



***Godišnji izvještaj o poslovanju***  
***2021 ANNUAL BUSINESS REPORT***



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# Uvodna riječ generalnog direktora



**U pogon  
puštena prva  
VE u vlasništvu  
kompanije**

**Ostvareno  
milijardu i 123,5  
miliona KM  
prihoda**

Uprkos otežanim okolnostima poslovanja uzrokovanim pandemijom koronavirusa koje su i u 2021. godini značajno uticale na djelovanje privrednih subjekata na globalnom nivou, JP Elektroprivreda BiH je proizvela 6.677 GWh električne energije, ostvarila milijardu i 123,5 miliona KM prihoda i 14 miliona dobiti prije oporezivanja. Ostvareni rezultati veći su od planiranih i onih koji su obilježili 2020. godinu. Svi kupci su uredno snabdijevani i ispunjene su ugovorene dugoročne isporuke u djelatnosti Trgovine.

Izvještajna godina je za JP Elektroprivreda BiH posebno značajna zbog činjenice da su u prvom kvartalu okončani radovi na izgradnji i u pogon je puštena Vjetroelektrana „Podveležje 1“ snage 48 MW, prva u vlasništvu kompanije. Vjetroelektrana na podveleškom platou, koja je proizvodnjom s 15 vjetroagregata premašila očekivane efekte, doprinijela je povećanju udjela proizvodnje električne energije iz obnovljivih izvora u okviru sistema JP Elektroprivreda BiH i predstavlja važan iskorak u ispunjavanju međunarodnih obaveza u energetskom sektoru na integracijskom putu BiH prema EU.

Tokom godine završeni su i pripremni radovi na gradilištu Bloka 7 TE „Tuzla“, čime je JP Elektroprivreda BiH ispunila sve potrebne preduvjete i obaveze za realizaciju projekta izgradnje novog pogona snage 450 MW.

Zahvaljujući ulaganjima u kapitalne projekte, ali i u djelatnosti Proizvodnje i Distribucije u iznosu koji prelazi 100 miliona KM, JP Elektroprivreda BiH je i u protekloj godini zadržala poziciju najznačajnijeg i najvećeg investitora u državi. Uporedo s provedbom zahtjevnog procesa restrukturiranja rudnika, ulaganjem 8 miliona KM JP Elektroprivreda BiH je, kao Vladajuće društvo Koncerna EPBiH, nastavila i s procesom dokapitalizacije rudnika uglja, uz istovremeno pružanje podrške održanju likvidnosti njihovog poslovanja.

Vodeća pozicija u BiH zadržana je i po osnovu ostvarenog prihoda u iznosu milijardu i 123,5 miliona KM. Ovakav finansijski rezultat, između ostalog, realiziran je i zahvaljujući većem obimu kratkoročne prodaje na tržištu, uz postizanje većih prodajnih cijena uglavnom zbog povećanog udjela proizvodnje u hidroelektranama, koji je u ukupno proizvedenoj količini 6.677 GWh učestvovao s gotovo 26 posto.

Uplatom 92,0 miliona KM obaveza po osnovu PDV-a, što je rekordni iznos, JP Elektroprivreda BiH je ostala i jedan od najvećih poreznih obveznika u BiH i Federaciji BiH, dok je 46 miliona KM

uplaćeno po osnovu raznih dažbina na ime ostvarene proizvodnje u hidro i termopostrojenjima.

Ispunjavajući obaveze po Zakonu o električnoj energiji u FBiH i evropskim direktivama koje se odnose na odvajanje distributivne od ostalih elektroprivrednih djelatnosti, novim Pravilnikom o organizaciji Društva djelatnosti Proizvodnje i Snabdijevanja izdvojene su iz elektrodistributivnih podružnica. Nastavljen je i proces restrukturiranja rudnika članica Koncerna EPBiH u okviru kojeg je formirano novo zavisno društvo GEOLP d.o.o. Kakanj.

JP Elektroprivreda BiH je i u izvještajnoj godini zadržala primat u obezbjeđenju integriteta i stabilnog funkcioniranja elektroenergetskog sistema BiH odgovornim i profesionalnim djelovanjem, s ciljem omogućavanja kontinuiranog odvijanja procesa proizvodnje električne energije i urednog snabdijevanja kupaca, jačanja konkurentne pozicije na otvorenom tržištu i ispunjavanja zadataka Vladajućeg društva Koncerna EPBiH.

Provedbom aktivnosti na realizaciji strategije svoga razvoja zasnovane na ciljevima i politikama EU, JP Elektroprivreda BiH je i u 2021. godini imala značajnu ulogu u ispunjavanju obaveza države BiH proisteklih iz Ugovora o Energetskoj zajednici.

**Generalni direktor  
Admir Anđelić**

# Vizija

**Javno preduzeće Elektroprivreda Bosne i Hercegovine d.d. - Sarajevo** svojim društveno odgovornim poslovanjem i profesionalnim integritetom u proizvodnji, distribuciji, pouzdanom snabdijevanju električnom energijom i razvojem tržišta električne energije, biće nosilac i pouzdan partner ostalim privrednim subjektima u ekonomskom razvoju Bosne i Hercegovine.

## Misija

**Misija Društva je proizvoditi i distribuirati električnu energiju, pouzdano snabdijevati kupce električnom energijom i trgovati u konkurentnom okruženju uz korištenje domaćih resursa i zadovoljenje okolišnih zahtjeva, doprinoseći održivom razvoju i kvalitetnom životu društva.**

**Javno preduzeće Elektroprivreda Bosne i Hercegovine d.d.- Sarajevo će:**

- proizvoditi električnu i toplotnu energiju iz domaćih obnovljivih i neobnovljivih resursa u skladu sa okolišnim zahtjevima, važećom zakonskom regulativom i evropskim standardima;
- obezbijediti efikasan distributivni sistem za isporuku električne energije krajnjim kupcima, i omogućiti svim korisnicima pristup mreži i napajanje električnom energijom po propisanim normama kvaliteta i pružanje informacija;
- sigurno i pouzdano snabdijevati i trgovati električnom energijom proizvedenom iz domaćih resursa po konkurentnim cijenama;
- osigurati ekonomski održivu proizvodnju uglja za potrebe termoelektrana, industrije i široke potrošnje po konkurentnoj cijeni;
- ulagati u razvoj i realizaciju novih kapitalnih investicija, pri čemu će posebnu pažnju posvetiti investiranju u proizvodnju električne energije iz obnovljivih izvora energije, povećanju fleksibilnosti energetskeg portfolija i energetske efikasnosti;
- vršiti restrukturiranje svih djelatnosti s ciljem povećanja efikasnosti poslovanja i ispunjavanja zahtjeva u okviru Energetske zajednice i evropskih standarda.

*Efikasno poslovanje Javno preduzeće Elektroprivreda Bosne i Hercegovine d.d. - Sarajevo bazira na dosljednoj primjeni propisa i standarda i na principima:*



**osiguranja kvaliteta  
proizvoda i usluga**



**povećanja zadovoljstva,  
sigurnosti i  
povjerenja kupaca**



**očuvanja okoliša**



**strateškog planiranja  
i razvoja zaposlenika**



**obezbjeđenja zaštite  
zdravlja i sigurnosti  
na radu**



**obezbjeđenja  
sigurnosti informacija**



**upravljanja rizicima**



**povećanja energetske  
efikasnosti**



**društveno odgovornog  
poslovanja**



# 1. STATUTARNI ELEMENTI DRUŠTVA

*Javno preduzeće Elektroprivreda Bosne i Hercegovine d.d. - Sarajevo je elektroprivredno društvo, koje obavlja djelatnosti: proizvodnje električne energije, distribucije električne energije, snabdijevanja i trgovine električnom energijom i druge djelatnosti utvrđene Statutom.*



**JP Elektroprivreda BiH posluje u okviru sljedećih osam podružnica i to:**

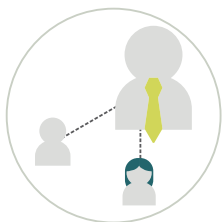
- Hidroelektrane na Neretvi, Jablanica
- Termoelektrana „Kakanj“, Kakanj
- Termoelektrana „Tuzla“, Tuzla
- „Elektrodistribucija“, Bihać,
- „Elektrodistribucija“, Mostar
- „Elektrodistribucija“, Sarajevo
- „Elektrodistribucija“, Tuzla
- „Elektrodistribucija“, Zenica
- uz organiziranu Direkciju u sjedištu Društva.



**Društvo zastupaju i predstavljaju generalni direktor, izvršni direktori i direktori podružnica, u skladu sa Statutom i posebnim aktom Uprave Društva.**

**Organi Društva su:**

- Skupština,
- Nadzorni odbor,
- Uprava i
- Odbor za reviziju.



**Upravljanje Društvom, u skladu sa Zakonom o privrednim društvima, Zakonom o javnim preduzećima i Statutom, vrši Uprava Društva koju čine:**

- generalni direktor,
- izvršni direktor za proizvodnju,
- izvršni direktor za distribuciju,
- izvršni direktor za snabdijevanje i trgovinu,
- izvršni direktor za ekonomske poslove,
- izvršni direktor za pravne poslove i ljudske resurse,
- izvršni direktor za kapitalne investicije.

Društvo ima sekretara Društva čije su nadležnosti utvrđene zakonom i Statutom.

**Direkcija Društva je organizirana u sjedištu Društva radi obavljanja zajedničkih funkcija za potrebe Društva kao cjeline, te za potrebe pojedinih elektroprivrednih djelatnosti i zavisnih društava.**

# PRIMJENA PRAVILA KORPORATIVNOG UPRAVLJANJA

*Društvo je u 2021. godini pratilo i u bitnom dijelu primijenilo sve preporuke utvrđene Kodeksom korporativnog upravljanja JP Elektroprivreda BiH d.d. - Sarajevo, od 20. 4. 2012. godine. U Kodeksu korporativnog upravljanja JP Elektroprivreda BiH d.d. - Sarajevo uvažene su specifičnosti koje proizlaze iz činjenice da je Društvo javno preduzeće, na koje se primjenjuje i Zakon o javnim preduzećima u Federaciji BiH.*

*U 2021. godini su pravovremeno izvršavane sve obaveze koje se odnose na objavu informacija predviđenih Kodeksom korporativnog upravljanja JP Elektroprivreda BiH d.d. - Sarajevo i Pravilnikom o objavljivanju informacija i izvještavanju na tržištu vrijednosnih papira.*

*JP Elektroprivreda BiH d.d. - Sarajevo je dioničko društvo. Na dan 30. 11. 2021. godine imalo je ukupno 2556 dioničara (31.506.541 dionica), od kojih su prvih 10:*

Redni broj	Dioničar	Broj dionica	Udio (%)
1.	<b>Federacija Bosne i Hercegovine</b>	<b>28.472.181</b>	<b>90,3691</b>
2.	<b>Raiffeisen BANK d.d. Bosna i Hercegovina</b>	<b>413.437</b>	<b>1,3122</b>
3.	<b>ZIF CROBIH FOND d.d. Mostar</b>	<b>272.468</b>	<b>0,8648</b>
4.	<b>ZIF HERBOS FOND d.d. Mostar</b>	<b>230.895</b>	<b>0,7328</b>
5.	<b>ZIF „PROF-PLUS“ d.d. Sarajevo</b>	<b>206.577</b>	<b>0,6557</b>
6.	<b>ZIF „prevent INVEST“ d.d. Sarajevo</b>	<b>204.113</b>	<b>0,6478</b>
7.	<b>ZIF „BONUS“ d.d. Sarajevo</b>	<b>180.904</b>	<b>0,5742</b>
8.	<b>OAIF „VIB FOND“ a.d. Banja Luka</b>	<b>149.950</b>	<b>0,4759</b>
9.	<b>ASA FINANCE d.d. Sarajevo</b>	<b>87.750</b>	<b>0,2785</b>
10.	<b>ZIF „FORTUNA FOND“ d.d.</b>	<b>74.929</b>	<b>0,2378</b>



## Skupština Društva

Nadležnosti Skupštine Društva, koju čine dioničari, propisane su zakonom i Statutom Društva. Skupština se saziva kada je to određeno zakonom, drugim propisima i Statutom i kada se ocijeni da je to u najboljem interesu Društva i dioničara, a najmanje jednom godišnje.

Društvo je u 2021. godini održalo ukupno četiri sjednice Skupštine Društva.

## Nadzorni odbor

Nadzorni odbor nadzire poslovanje Društva i radi na osnovu Zakona o privrednim društvima, Zakona o javnim preduzećima, Statuta Društva i Poslovnika o radu Nadzornog odbora.

U toku 2021. godine održane su 34 sjednice Nadzornog odbora.

Na 68. (vanrednoj) sjednici Skupštine Društva, održanoj 11. 2. 2021. godine, zbog isteka perioda na koji su imenovani zaključno s 10. 2. 2021. godine, razriješeni su članovi Nadzornog odbora imenovani u ime državnog kapitala:

- **dr. sci. Izet Žigić – predsjednik,**
- **dr. sci. Milenko Obad – član,**
- **Selvedin Subašić – član,**
- **dr. sci. Izudin Džafić – član,**
- **dr. sci. Safet Isić – član,**
- **dr. sci. Ramiz Kikanović – član.**

Također, na 68. (vanrednoj) sjednici Skupštine Društva, održanoj 11. 2. 2021. godine, u ime državnog kapitala su imenovani sljedeći članovi Nadzornog odbora:

- **dr. sci. Izet Žigić – predsjednik,**
  - **dr. sci. Admir Softić – član,**
  - **dr. sci. Safet Isić – član,**
  - **dr. sci. Milenko Obad – član,**
  - **Muhidin Zametica – član,**
  - **Selvedin Subašić – član,**
- na period do 27. 8. 2023. godine.

Sedmi član Nadzornog odbora je mr. sci. Hasen Mašović, koji je imenovan u ime grupe dioničara s više od 5% dionica s pravom glasa, na 58. sjednici Skupštine Društva, održanoj 27. 8. 2019. godine, na period od četiri (4) godine.

## Odbor za reviziju

Odbor za reviziju se sastoji od tri člana. Na 68. sjednici Skupštine Društva, održanoj 11. 2. 2021. godine, prihvaćene su ostavke i razriješena su dva člana Odbora za reviziju:

- **dr. sci. Haris Jahić, dipl. ecc. – član,**
- **Fikreta Bešović, dipl. ecc. – član.**

Na istoj sjednici Skupštine Društva je donesena Odluka o izboru i imenovanju dva člana Odbora za reviziju i to:

- **Mustafa Šakić, dipl. ecc.,**
  - **Ismeta Jakupović-Divković, dipl. ecc.,**
- na period počev od 12. 2. 2021. godine do isteka mandata Odbora za reviziju, imenovanog 28. 5. 2020. godine na period od četiri godine od dana imenovanja.

Odbor za reviziju djeluje u sastavu:

- **mr. sci. Almira Zulić, dipl. ecc.,**
- **Mustafa Šakić, dipl. ecc.,**
- **Ismeta Jakupović-Divković, dipl. ecc.**



## Uprava društva

Uprava Društva se sastoji od sedam članova koje je Nadzorni odbor Društva imenovao na mandatni period od četiri godine, počev od 13. 4. 2020. godine, i djeluje u sastavu:

- **Admir Anđelija - generalni direktor,**
- **mr. sci. Samir Selimović, izvršni direktor za proizvodnju,**
- **mr. sci. Elvir Lojić, izvršni direktor za distribuciju,**
- **Zlatan Planinčić, izvršni direktor za snabdijevanje i trgovinu,**
- **Muhamed Kozadra, izvršni direktor za ekonomske poslove,**
- **Ružica Burić – izvršna direktorica za pravne poslove i ljudske resurse,**
- **dr. sci. Senad Salkić - izvršni direktor za kapitalne investicije.**


## 2. KLJUČNI POKAZATELJI O DRUŠTVU

*U 2021. godini EPBiH je proizvela 6.677,1 GWh električne energije.*

*Ostvaren je ukupan prihod u iznosu 1.123,47 miliona KM i dobit prije oporezivanja 14,00 miliona KM.*

Po vrijednosti kapitala, instaliranim kapacitetima, ukupnoj proizvodnji i prodaji električne energije, EPBiH je najveća elektroprivredna kompanija u Bosni i Hercegovini koja opslužuje više od 788 hiljada kupaca u sedam kantona na području Federacije BiH.

Opis		31. 12. 2021.	Plan 2021.	31. 12. 2020.
Dionički kapital	mlrd. KM	2,237	2,237	2,237
Operativni prihod	mil. KM	1.098,4	1.076,3	1037,3
Operativni rashod	mil. KM	870,4	873,0	832,5
<b>EBITDA</b>	<b>mil. KM</b>	<b>228,1</b>	<b>203,4</b>	<b>204,8</b>
Opis		2021.	Plan 2021.	2020.
Ukupan prihod	mil. KM	1.123,47	1.097,09	1.058,10
Prihod od prodaje el. energ. i pom. usluga	mil. KM	1.052,43	1.032,91	997,20
Ostali prihodi	mil. KM	71,04	64,17	60,80
Ukupni rashodi i troškovi	mil. KM	1.109,47	1.084,00	1.047,50
Amortizacija	mil. KM	156,20	156,34	144,70
<b>Dobit prije oporezivanja</b>	<b>mil. KM</b>	<b>14,00</b>	<b>13,09</b>	<b>10,54</b>
Opis		2021.	Plan 2021.	2020.
Proizvodnja	GWh	6.677,1	6.654,6	6.237,9
Neto distribucija EPBiH	GWh	4.454,3	4.419,3	4.263,9
Tržišna prodaja	GWh	2.465,2	2.487,3	2.437,6
Broj kupaca (kraj godine)		788.168	785.000	778.962
Broj zaposlenih (sa 31.12. neodređeno)		4.075	4.265	4.206

The background of the slide is a dark, out-of-focus image of numerous colorful bokeh lights in shades of blue, orange, yellow, and red, creating a festive or celebratory atmosphere.

### *3. REALIZACIJA POSLOVNE POLITIKE I CILJEVA DRUŠTVA*

## Oblast djelatnosti Proizvodnje

- ukupna ostvarena proizvodnja električne energije u 2021. godini iznosila je 6.677,1 GWh, što je za 123,8 GWh ili 1,89% više od planirane proizvodnje prema EEB za 2021. godinu; u poređenju s ukupnom ostvarenom proizvodnjom u 2020. godini, ukupna ostvarena proizvodnja električne energije u 2021. godini je veća za 439,2 GWh ili za 7,04 %;
- ukupna ostvarena proizvodnja električne energije u HE (uključujući i mHE) u 2021. godini iznosila je 1.729,1 GWh i veća je za 300,5 GWh ili 21,03 % u odnosu na planiranu prema EEB za 2021. godinu;
- ukupna ostvarena proizvodnja električne energije u VE „Podveležje“ u 2021. godini iznosila je 107,2 GWh i veća je za 7,2 GWh ili 7,17 % u odnosu na planiranu prema EEB za 2021. godinu;
- ukupna ostvarena proizvodnja električne energije u TE u 2021. godini iznosila je 4.840,8 GWh i manja je za 183,9 GWh ili 3,66 % u odnosu na planiranu proizvodnju prema EEB za 2021. godinu;
- udio ostvarene proizvodnje električne energije iz obnovljivih izvora u ukupnoj ostvarenoj proizvodnji u 2021. godini iznosi 27,50%, od čega HE na Neretvi učestvuju sa 24,95 %, mHE sa 0,95 %, a VE „Podveležje“ sa 1,60 %;
- udio ostvarene proizvodnje električne energije u TE u ukupnoj ostvarenoj proizvodnji u 2021. godini iznosi 72,50 %, od čega TE „Tuzla“ učestvuju sa 42,88 %, a TE „Kakanj“ s 29,62 %;
- za potrebe proizvodnje električne energije, toplotne energije i tehnološke pare u termoelektranama je ukupno utrošeno 4.990.301 tona uglja, od čega je u TE „Tuzla“ utrošeno 3.093.512 tona uglja, a u TE „Kakanj“ je utrošeno 1.896.789 tona uglja. Od ukupne količine utrošenog uglja, 4.812.674 tona uglja ili 96,44 % je utrošeno za proizvodnju električne energije, dok je količina od 177.627 tona uglja ili 3,56 % utrošeno za proizvodnju toplotne energije i tehnološke pare

## Oblast djelatnosti Distribucije

- bruto distributivna potrošnja ostvarena je u količini 4.861,7 GWh i za 0,6% je veća u odnosu na bilansiranu bruto potrošnju za 2021.godinu, a za 184 GWh (3,9 %) veća je od ostvarenja u 2020. godini;
- distributivni gubici su ostvareni u iznosu 375,6 GWh (7,73 % u odnosu na bruto potrošnju) i manji su od planiranih gubitaka u 2021. godini (planirano 7,78%); procenat distributivnih gubitaka je smanjen u odnosu na ostvareni procenat za 2020. godinu (kad je ostvaren u iznosu 8,01 %);
- razmatrajući cijeli elektrodistributivni sistem, ostvaren je indeks broja prekida po kupcu (SAIFI) za oko 13 % niži (bolji) nego što je to bilo prošle godine, dok je indeks trajanja prekida po kupcu (SAIDI) za oko 20 % niži (bolji) od ostvarenog u 2020. godini;
- okončani su radovi na implementaciji projekta SCADA/DMS/OMS i pripadajućih telekomunikacija na distributivnom nivou;
- nastavljaju se aktivnosti proširenja sistema daljinskog nadzora i upravljanja te aktivnosti eliminisanja subpotrošnje;
- kontinuirano se realiziraju aktivnosti na izgradnji i rekonstrukciji elektrodistributivnih objekata s ciljem stvaranja uvjeta za priključenje novih krajnjih korisnika na distributivnu mrežu (detaljnije u Realizaciji Plana ulaganja).

## Oblast djelatnosti Snabdijevanja

- ukupna isporuka električne energije krajnjim kupcima ostvarena u količini 4.992 GWh (isključujući energiju za vlastitu potrošnju), što je za 3,72 % više u odnosu na 2020. godinu;
- realizirana je Odluka o primjeni Odluke o provedbi mjera za smanjenje troškova električne energije domaćinstvima i stimulaciji energetske efikasnosti;
- implementacija redizajniranog računa za električnu energiju i mrežarinu;
- redovna realizacija printanja, kovertiranja i dostave računa i drugih pratećih dokumenata (opomene, obavještenja o isključenju, kamatni listovi, IOS obrasci) kupcima električne energije putem BH Pošte;
- ostvaren je stepen naplate od 100,3 % (bez salda potraživanja iz ranijih godina), a 96,6 % (sa saldom potraživanja iz ranijih godina) posmatrajući odnos fakturisanog i ukupno naplaćenog prihoda u tekućoj godini;
- redovno, kontinuirano praćenje realizacije odluke Vlade FBiH o subvencioniranju kupaca električne energije kao i informiranje resornog ministra o broju korisnika, periodu korištenja i ukupnom iznosu odobrenih i isplaćenih subvencija.



## Oblast djelatnosti Trgovine

- ukupna prodaja električne energije ostvarena je u količini od 2.348,0 GWh, što je za 14,5 GWh ili za 0,61% manje od planiranog obima prodaje, odnosno za 28,3 GWh ili za 1,19% manje od ostvarene prodaje u 2020. godini;
- ukupan prihod od prodaje električne energije ostvaren je u iznosu od 286,28 mil. KM, što je za 15,57 mil. KM ili za 5,75% više od planiranog prihoda, a za 31,76 mil. KM ili za 12,48% više od ukupno ostvarenog prihoda od prodaje električne energije u 2020. godini;
- prihod na kapacitetima od pomoćnih usluga ostvaren je u iznosu od 7,73 mil. KM, što je za 1,39 mil. KM ili za 15,27% manje od planiranog prihoda po ovom osnovu, a za 1,0 mil. KM ili za 14,85% više od ukupno ostvarenog prihoda na ime kapaciteta od pomoćnih usluga u 2020. godini;
- prihod na ime usluge balansiranja VE „Jelovača“ ostvaren je u ukupnom iznosu od 3,22 mil. KM;
- zbirni prihod (prihod od prodaje električne energije, prihod od kapaciteta za pomoćne usluge i prihod na ime usluge balansiranja VE „Jelovača“) ostvaren je u iznosu od 297,23 mil. KM, što je za 14,18 mil. KM ili za 5,22% više od planiranog ukupnog prihoda, odnosno za 32,75 mil. KM ili za 13,77% više od ostvarenog ukupnog prihoda u 2020. godini;
- realizirani su ugovori za dugoročnu prodaju električne energije na tržištu u količini od 1.051,0 GWh, odnosno u ukupnoj vrijednosti od 102,29 mil. KM (stepen naplate isporučenih količina električne energije je 100%);
- realizirana je kratkoročna prodaja električne energije u količini od 821,9 GWh, odnosno u ukupnoj vrijednosti od 119,02 mil. KM (stepen naplate isporučenih količina električne energije je 100%);
- realizirana je vezana trgovina električne energije u ukupnoj količini od 150,9 GWh, s ukupnim iznosom prihoda od 29,57 mil. KM i ukupnim iznosom troškova od 25,66 mil. KM, čime je ostvarena zarada u iznosu od 3,91 mil. KM;
- ukupna kupovina električne energije ostvarena je u količini od 738,2 GWh, što je za 31,8 GWh ili za 4,12% manje od planiranog obima kupovine, odnosno za 243,0 GWh ili za 24,77% manje od ostvarene kupovine u 2020. godini;
- ukupni troškovi za kupovinu električne energije ostvareni su u iznosu od 129,27 mil. KM, što je za 2,31 mil. KM ili 1,75% manje od planiranih troškova, a za 53,13 mil. KM ili za 69,77% više od ukupno ostvarenih troškova za kupovinu električne energije u 2020. godini;
- troškovi na ime kapaciteta od pomoćnih usluga ostvareni su u iznosu od 0,47 mil. KM, što je za 0,22 mil. KM ili za 88,87% više od planiranih troškova po ovom osnovu, a za 0,20 mil. KM ili za 71,42% više od ukupno ostvarenih troškova na ime kapaciteta od pomoćnih usluga u 2020. godini;
- zbirni troškovi (troškovi od kupovine električne energije i troškovi na ime kapaciteta za pomoćne usluge) ostvareni su u iznosu od 129,74 mil. KM, što je za 2,09 mil. KM ili 1,58% manje od planiranih ukupnih troškova, odnosno za 53,32 mil. KM ili za 69,77% više od ostvarenih ukupnih troškova u 2020. godini.

## Oblast ekonomskih poslova

**U oblasti ekonomskih poslova koji obuhvataju upravljanje finansijama (uključujući PIU), računovodstvene poslove, te poslove planiranja, izvještavanja i analize, najvažnije aktivnosti u izvještajnom periodu, uz angažman u projektnim timovima, stručnim timovima i komisijama, bile su sljedeće:**

- urađen je godišnji obračun za 2020. godinu i sve prateće aktivnosti;
- izrada poreznog bilansa za 2020. godinu;
- izrada Studije o transfernim cijenama za 2020. godinu;
- priprema konsolidiranih finansijskih izvještaja za 2020. godinu;
- računovodstvena implementacija Sporazuma o pozajmicama s rudnicima u Koncernu;
- priprema podataka za informativnu kontrolu Uprave za indirektno oporezivanje povodom preknjiženja uplaćenih, a neopravdanih avansa za isporuku uglja ZD - rudnicima uglja u dugoročne pozajmice;
- knjigovodstveno evidentiranje aktiviranja VE „Podveležje“ (1. projekt ovakve vrste u EPBiH);
- urađen Izvještaj o poslovanju JP Elektroprivreda BiH za 2020. godinu, Polugodišnji izvještaj o poslovanju za 2021. godinu, te predračun gotovinskih tokova Društva za period 2021-2030. godina;
- urađen je Plan poslovanja Direkcije za trogodišnji period 2021-2023. godina, te obavljena koordinacija s drugim nadležnim sektorima i službama iz Direkcije i podružnica na izradi trogodišnjih planova djelatnosti i podružnica; dinamika plana unesena u aplikaciju SAP;
- tokom maja urađen Revidirani plan poslovanja Društva usvojen na sjednici Skupštine 25. 5. 2021. godine, a početkom decembra pripremljen novi Revidirani plan poslovanja za period 2021-2023. godina koji je usvojen na sjednici Skupštine Društva 30. 12. 2021. godine;

- pripremljena je informacija o starosnoj strukturi zaliha sa 30. 6. 2021. godine;
- obavljeni poslovi redovnog godišnjeg finansijskog izvještavanja FERK-a (za sve regulisane djelatnosti) za 2020. godinu;
- urađena i računovodstveno evidentirana raspodjela prihoda od električne energije i pomoćnih usluga za 2020. godinu;
- u toku izvještajnog perioda izvršeno je oročavanje novčanih sredstava u iznosu od 20,0 mil. KM, a za 2021. godinu po osnovu kamata na oročene depozite ostvaren je prihod od 1,22 mil. KM;
- obavljane su finansijske aktivnosti u vezi s realizacijom projekata u toku: VE „Podveležje“, SCADA/DMS/OMS, Blok 7 u TE „Tuzla“, HE „Janjići“, Projekt VP „Vlašić“;
- u vezi s realizacijom Projekta Blok 7 u TE „Tuzla“ obavljane su aktivnosti na ispunjavanju obaveza definiranih ugovorom o kreditu kod konzorcija domaćih banaka;
- uspješno su okončane aktivnosti na zaključenju novog trogodišnjeg ugovora za selektivno osiguranje imovine EPBiH, ugovor je potpisan, kao i police osiguranja, koje su distribuirane korisnicima osiguranja;
- provedba aktivnosti na obezbjeđenju garancija za potrebe Društva u skladu sa zaključenim novim Okvirnim sporazumom s pet banaka za usluge izdavanja bankarskih garancija za potrebe JP Elektroprivreda BiH – Direkcija Društva, pripremljen Plan nabavki Sektora za upravljanje finansijama za 2022. godinu;
- aktivnosti na koordinaciji i izradi tenderskih dokumenata „Izrada glavnog projekta za HE ‘Janjići’“ i „Konsultantske usluge za izradu studije izvodljivosti za FNE ‘Podveležje’ i usluge implementacionog konsultanta“;
- aktivnosti na praćenju realizacije ugovora: ažuriranje studije izvodljivosti na osnovu dodatnih mjerenja Lidarom za Projekt VE „Vlašić“ i monitoring ptica i šišmiša na lokaciji VE „Podveležje“ koji

- se finansira iz dodatnih grant sredstava KfW;
- kandidiranje projekata elektrana na bazi obnovljivih izvora energije za finansiranje iz grant sredstava međunarodnih finansijskih institucija, potvrđena je spremnost EBRD-a i GGF-a (Green for Growth Fund) za finansiranje Studije izvodljivosti projekata FNE „Gračanica“, FNE „Gornja Breza“ i FNE „Bijele vode“;
- izvještavanje nadležnih ministarstava u vezi s kreditnim aranžmanima, kao i izvještavanje u skladu sa zaključenim kreditnim sporazumima.

## Oblast pravnih, kadrovskih i općih poslova

- kontinuirano pružanje pravne podrške osnovnim djelatnostima Društva, kao i poslovima podrške;
- aktivnosti na zastupanju EPBiH u postupcima pred sudovima u BiH;
- poslovi registracije u vezi s izmjenama lica ovlaštenih za predstavljanje i zastupanje;
- aktivnosti na izradi i analizi normativnih akata;
- učešće u rješavanju zahtjeva zavisnih društava - rudnika uglja;
- učešće u aktivnostima sačinjavanja složenih ugovora i ugovora velike vrijednosti u Društvu;
- provođenje postupaka eksproprijacije zemljišta za Blok 7 TE „Tuzla“, MHE na Neretvici;
- pravni poslovi u vezi s VP „Podveležje“ i drugim projektima koji se realiziraju putem kapitalnih investicija kao i pružanje druge vrste pravne podrške kapitalnim investicijama;
- pravni poslovi zastupanja u vezi s nekretninama Društva u inostranstvu;
- harmonizacija akata zavisnih društava s aktima Vladajućeg društva, kao i priprema i izrada uputstava, odluka, smjernica i dr;
- provođenje aktivnosti u vezi s arbitražnim postupkom HE „Vranduk“;
- učešće na aktivnosti provođenja prestrukturiranja

- i reorganizacije EPBiH i Koncerna;
- aktivnosti i poslovi iz oblasti upravljanja ljudskim resursima;
- učešće u postupcima selekcije kadrova po osnovu javnog oglašavanja, u skladu s Uredbom o postupku prijema u radni odnos u javnom sektoru u Federaciji BiH i Odlukom o načinu izbora, postupku i kriterijima za izbor novih radnika i pripravnika u EPBiH;
- učešće u izradi općih akata i izrada akata sistema kvaliteta u vezi sa strateškim upravljanjem ljudskim resursima, obrazovanjem, radnim odnosima i kadrovskim poslovima na nivou Društva;
- aktivnosti i poslovi u vezi sa zapošljavanjem i ostvarivanjem prava iz rada i po osnovu rada, izrada ugovora o radu i svih drugih pojedinačnih akata iz oblasti radnih odnosa;
- aktivnosti na sistematizaciji, razvoju kadrova i obučavanju radnika;
- zastupanje Društva u radnim sporovima i ostale aktivnosti;
- redovne aktivnosti na prijevozu zaposlenika, čuvanja arhivske građe i tehničke dokumentacije, opsluživanja Uprave, Nadzornog odbora i drugih potrebnim materijalima za razmatranje i odlučivanje;
- kontinuirane aktivnosti na primanju, protokolisanju, dostavi i slanju pošte;
- aktivnosti na realizaciji planiranih poslova na servisiranju, osiguranju i registraciji vozila Direkcije;
- kontinuirana realizacija procesa održavanja opreme i infrastrukture;
- kontinuirane aktivnosti na realizaciji sporazuma s Elektroprijenosom OP Sarajevo;
- priprema tehničkog dijela tenderske dokumentacije i praćenje realizacije ugovora za robe i usluge iz nadležnosti OJ za opće poslove;
- kontinuirano odvijanje planiranih aktivnosti na realizaciji nabavke DC punionice za električna vozila na lokaciji odmorište Lepenica autoputa A1, te deset AC punionica za električna vozila;
- kontinuirano odvijanje planiranih aktivnosti na realizaciji satelitskog nadzora vozila.

## Oblast kapitalnih investicija

**U 2021. godini aktivnosti organizacionih jedinica za kapitalne investicije odnosile su se na izgradnju i pripremu izgradnje termoelektrana, hidroelektrana i elektrana iz obnovljivih i alternativnih izvora energije, a obuhvatile su:**

- izgradnju VE „Podveležje1“;
- izvođenje pripremnih radova za Blok 7 u TE „Tuzla“ - investitorski nadzor;
- izradu investiciono-tehničke dokumentacije, ispitivanja i istraživanja;
- pribavljanje potrebnih dozvola i saglasnosti i vođenje postupaka za eksproprijaciju nekretnina;
- zatvaranje finansijske konstrukcije;
- pripremu tenderske dokumentacije za izbor isporučilaca opreme i izvođača za usluge i radove.



## Oblast razvoja

### Poslovni razvoj

- urađen Prednacrt nove sistematizacije, metodologije vrednovanja i vrednovanja radnih mjesta EPBiH, a na osnovu usvojenog novog Pravilnika o organizaciji EPBiH s fokusom na organizaciono razdvajanje djelatnosti Distribucije i prilagođavanje poslovanju na otvorenom tržištu el. energije;
- sačinjen je Elaborat za reorganizaciju djelatnosti Proizvodnje EPBiH;
- pripremljena je radna verzija novog Pravilnika o organizaciji EPBiH, a na osnovu usvojenog Koncepta nove organizacije (reorganizacije) djelatnosti Proizvodnje EPBiH;
- urađen je Elaborat tehno-ekonomske opravdanosti za formiranje novog zavisnog društva za geološka istraživanja, ispitivanja, projektiranje i zaštitu;
- pripremljen je Operativni plan aktivnosti za formiranje novog zavisnog društva za geološka istraživanja, ispitivanja, projektiranje i zaštitu (usvojen od Uprave EPBiH), realizacija Operativnog plana u toku;
- sačinjen je Elaborat „Analiza potreba za zaštitnom opremom, alatima i vozilima u proizvodnoj djelatnosti EPBiH s prijedlogom tipskih potreba“;
- urađen je Elaborat „Analiza funkcije upravljanja ljudskim resursima u EPBiH s prijedlogom poboljšanja u pogledu njenog procesnog i organizacionog uređenja“;
- urađen je Elaborat tehno-ekonomske opravdanosti za formiranje novog zavisnog društva za pružanje usluga održavanja i pomoćne mehanizacije ZD rudnicima Koncerna EPBiH;
- pripremljen je te od Uprave EPBiH usvojen dokument „Strategija i Plan aktivnosti za realizaciju strategije razvojnog projekta elektromobilnosti u EP BiH za period 2021. - 2023. godina“;
- sačinjeno je pet izdanja biltena „Aktuelnosti energetskeg sektora“ koji su postavljeni na Intranet portal EPBiH.

### Strateški razvoj

#### Strateški planski dokumenti i sistemske aktivnosti

- izrada Elaborata „Analiza shema taksi na emisije CO2 s prijedlogom optimalnog održivog scenarija za EP BiH“, finalna verzija usvojena na sjednicama Uprave i NO (mart 2021.);
- izrada Elaborata „Analiza i projekcije potreba za ugljem u EPBiH do 2050. godine s projekcijom dinamike obustave rudnika“, finalna verzija usvojena na Upravi i NO (mart 2021.) + ažurirana verzija Elaborata - Aneks 1 (decembar 2021.);
- učešće u izradi Indikativnog plana razvoja proizvodnje 2022. - 2031. (koordinacija s NOS BiH); priprema podloga za Indikativni plan razvoja proizvodnje 2023. - 2032. godina;
- uspostava Sistema upravljanja energijom u svim djelatnostima / dijelovima EPBiH u skladu s ISO EN 50001, prema Master planu aktivnosti za 2021. godinu;
- izrada Elaborata „Formiranje instituta za energetiku, klimu i okolinu“, uvodna poglavlja;
- ažuriranje Tehničkih preporuka TP 2 i TP 3.

#### **Razvoj proizvodnje/OIE**

- mjerenje vjetro potencijala i globalnog sunčevog zračenja na više lokacija u Federaciji BiH, održavanje mjernih stanica, prikupljanje i obrada podataka;
- finaliziranje izgradnje VE „Podveležje“, završena funkcionalna ispitivanja, puštanje u pogon, test usaglašenosti s Mrežnim kodeksom i test krive snage;
- izrada Idejnog projekta FNE „Podveležje“;
- razvojne i pripreme aktivnosti za realizaciju projekta VE „Vlašić“; nastavak mjerenja



- parametara vjetra na lokaciji Vlašić, sistematizacija dosadašnje mjerne kampanje, rad na inoviranju studije izvodljivosti;
- razvoj projekta VE „Bitovnja“ i izrada prateće razvojno-investicione dokumentacije;
  - izrada i revizija Elaborata opravdanosti izgradnje fotonaponskih elektrana na slobodnim površinama rudnika Koncerna EPBiH i odlagalištima šljake i pepela TE EPBiH (FNE „Gračanica“, FNE „Kreka“, FNE „Divkovići“, FNE „Kakanj Bijele Vode“, FNE „Gornja Breza“);
  - izrada prethodne elaboracije s master planom aktivnosti Mogućnosti zasada energetskih usjeva/ biomase na zemljištu rudnika Koncerna EPBiH;
  - realizacija Pilot-projekta eksperimentalnih zasada energetske brzorastuće kulture „švedska vrba“ na rudnicima RU „Kreka“ i RMU „Breza“ (2 x 1 ha), u saradnji s E3 International;
  - izrada Razvojnog programa korištenja alternativnih goriva SRF/RDF u EPBiH: Mogućnost korištenja alternativnih goriva SRF/RDF u termoelektranama EPBiH u okvirima održivih ekonomskih i tehnoloških parametara te okolinsko-regulatornih uvjeta;
  - izrada logističke studije o nabavci, transportu, kvalitetu i dugoročnom snabdijevanju SRF/RDF – Fabrika cementa Lukavac za potrebe EPBiH;
  - izrada Elaborata opravdanosti ulaganja u FNE za vlastite potrebe za Fabrikom cementa Lukavac;
  - plan implementacije uvođenja biogoriva/alternativnih goriva EPBiH (I. SRF/RDF, II. Otpadna drvena biomasa, III. Brzorastuća biomasa);
  - izrada polaznog elaborata primjene vodika u energetici;
  - priprema pilot-projekta „Testovi kosagorijevanja uglja s otpadnom drvnom biomasom na Bloku 6 TE ‘Tuzla’ i Bloku 5 TE ‘Kakanj’“. Postupak nabavke biomase okončan. Testni pogoni inicirani u TE „Tuzla“, realiziran preliminarni test linije mlin-gorionik na kotlu Bloka 6 TE „Tuzla“.

## Razvoj elektromobilnosti

- realizacija Pilot-projekta „Uvođenje pružanja usluge punjenja električnih vozila u EPBiH kroz implementaciju CPMS softverskog sistema“;
- pokrenut Pilot-projekt „Integracija na komercijalnoj osnovi punionica za električna vozila u vlasništvu trećih lica u CPMS sistem nadzora i upravljanja“;
- u okviru Pilot-projekta „DC punionica za električna vozila na autocesti A1 – odmorište Lepenica“ izvršen tehnički prijem punionice; očekuje se izdavanje upotrebne dozvole, što će značiti zvanični završetak projekta;
- u okviru Pilot-projekta „Izgradnja infrastrukture javnih AC punionica za električna vozila u Bosni i Hercegovini“ (10 AC punionica) realizirana izrada idejnih projekata, ishodovanje urbanističkih saglasnosti, pokrenut tender;
- učešće u radu Udruženja za elektromobilnost pri Privrednoj komori FBiH.

## Međunarodni projekti, saradnja

- realizacija aktivnosti u okviru Horizont 2020 projekta Upgrade DH (Poboljšanje efikasnosti postojećih sistema daljinskog grijanja u Evropi, s integracijom modula OIE; Case study Tuzla DHS) - prema planu realizacije za 2021. godinu; projekt uspješno okončan;
- realizacija aktivnosti u okviru Horizont 2020 projekta BIOFIT (Retrofit Evropske industrije s biogorivima; Case study 0.15 biomass co-firing na Bloku 6 TE „Tuzla“ i Case study full repowering Bloka 5 TE „Kakanj“);
- realizacija aktivnosti u okviru Erasmus+ projekta ELEMEND (Saradnja univerziteta i industrije u kreiranju nastavnih programa s ciljem poboljšanja zapošljavanja diplomiranih studenata) - prema planu realizacije za 2021. godinu;



- realizacija aktivnosti u okviru Erasmus + projekta SUCCESS (Saradnja univerziteta i industrije kako bi se univerzitetima u zemljama Zapadnog Balkana nastavnim programima iz oblasti elektrotehnike u području pametnih tehnologija, mikromreža i tržišta električne energije omogućila bolja konkurentnost) - prema planu realizacije za 2021. godinu;
- učešće u pripremi aplikacije Horizon Europe projekta BringHeat;
- učešće u pripremi aplikacije Horizon Europe projekta „Predictive maintenance with digital twin“.

## Oblast sistema kvaliteta

- kontinuirane aktivnosti – nadzor, održavanje i poboljšanje sistema upravljanja prema ISO 9001:2015 i ISO 45001:2018 u Direkciji Društva;
- proveden nadzorni audit integriranog sistema upravljanja u Direkciji Društva od stvarne ovlaštene certifikacijske kuće i potvrđeno da je sistem upravljanja koji je primijenjen u organizaciji usklađen sa zahtjevima standarda ISO 9001:2015 i ISO 45001:2018 (certifikati br. MS 2004119.00 koji važi do 14. 3. 2022. i br. MS 2004219.00 koji važi do 8. 4. 2022. godine);
- kontinuirane aktivnosti praćenja ugovora (sukcesivna isporuka i ažuriranja međunarodnih i evropskih standarda: ISO, IEC, IEE, DIN, EN itd. i bosanskohercegovačkih standarda (BAS) od Instituta za standardizaciju BiH za potrebe EPBiH);
- aktivnosti uvođenja i implementacije sistema energetskog upravljanja prema zahtjevima ISO 50001:2018 i integracija s primijenjenim sistemima upravljanja (prema ISO 9001:2015 i ISO 45001:2018) prema Odluci o inoviranju strukture i funkcioniranju sistema upravljanja efikasnošću u JP Elektroprivreda BiH d.d. – Sarajevo i Odluci o izgradnji i implementaciji sistema upravljanja energetskom efikasnošću prema zahtjevima ISO 50001:2018 i integraciji s postojećim sistemima upravljanja u JP Elektroprivreda BiH d.d. – Sarajevo i Planom aktivnosti na dokumentiranju i kontroli sistema energetskog upravljanja prema ISO 5001:2018;
- priprema i provođenje internog audita prema zahtjevima ISO 90001:2015, ISO 450001:2018 i 50001:2018 u Direkciji Društva.

## Oblast IKT-a

**Pored navedenih IKT projekata koji su implementirani u 2021. godini, a opisani su detaljno u poglavlju Realizacija Plana ulaganja, u oblasti informaciono-komunikacionih tehnologija se pružala operativna podrška za 58 poslovnih servisa, a čiji su korisnici različite djelatnosti unutar EPBiH. Može se posebno istaći sljedeće:**

- obezbjeđivanje operativne podrške za poslovne servise koji su definirani Katalogom poslovnih IKT servisa, a čiji su korisnici različite djelatnosti unutar EPBiH;
- obezbjeđivanje IKT infrastrukturne i servisne osnove za uvođenje novih servisa, a u cilju podrške uspješnom vođenju, upravljanju i održavanju elektroenergetskog sistema, te efikasnom provođenju svih poslovnih procesa i planiranju razvoja elektroenergetskog sistema;
- izgradnja IKT infrastrukture u skladu sa zakonskom regulativom i propisima Regulatorne agencije za komunikacije, te politikom sigurnosti IKT sistema;
- obezbjeđivanje integriteta informacije u IKT sistemu (jedinствен unos informacije i njena višestruka upotreba) kroz konsolidaciju tehničkog i poslovnog informacionog sistema;
- kontinuirano poboljšavanje sistema za upravljanje servisima;
- aktivno učešće u realizaciji razvojnih i kapitalnih projekata.

## Oblast sigurnosti i zaštite

- realizirani ugovoreni poslovi u vezi s pružanjem usluga fizičko-tehničke zaštite u EPBiH;
- realizirani ugovoreni poslovi na projektiranju i pružanju usluga sistema tehničke zaštite za novi objekat TS „Podveležje“;
- ovlaštena firma izvršila je ispitivanje aparata za početno gašenje požara, ispravnost i funkcioniranje ugrađenog sistema aktivne zaštite od požara i ispravnost i funkcionalnost hidrantske mreže, kao i ispitivanje i funkcioniranje sistema vatrodjave;
- iz oblasti zaštite od požara vršena je kontinuirana saradnja s licima koja obavljaju ove poslove u podružnicama Društva, te pružena i određena stručna pomoć;
- u toku je realizacija usluge „Izrada studije, procjene ugroženosti i rizika, ažuriranje planova zaštite i spašavanja i zaštite od požara u EPBiH“;
- u skladu s obavezama iz Zakona o agencijama i unutrašnjim zaštitarskim službama u FBiH, izvršena je edukacija, testiranje fizičke spremne i gađanje vatrenim oružjem pripadnika Unutrašnje službe zaštite EPBiH u Direkciji Društva;
- kontinuirano su vršene aktivnosti na provođenju usvojenog Sistema upravljanja zdravljem i sigurnošću na radu OHSAS 18001:2007;
- u skladu s Pravilnikom o zaštiti na radu i Kolektivnim ugovorom izvršen je redovni ljekarski pregled radnika Direkcije i periodični ljekarski pregledi radnika na radnim mjestima s posebnim uvjetima rada.

## Oblast rudarstva

**Aktivnosti u vezi s oblasti rudarstva tokom 2021. godine bile su veoma intenzivne i složene, a mogu se sažeti u sljedeće:**

- urađene analize poslovanja ZD rudnika uglja, što je obuhvatalo proizvodne pokazatelje (tehničko-tehnološke parametre i organizaciju), finansijski položaj s posebnim akcentom na dospjele neizmirene obaveze, te identifikaciju uzroka lošeg poslovanja većine ZD rudnika u proteklom periodu;
- podrška i aktivno učešće u realizaciji mjera na prevazilaženju teškog tehničko-tehnološkog, organizacionog i finansijskog stanja u ZD rudnicima uglja;
- učešće u izradi Elaborata „Analiza i projekcije potreba za ugljem u EPBiH do 2050. godine s projekcijom dinamike obustave rudničkih kopova/pogona“;
- učešće i koordinacija u aktivnostima formiranja novih ZD u sklopu procesa prestrukturiranja;
- priprema akata u vezi s realizacijom finansijske podrške rudnicima, te neposredne aktivnosti na implementaciji odluka Skupštine iz maja 2021. godine u vezi s odobravanjem pozajmica;
- učešće u izradi i usklađivanju akata ZD rudnika kojim bi se unaprijedilo njihovo poslovanje;
- analize organizacionih rješenja i IT infrastrukture;
- podrška u realizaciji odluka o dokapitalizaciji ZD rudnika (detaljnije o ovom u poglavlju Realizacija Plana ulaganja).

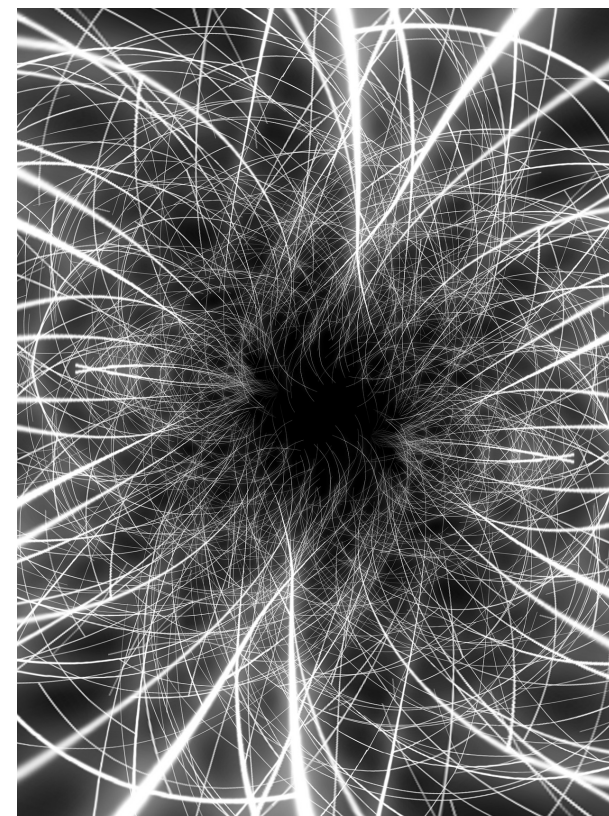
**Mjere na prevazilaženju teškog tehničko-tehnološkog, organizacionog i finansijskog stanja u ZD rudnicima uglja poduzimane su u više pravaca:**

- realizacija programa prestrukturiranja ZD rudnika uglja,

- intenziviranje investicionih ulaganja putem odluka o dokapitalizaciji,
- finansijska podrška davanjem pozajmica kojima se reprogramiraju postojeće obaveze ZD rudnika prema EPBiH i stvaraju preduvjeti za rješavanje viška neproizvodnih radnika u ZD rudnicima.

## Aktivnosti Službe za ostala zavisna i povezana društva i imovinu

- stalno praćenje predmeta prometovanja neelektroprivrednom imovinom po pitanju zakupa, prodaje ili kupovine;
- aktivnosti u vezi s dodjelom stanova EPBiH u skladu s Pravilnikom o vraćanju, dodjeli i prodaji stanova;
- kontinuirane aktivnosti s Agencijom za privatizaciju na regulisanju statusa i povratu imovine u R Hrvatskoj koja je upisana u Centralni registar pasivnog podbilansa;
- izrada projektnog zadatka za izradu Idejnog i Glavnog projekta poslovnog objekta PJD Ključ s pomoćnim objektima i nastavak aktivnosti na praćenju realizacije Idejnog i Glavnog projekta objekta PJD Ključ; urađen je Glavni projekt i pokrenute aktivnosti na pribavljanju općinskih saglasnosti;
- izvršen uvid u stanje objekta – odmarališta u Sutivanu, otok Brač, Republika Hrvatska, u korist SEER-a, Sindikalna organizacija „TE Tuzla“; u svrhu izrade specifikacije potrebnih ulaganja za nabavku opreme, inventara i ostalog materijala na period od 5 (pet) godina;
- kontinuirano praćenje i izvještavanje o realizaciji aktivnosti zavisnih društava (Eldis Tehnika d.o.o. Sarajevo, Hotel „ELBIH“ d.d. Makarska, TTUen-



ergetik d.o.o. Tuzla, Iskraemeco d.o.o. Sarajevo i ETI Sarajevo d.o.o. Sarajevo), putem planova poslovanja i godišnjih izvještaja o poslovanju; kvartalno izvještavanje o poslovanju zavisnih i povezanih društava;

- učešće u aktivnostima na osnivanju zavisnog društva GEOLP d.o.o. Kakanj – izrada općih akata.

## Realizacija okolišne politike i planova zaštite

### TE „Tuzla“:

- nastavljene započete aktivnosti u postupku dobijanja okolišne dozvole za odsumporavanje dimnih plinova Bloka 5 i Bloka 6;
- nastavljene započete aktivnosti u postupku dobijanja okolišne dozvole za zatvaranje odlagališta produkata procesa Plane i Divkovići – FMOIT izdalo rješenje o izdavanju okolišne dozvole za zatvaranje i sanaciju odlagališta šljake i pepela „Plane“, „Divkovići I“ i „Divkovići II“ na okolišno prihvatljiv način sa specifičnim mjerama za smanjenje utjecaja na okoliš, zdravlje ljudi i sigurnost;
- provedene aktivnosti ishodovanja upotrebne dozvole za odlagalište produkata procesa Jezero i zatvoreni sistem povratnih tehnoloških voda u TE;
- kontinuirano održavanje mjernih uređaja sistema za monitoring emisije zagađujućih materija u zrak na dimnjacima blokova 3, 4, 5 i 6 – održavanje se vrši kontinuirano za blokove 4,5 i 6 a za Blok 3 održavanje je obustavljeno do završetka radova kako bi se obezbijedio siguran pristup opremi za mjerenje zagađujućih materija na Bloku 3;
- provedene aktivnosti na realizaciji Plana aktivnosti od 17. 10. 2016. po uvjetima iz obnovljene okolišne dozvole od 30. 6. 2016. s rokom važenja do 13. 7. 2021. godine; u zakonskom roku dostavljena dokumentacija FMOiT-u za ishodovanje okolišne dozvole za TE „Tuzla“;
- u toku su aktivnosti po uvjetima iz vodne dozvole br. UP-I/25-3-40-432-04/17 od 6. 9. 2017. godine s rokom važenja do 6. 9. 2022. godine;
- nakon izbora konsultanta nastavljene aktivnosti za pripremu dokumentacije i izgradnju postrojenja za odsumporavanje dimnih plinova na Bloku 6;
- završeno zbrinjavanje opasnog otpada; mjerenje

- ambijentalne buke i radioaktivnosti;
- nastavljena kontinuirana upotreba zatvorenog ciklusa povratnih otpadnih voda s odlagalište produkata procesa Jezero;
- proveden nadzorni audit integriranog sistema poslovnog upravljanja kvalitetom i okolinom prema zahtjevima standarda ISO 9001:2015 i ISO 14001:2015;
- mjerenje EBS-a;
- mjerenje sadržaja lebdećih čestica (PM10) u zraku na udaljenosti od maksimalno 20 m od rubova deponije „Divkovići“ i deponije „Jezero“ prema naseljenim mjestima.

### TE „Kakanj“:

- pokrenut postupak nabavke za izgradnju postrojenja za odsumporavanje dimnih plinova blokova 6 i 7;
- izvršeno zbrinjavanje opasnog otpada od strane ovlaštenog operatora;
- realizirano mjerenje emisije buke;
- izvršeno mjerenje nivoa radioaktivnosti u krugu termoelektrane i na deponiji šljake i pepela;
- proveden nadzorni audit integriranog sistema poslovnog upravljanja kvalitetom i okolinom prema zahtjevima standarda ISO 9001:2015 i ISO 14001:2015;
- provedene aktivnosti na produženju kolektora Slapničkog Potoka;
- urađen i u skladu sa zakonskim rokovima dostavljen zahtjev za ishodovanje nove okolišne dozvole u FMOiT;
- provedeno umjeravanje automatskog sistema monitoringa emisije u zrak;
- izvršena zamjena mjerača protoka dimnih plinova na dimnjaku 300 m;
- vršeno periodično i kontinuirano mjerenje kvaliteta ispuštenih voda;
- vršeno redovno selektivno prikupljanje i odvoz otpadnog materijala iz kruga TE;
- vršeno redovno čišćenje, odvoz, odlaganje i

- zbrinjavanje mulja s postrojenja za pripremu voda i obradu voda;
- izvršena nabavka opreme za sanaciju okolišnih incidenata;
- redovno i u skladu sa zakonskim rokovima plaćane naknade:
  - komunalna naknada,
  - vodni doprinosi,
  - naknade za emisiju u zrak;
- redovno izvještavani nadležni državni organi o utjecajima TE na okoliš, odnosno o nastalim okolišnim aspektima u pogledu:
  - emisija u zrak,
  - ispuštanja u vode,
  - proizvodnje i upravljanja nastalim otpadima.

### HE na Neretvi:

- proveden je nadzorni audit ISU u podružnici sredinom decembra 2021. godine po zahtjevima standarda ISO 9001:2015; ISO 14001:2015 od strane predstavnika ovlaštenog certifikacijskog tijela „ICS – Institut za certificiranje sistema ICS“ d.o.o. Sarajevo;
- izvršeno ispitivanje hemijskih, fizikalnih i bioloških svojstava otpadnih voda (monitoring otpadnih voda), dva puta godišnje prema okolišnim dozvolama pogona HE „Jablanica“, HE „Grabovica“ i HE „Salakovac“;
- izvršeno ispitivanje emisije zagađujućih materija u zrak iz kotlovnice;
- izvršena nabavka materijala za apsorpciju (upijajuće maramice za ulje i apsorbeniti);
- sukcesivno se zbrinjava opasni otpad od strane ovlaštenog operatora „Kemeko-BH“ Lukavac;
- kontinuirano se vrši zbrinjavanje plutajućeg otpada s akumulacija HE „Jablanica“, HE „Grabovica“ i HE „Salakovac“;
- izvršena nabavka alohtonih vrsta riblje mladi/ ribe za poribljavanje sliva rijeke Neretve za 2021. godinu (jezerska pastrmka, kalifornijska pastrm-

ka, šaran), a nije izvršena nabavka jezerske zlatovčice i jegulje (nije bilo ponuđača) kao i nabavka autohtonih vrsta riblje mladi/ribe (potočne pastrmke, glavatice i mekousne pastrmke);

- potpisani sporazumi u 2021. godini s udruženjima sportskih ribolovaca U.G. „OSR Konjic“ Konjic, USR „Glavatica“ Jablanica i SRTD „Ramske vode“ Prozor-Rama o izmirenju zaostalih obaveza iz člana 35. Zakona o slatkovodnom ribarstvu za 2019. i 2020. godinu.

### ED Bihać:

- nastavljene su započete aktivnosti na izgradnji skladišta za privremeno odlaganje otpada u Bosanskom Petrovcu nakon pribavljenog Glavnog projekta;
- kontinuirano se vrši ugovaranje prodaje sekundarnih sirovina i otpadnih materijala, kao i zbrinjavanje opasnog otpada i predaja istog ovlaštenim operaterima;
- izvršena je nabavka sredstava za zaštitu okoliša (apsorbensi), za potrebe djelatnosti proizvodnje EE;
- realizirane su aktivnosti i mjere zaštite vode i okoliša naložene važećim okolišnim i vodnim dozvolama;
- u skladu sa zaključenim sporazumima izvršeno je poribljavanje rijeka Une i Krušnice;
- izrađeni su projektni zadaci sanacije i izgradnje uljnih jama na TS 35/10 kV. U toku je postupak nabavke usluge izrade projektne dokumentacije.

### ED Mostar:

- u skladu s propisima iz oblasti zaštite voda, kontinuirano se vrši nadzor nad ispravnosću uljnih jama u zidanim TS 35/10 kV i 20(10)/04 kV i po potrebi se interveniše na njima;
- svi novi elektroenergetski objekti (transformatorske stanice 10(20)/0,4 kV), izgrađeni u 2021. godini, izvedeni su s hermetički zatvorenim uljnim

transformatorima, a ispod svakog transformatora u kablovskim transformatorskim stanicama temelji su riješeni na način da se omogućiti sakupljanje cjelokupne količine ulja energetskog transformatora, kako bi tehnička izvedba zadovoljila standarde sa aspekta zaštite okoliša.

### ED Sarajevo:

- skladište za privremeno skladištenje otpada Azići u funkciji (kontinuirano izvještavanje o ispunjenju uvjeta iz dozvole za upravljanje otpadom);
- izvršeno mjerenje ambijentalnog jonizirajućeg zračenja u skladištu za privremeno skladištenje otpada Azići ( u skladu s dozvolom za upravljanje otpadom);
- završena rekonstrukcija skladišta za privremeno skladištenje otpada u PJD Goražde i pokrenute aktivnosti na dobijanju upotrebne dozvole i stavljanju skladišta u funkciju;
- kontinuirano ugovaranje usluga zbrinjavanja opasnog otpada i prodaja otpada;
- kontinuirana nabavka sredstava za zaštitu okoliša (apsorbensi); u 2021. godini podružnica je realizirala centraliziranu nabavku;
- kontinuirano godišnje poribljavanje rijeke Osanica u Goraždu;
- kontinuirano predavanje odbačene električne i elektronske opreme operateru sistema upravljanja otpadnom električnom i elektronskom opremom na preradu i zbrinjavanje; u 2021. godini predaja izvršena u tri navrata;
- u 2021. godini počela je implementacija UNDP projekta „Okolinski prihvatljivo upravljanje postojanim organskim zagađujućim materijama (POPs) u industrijskom i sektoru upravljanja otpadom u Bosni i Hercegovini“; podružnica će u okviru ovog projekta (uz finansiranje Vlade Švedske) zbrinuti demontirane kondenzatore za koje postoji sumnja da su punjeni PCB-om;
- mjerenje protoka na rijeci Osanica u trajanju od petnaest (15) mjeseci. Mjerenje se vrši u skladu s ugovorom za izradu Elaborata za određivanje

ekološki prihvatljivog protoka (EPP) na rijeci Osanici u svrhu dobivanja nove vodne dozvole za mHE „Osanica“.

### ED Tuzla:

- kontinuirano se ugovara usluga zbrinjavanja opasnog otpada i prodaje sekundarnih sirovina i otpadnih materijala, te se otpad predaje ovlaštenim operaterima;
- izvršeno je ispitivanje kvaliteta vode na izlazu iz dva separatora u poslovnom krugu na lokaciji Mitra T. Uče do br. 5, Tuzla;
- izvršeno je poribljavanje hidroakumulacije „Sniježnica“;
- prema potrebi se nabavljaju neophodni kontejneri/kante za selektivno prikupljanje i odlaganje otpada; u 2021. godini nabavljen dodatni kontejner za prikupljanje otpadnih tonera;
- izvršen prvi nadzorni audit po zahtjevima standarda ISO 9001:2015; i ISO 14001:2015, 14. 6. 2021. godine;
- objavljen je tender za sanaciju klizišta na bokovima brane „Sniježnica“, ali nije realizirano sklapanje ugovora, finansijska sredstva se prenose u narednu 2022. godinu.

### ED Zenica:

- pripremljena i dostavljena dokumentacija (ažurirana od 7. 9. 2021. godine) za javni oglas za prikupljanje ponuda za prodaju sekundarnih sirovina i otpadnih materija prikupljenih u podružnici ED Zenica;
- predat je elektronski otpad operatoru sistema za prikupljanje električnog i elektronskog otpada (C.I.B.O.S. d.o.o. Sarajevo Podružnica Zenica), uz izdavanje pratećeg lista za električni i elektronski otpad;
- prisustvovanje seminaru „Zaštita okoliša i upravljanje otpadom“ (novi Zakon o zaštiti okoliša, pravilnici i uredbi) u organizaciji Ceteor d.o.o. Sarajevo.



## 4. REALIZACIJA ELEKTROENERGETSKOG BILANSA

*Ostvarena je ukupna proizvodnja električne energije u količini 6.677,1 GWh, što je za 123,8 GWh ili 1,9% više od bilansirane proizvodnje, a za 439,2 GWh ili za 7,0% više od ostvarene proizvodnje u 2020. godini.*

## Rad elektroenergetskog sistema EPBiH u 2021. godini karakterišu:

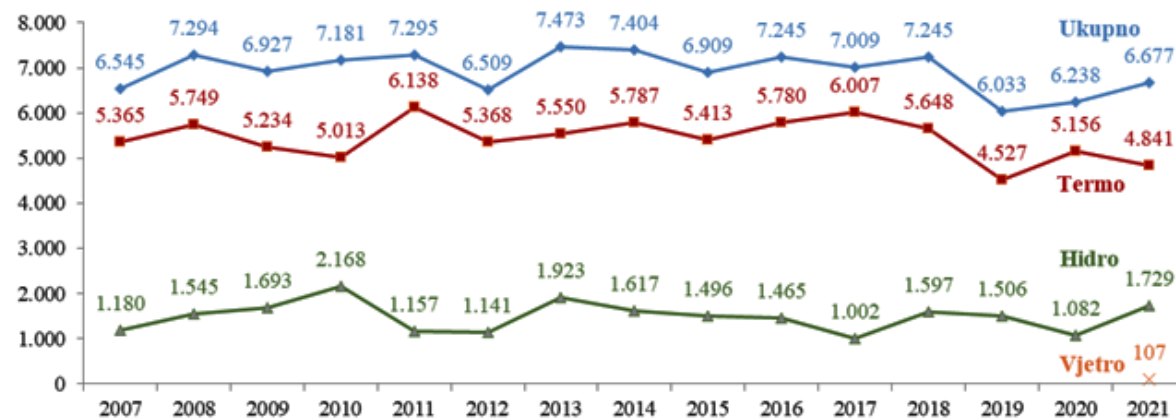
- ukupna proizvodnja električne energije veća za 1,9% od bilansirane po EEB-u, a za 7,0% veća od proizvodnje u 2020. godini;
- ukupno ostvareni prirodni dotoci vode veći od bilansiranih za 622,5 GWh ili za 31,5%, a za 1.034,4 GWh ili 66,1% veći od ostvarenih dotoka u 2020. godini;
- ukupne nabavke uglja manje od bilansiranih količina za 6,7%, a za 8,2% manje od nabavki u 2020. godini;
- ukupna potrošnja električne energije veća od bilansirane za 148,3 GWh ili za 2,8%, a za 183,9 GWh ili 3,5% veća od ukupno ostvarene potrošnje u 2020. godini;
- tržišna prodaja električne energije (uključujući prodaju gubitaka prijenosa, a isključujući kupoprodaju (gdje po EEB-u nije ni planirana količina) veća je od bilansirane, odnosno ostvarene tržišne prodaje iz 2020. godine.

S aspekta količina i dinamike, isporuke električne energije u 2021. godini su:

- u potpunosti zadovoljene sve potrebe krajnjih kupaca koje snabdijeva EPBiH u količini od 5.004,3 GWh;
- realizirane ugovorene obaveze za prodaju električne energije u količini 1.872,8 GWh;
- realizirana ukupna prodaja električne energije vezane trgovine u količini 150,9 GWh;
- realizirana ukupna prodaja po osnovu pokrivanja prijenosnih gubitaka u količini od 109,8 GWh;
- realizirana prodaja po osnovu ugovora o poslovno-tehničkoj saradnji u količini od 166,6 GWh;
- realizirana prodaja električne energije po osnovu ostvarenog debalansa i regulacije u količini 47,9 GWh.

Proizvodnja (GWh)	2014.	2015.	2016.	2017.	2018.	2019.	2020.	2021.
HE	1.617	1.496	1.465	1.002	1.597	1.506	1.082	1.729
TE	5.787	5.413	5.780	6.007	5.648	4.527	5.156	4.841
VE								107
<b>Ukupno</b>	<b>7.404</b>	<b>6.909</b>	<b>7.245</b>	<b>7.009</b>	<b>7.245</b>	<b>6.034</b>	<b>6.238</b>	<b>6.677</b>

### TREND - proizvodnja električne energije (GWh)



Hidroelektrane („Jablanica“, „Grabovica“, „Salakovac“ i male hidroelektrane u vlasništvu EPBiH) proizvele su 1.729,1 GWh, što je za 300,5 GWh ili za 21,0% više od bilansirane, te za 647,0 GWh ili za 59,8% više od ostvarene proizvodnje u 2020. godini.

Termoelektrane „Tuzla“ i „Kakanj“ ostvarile su proizvodnju 4.840,8 GWh, što je za 183,9 GWh ili za 3,7% manje od bilansirane, a za 315,0 GWh ili 6,1% manje u odnosu na proizvodnju TE u 2020. godini. Kod TE „Tuzla“ proizvodnja je realizirana ispod bilansirane uz procenat ostvarenja 95,4%, dok je kod TE „Kakanj“ taj procenat iznosio 97,8%. Ukupnu elektroenergetsku situaciju uvjetovale su ukupne nabavke uglja, cijena električne energije na tržištu, kao i hidrološke prilike.

Proizvodnja (%)	2021.	Bilans 2021.	2020.	2019.	2018.	2017.	2016.	2015.	2014.
Hidroelektrane	25,9	21,8	17,3	25,0	22,0	14,3	20,2	21,7	21,8
Termoelektrane	72,5	76,7	82,7	75,0	78,0	85,7	79,8	78,3	78,2
Vjetroelektrane	1,6	1,5							

Od ukupne proizvodnje za 2021. godinu, 72,5% odnosi se na proizvodnju termoelektrana, 25,9% na proizvodnju hidroelektrana, dok se 1,6% odnosi na proizvodnju vjetroelektrana koje pored dva tradicionalna izvora od ove godine također učestvuju u miksu proizvodnje električne energije. Ovo predstavlja povoljniji hidro-termo odnos u poređenju s bilansom i nekoliko prethodnih godina, gdje su i vjetroelektrane doprinijele još povoljnijem odnosu.

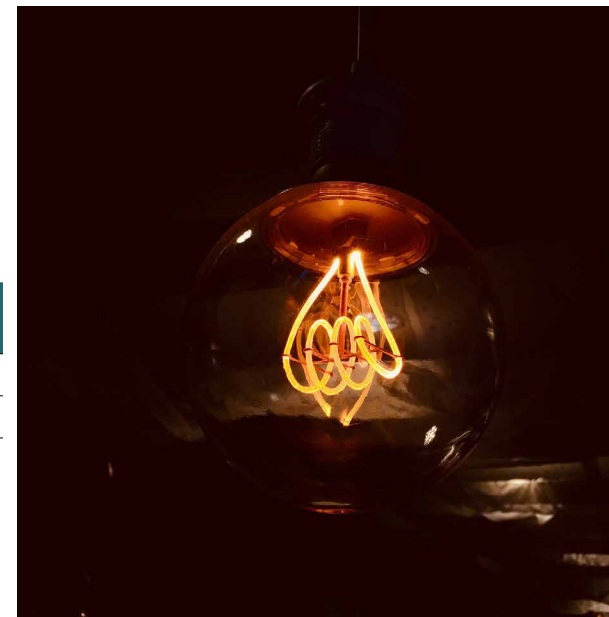
## Potrošnja

Ukupna potrošnja električne energije obuhvata bruto distributivnu potrošnju (bez neto potrošnje drugih snabdjevača) i potrošnju direktnih potrošača. Ukupna potrošnja električne energije ostvarena je u količini od 5.379,9 GWh, što je za 148,3 GWh ili 2,8% više od bilansirane, a za 183,9 GWh ili za 3,5% više od potrošnje u 2020. godini.

Ukupna potrošnja obuhvata:

- bruto distributivnu potrošnju (bez neto potrošnje drugih snabdjevača) ostvarenu u količini 4.861,7 GWh
- potrošnju direktnih potrošača (krajnji kupci na 110 kV naponu) 549,9 GWh (više od bilansirane za 0,3%).

Ukupnu bruto distributivnu potrošnju čine neto distributivna potrošnja kupaca EPBiH 4.454,3 GWh, neto distributivna potrošnja kupaca drugih snabdjevača u količini 31,7 GWh, te distributivni gubici u količini 375,6 GWh. Procenat distributivnih gubitaka u odnosu na bruto distributivnu potrošnju je 7,73%, što je bolje od bilansiranog procenta.



Iz elektroenergetskog sistema EPBiH isporučeno u saldu 1.297,2 GWh (prodaja i isporuka 2.479,3 GWh, kupovina i prijem 1.182,2 GWh).

Ukupna količina tržišne prodaje iznosila je 2.348,0 GWh, što je za 130,2 GWh ili 5,9% više od bilansiranog po EEB-u, a za 28,4 GWh ili 1,2% manje u odnosu na 2020. godinu.

U 2021. godini kupljena je količina električne energije od 1.165,7 GWh.



## Proizvodnja sporednih proizvoda

Osim električne energije ostvarena je i proizvodnja sporednih proizvoda u termoelektranama i to:

- toplotna energija i tehnološka para, ukupno 125,8 GWh u TE „Tuzla“;
- toplotna energija 23,9 GWh u TE „Kakanj“;

Ukupne nabavke uglja za potrebe rada termoelektrana iznosile su 4.676,5 hilj. tona što je manje od bilansiranih količina za 335,5 hilj. tona ili 6,7%. U odnosu na 2020. godinu, ukupno nabavljene količine uglja bile su manje za 419,1 hilj. tona ili za 8,2%.

Ukupno ostvarene zalihe na depozima termoelektrana na kraju 2021. godine iznosile su 119,3 hilj. tona, što je za 307,8 hilj. tona manje od bilansiranih.

Toplotna vrijednost utrošenog uglja iznosila je ukupno 11.822 kJ/kg, što je za 682 kJ/kg ili za 5,5% lošije od bilansirane.

## REALIZACIJA ELEKTROENERGETSKOG BILANSA ZA 2021. GODINU (sažetak)

ELEMENTI BILANSA	Ostvarenje	Bilans	Ostvarenje	U odnosu na	U odnosu na
	2021.	2021.	2020.	Bilans 2021.	2020.
	GWh	GWh	GWh	promjena	promjena
				%	%
<b>1. PROIZVODNJA</b>	<b>6.677,1</b>	<b>6.553,3</b>	<b>6.237,9</b>	<b>1,9</b>	<b>7,0</b>
Hidroelektrane	1.729,1	1.428,6	1.082,1	21,0	59,8
- HE na Neretvi	1.665,5	1.352,2	1.024,1	23,2	62,6
- male HE	63,6	76,4	58,0	-16,8	9,6
Termoelektrane	4.840,8	5.024,8	5.155,8	-3,7	-6,1
- TE „Tuzla“	2.862,9	3.001,5	3.124,2	-4,6	-8,4
- TE „Kakanj“	1.977,9	2.023,3	2.031,6	-2,2	-2,6
Vjetroelektrane	107,2	100,0	-	7,2	-
<b>2. PRIJEM - kupovina i korekcija</b>	<b>1.182,2</b>	<b>1.072,4</b>	<b>1.403,3</b>	<b>10,2</b>	<b>-15,8</b>
<b>3. UKUPNO RASPOLOŽIVO (1+2)</b>	<b>7.859,1</b>	<b>7.625,8</b>	<b>7.641,2</b>	<b>3,1</b>	<b>2,9</b>
<b>4. POTROŠNJA</b>	<b>5.379,9</b>	<b>5.231,6</b>	<b>5.196,0</b>	<b>2,8</b>	<b>3,5</b>
Bruto distributivna potrošnja	4.861,7	4.834,6	4.677,6	0,6	3,9
Direktni potrošači	549,9	547,6	560,6	0,4	-1,9
<b>5. ISPORUKA - prodaja i korekcija</b>	<b>2.479,3</b>	<b>2.394,1</b>	<b>2.445,2</b>	<b>3,6</b>	<b>1,4</b>
<b>6. UKUPNE POTREBE (4+5)</b>	<b>7.859,1</b>	<b>7.625,7</b>	<b>7.641,2</b>	<b>3,1</b>	<b>2,9</b>



5. REALIZACIJA  
FINANSIJSKOG  
PLANA

UKUPNI PRIHODI u hiljadama KM		Plan			Index	Index
		2021.	2021.	2020.	21/pl	21/20
		1	2	3	4	5
<b>1.</b>	<b>Prihodi od prod. električne energije i pomoćnih usluga</b>	<b>1.052.426</b>	<b>1.032.914</b>	<b>997.246</b>	<b>101,9</b>	<b>105,5</b>
	- prihod od prodaje krajnjim kupcima EPBiH	739.385	733.962	726.786	100,7	101,7
	- kupci na 110 kV	61.328	61.650	68.059	99,5	90,1
	- kupci na 35 kV *	35.797	35.972	36.262	99,5	98,7
	- kupci na 10 kV *	128.629	126.271	126.759	101,9	101,5
	- kupci na 0,4 kV domaćinstva	322.641	318.791	318.423	101,2	101,3
	- kupci na 0,4 kV * ostala potrošnja	174.596	175.355	161.855	99,6	107,9
	- kupci na 0,4 kV javna rasvjeta	15.978	15.487	15.025	103,2	106,3
	- neovlaštena potrošnja (svi naponi)	417	436	403	95,7	103,4
	- dugoročna i kratkor. prodaja u /van BiH	234.415	218.916	186.117	107,1	126,0
	- prihod po osnovu UPTS-a (energija+ mrežarina)	17.938	17.648	16.696	101,6	107,4
	- prihod po osnovu kupoprodaje (vezana trgov.)	29.567	29.707	52.005	99,5	56,9
	- prihod od prodaje iz obnovljivih izvora	13.152	14.007	6.739	93,9	195,2
	- prihod od pom. usl. uključ. i el. energ. u vezi PU	17.969	18.673	8.903	96,2	201,8
<b>2.</b>	<b>Prihod od prod. tehn. pare i topl. energije</b>	<b>15.527</b>	<b>15.483</b>	<b>14.522</b>	<b>100,3</b>	<b>106,9</b>
	-prihod od tehnološke pare	3.539	3.518	3.049	100,6	116,1
	- prihod od toplotne energije	10.297	10.396	9.815	99,1	104,9
	- prihod od prodaje ostalih spor. i nus proizvoda	1.690	1.569	1.658	107,8	102,0
<b>3.</b>	<b>Prihodi od prodaje materijala i usluga</b>	<b>30.483</b>	<b>27.903</b>	<b>25.510</b>	<b>109,2</b>	<b>119,5</b>
	- prihod od naknada priključenja	21.473	19.867	17.788	108,1	120,7
	- ostali prihodi od prodaje materijala i usluga	9.011	8.036	7.722	112,1	116,7
<b>4.</b>	<b>Prihod od finansiranja</b>	<b>6.553</b>	<b>5.877</b>	<b>6.060</b>	<b>111,5</b>	<b>108,1</b>
<b>5.</b>	<b>Ostali prihodi</b>	<b>18.482</b>	<b>14.911</b>	<b>14.749</b>	<b>123,9</b>	<b>125,3</b>
<b>UKUPNO (1 do 5)</b>		<b>1.123.471</b>	<b>1.097.088</b>	<b>1.058.087</b>	<b>102,4</b>	<b>106,2</b>

\* uključujući distributivnu mrežarinu krajnjih kupaca drugih snabdjevača i vlastitu potrošnju koja se preuzima sa 10kV i 0,4kV.

6.	Materijal za proizvodnju električne energije	304.354	308.020	331.762	98,8	91,7
7.	Materijal za održavanje	9.958	9.983	9.047	99,8	110,1
8.	Ostali troškovi materijala (utroš. el. energ., HTZ oprema, gorivo, kanc. mat.)	5.431	5.427	5.353	100,1	101,5
9.	Troškovi prijevoza uglja	20.809	22.359	24.248	93,1	85,8
10.	Usluge održavanja	17.619	18.728	17.459	94,1	100,9
11.	Troškovi nabavke električne energije i pomoćnih usluga	200.704	200.024	146.692	100,3	136,8
12.	Premije osiguranja	2.078	2.532	1.830	82,1	113,6
13.	Drugi troškovi usluga	13.869	15.130	11.394	91,7	121,7
14.	Troškovi amortizacije	156.202	156.341	144.650	99,9	108,0
15.	Troškovi mrežarina i naknada za NOS	53.631	53.158	51.742	100,9	103,7
16.	Plate i naknade plata	148.617	149.800	149.547	99,2	99,4
17.	Drugi troškovi rada	24.763	24.998	24.301	99,1	101,9
18.	Vodoprivredne naknade	30.185	28.031	19.032	107,7	158,6
19.	Razne dažbine, naknade i članarine	19.494	19.645	20.195	99,2	96,5
20.	Drugi troškovi poslovanja	7.436	8.233	7.034	90,3	105,7
21.	Finansijski troškovi i rashodi	4.783	5.120	3.540	93,4	135,1
22.	Drugi rashodi (otpis potraž., gubici od umanj. vrijed. troš. iz ran. god.)	78.379	50.209	67.059	156,1	116,9
23.	Troškovi rezervisanja (sudski sporovi, demontaža, aktuarska rezerva i dr)	11.156	6.258	12.662	178,3	88,1
<b>UKUPNI TROŠKOVI I RASHODI (6 do 23)</b>		<b>1.109.469</b>	<b>1.083.996</b>	<b>1.047.546</b>	<b>102,3</b>	<b>105,9</b>
<b>DOBIT PRIJE POREZA</b>		<b>14.001</b>	<b>13.092</b>	<b>10.542</b>	<b>106,9</b>	<b>132,8</b>
<b>NETO DOBIT PERIODA</b>		<b>12.325</b>	<b>10.824</b>	<b>7.249</b>	<b>113,9</b>	<b>170,0</b>

# Prihodi

**U 2021. godini EPBiH je nastavila s pozitivnim, likvidnim i stabilnim poslovanjem, uz redovno izmirivanje obaveza prema dobavljačima, državnim organima i institucijama, zaposlenicima i kreditorima.**

Ukupno ostvareni prihod EPBiH za 2021. godinu iznosi **1.123,47 mil. KM** i veći je od planiranog za **23,38 mil. KM** ili **2,4%**, dok je za **65,38 mil. KM** ili **6,2%** veći od ostvarenog prihoda u 2020. godini.

## Prihod od prodaje električne energije i pomoćnih usluga

**U strukturi ukupno ostvarenog prihoda najveći dio čini prihod od prodaje električne energije i pomoćnih usluga u iznosu 1.052,43 mil. KM, što je 93,7% ukupnih prihoda Društva za 2021. godinu.**

Ovi prihodi se odnose na prihod od:

- prodaje krajnjim kupcima EPBiH u iznosu **739,39 mil. KM**
- prodaje energije iz obnovljivih izvora u iznosu **13,15 mil. KM**
- prodaje po osnovu Ugovora o PTS (energija i mrežarina) u iznosu **17,94 mil. KM,**
- dugoročne i kratkoročne prodaje u/van BiH u iznosu **234,41 mil. KM,**
- kupoprodaje (vezane trgovine) u iznosu **29,57 mil. KM** i
- pomoćnih usluga (energija, kapaciteti i usluga balansiranja) u iznosu **17,97 mil. KM.**

## Prihod od prodaje električne energije krajnjim kupcima

**Iznosi, učešća i pokazatelji posmatrano po distributivnim podružnicama, a u vezi s ostvarenjem prihoda od krajnjih kupaca na distributivnoj mreži (podaci ne uključuju prihod od neovlaštene potrošnje, cut-offa, kao ni prihod po osnovu mrežarine kupcima drugih snabdjevača):**

Podružnica / Pokazatelj	ED Bihać	ED Mostar	ED Sarajevo	ED Tuzla	ED Zenica	Ukupno
Iznos prihoda (mil. KM)	73,83	37,91	213,17	186,48	164,78	676,63
Učešće prihod distr. kupci (%)	10,9	5,6	31,5	27,6	24,4	100,0
Prodana količina (GWh)	473,4	245,3	1.387,2	1.265,5	1.079,5	4.454,3
Prosječna cijena (F/kWh)	15,60	15,46	15,37	14,74	15,26	15,19

## Pregled strukture prodaje krajnjim kupcima razložen na energiju i mrežarinu

(prihod i prosječna cijena uključuju i dio koji se odnosi na tarifni element Mjerno mjesto (MM)).

STRUKTURA	Ostv. 2021.			Ostv. 2020.			Ostv. 2019.			Ostv. 2018.			Ostv. 2017.			Ostv. 2016.			Ostv. 2015.		
	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod
PRODAJE	GWh	F/kWh	mil.KM	GWh	F/kWh	mil.KM	GWh	F/kWh	mil.KM	GWh	F/kWh	mil.KM	GWh	F/kWh	mil. KM	GWh	F/kWh	mil. KM	GWh	F/kWh	mil. KM
ENERGIJA																					
Krajnji kupci																					
- kupci na 110 kV	549,9	9,66	53,1	560,6	10,64	59,6	493,3	10,14	50,0	464,3	9,49	44,1	485,3	8,20	39,8	458,0	8,62	39,5	449,6	9,05	40,7
- kupci na 35 kV	299,6	9,56	28,7	287,7	10,18	29,3	296,6	9,83	29,1	303,9	9,61	29,2	286,7	8,71	25,0	274,8	8,77	24,1	274,5	8,86	24,3
- kupci na 10 kV	922,8	10,44	96,4	851,4	11,29	96,2	887,1	10,90	96,7	860,0	10,49	90,2	830,1	9,61	79,7	790,4	10,65	84,2	827,4	11,29	93,4
- domaćinstva	2.224,8	7,41	164,8	2.189,5	7,43	162,6	2.143,1	7,44	159,5	2.110,7	7,46	157,5	2.141,8	7,44	159,4	2.132,4	7,44	158,7	2.121,2	7,40	156,9
- ostali 0,4 kV	924,2	11,05	102,1	852,5	11,11	94,7	904,5	11,03	99,7	893,7	10,58	94,6	885,0	10,50	93,0	856,2	10,88	93,1	829,5	11,07	91,8
- javna rasvjeta	82,9	11,43	9,5	82,9	10,29	8,5	83,2	10,11	8,4	81,9	9,08	7,4	81,2	7,46	6,1	80,4	7,44	6,0	77,4	8,62	6,7
Ukupno krajnji kupci (SNB)	5.004,3	9,08	454,6	4.824,5	9,35	450,9	4.807,6	9,22	443,5	4.714,4	8,97	422,9	4.710,1	8,56	403,0	4.592,3	8,83	405,6	4.579,5	9,04	413,8

STRUKTURA	Ostv. 2021.			Ostv. 2020.			Ostv. 2019.			Ostv. 2018.			Ostv. 2017.			Ostv. 2016.			Ostv. 2015.		
	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod	Energija	Cijena	Prihod
PRODAJE	GWh	F/kWh	mil.KM	GWh	F/kWh	mil.KM	GWh	F/kWh	mil.KM	GWh	F/kWh	mil.KM	GWh	F/kWh	mil. KM	GWh	F/kWh	mil. KM	GWh	F/kWh	mil. KM
MREŽARINA																					
Krajnji kupci																					
- kupci na 110 kV	549,9	1,49	8,2	560,6	1,50	8,4	493,3	1,43	7,1	464,3	1,34	6,2	485,3	1,35	6,6	458,0	1,38	6,3	449,6	1,49	6,7
- kupci na 35 kV	299,6	2,30	6,9	287,7	2,34	6,7	296,6	2,32	6,9	303,9	2,28	6,9	286,7	2,34	6,7	274,8	2,32	6,4	274,5	2,41	6,6
- kupci na 10 kV	922,8	3,43	31,6	851,4	3,48	29,6	887,1	3,42	30,3	860,0	3,37	29,0	830,1	3,36	27,9	790,4	3,39	26,8	827,4	3,39	28,0
- domaćinstva	2.224,8	7,09	157,7	2.189,5	7,11	155,6	2.143,1	7,12	152,5	2.110,7	7,13	150,5	2.141,8	7,13	152,6	2.132,4	7,13	152,0	2.121,2	7,13	151,2
- ostali 0,4 kV	924,2	7,84	72,5	852,5	7,88	67,2	904,5	7,84	70,9	893,7	7,85	70,1	885,0	7,91	70,0	856,2	7,94	68,0	829,5	7,95	66,0
- javna rasvjeta	82,9	7,85	6,5	82,9	7,84	6,5	83,2	7,84	6,5	81,9	7,84	6,4	81,2	7,84	6,4	80,4	7,83	6,3	77,4	7,82	6,1
Ukupno krajnji kupci (SNB)	5.004,3	5,66	283,4	4.824,5	5,68	274,0	4.807,6	5,70	274,2	4.714,4	5,71	269,2	4.710,1	5,74	270,1	4.592,3	5,79	265,8	4.579,5	5,78	264,6

## Prihod od prodaje električne energije iz obnovljivih izvora

EPBiH je zaključila ugovore o otkupu električne energije s Operaterom za OIEiK, a po kojim Operater otkupljuje proizvedenu električnu energiju iz sedam malih hidroelektrana u sastavu ED podružnica, te VP „Podveležje“ za koje imamo status kvalificiranog proizvođača iz obnovljivih izvora. Otkup se vrši po referentnoj cijeni koju utvrđuje FERK, a na osnovu historijskog kretanja cijena trgovine u Federaciji BiH. Po ovom osnovu ostvaren je prihod u iznosu 13,15 mil. KM za energiju u količini 117,2 GWh.

## Prihod od prodaje električne energije na tržištu

Prihod od prodaje električne energije na tržištu realiziran kroz djelatnost Trgovine ostvaren je u zbirnom iznosu 281,92 mil. KM (bez energije prodane kroz sistem pomoćnih usluga) i veći je od plana za 15,65 mil. KM ili 5,9%. Prosječna prodajna cijena kupoprodaje je bila 10,8% veća od planirane.

Struktura ostvarenog prihoda u djelatnosti Trgovine:

- prihod od dugoročne prodaje vlastite energije 102,29 mil. KM
- prihod od kratkoročne prodaje vlastite energije 132,13 mil. KM (uključujući prodaju NOS-u BiH za pokriće prijenosnih gubitaka u toku četiri mjeseca u iznosu 13,11 mil. KM)
- prihod po osnovu UPTS-a 15,28 mil. KM (bez mrežarine), odnosno 17,94 mil. KM s mrežarinom
- prihod po osnovu kupoprodaje (također kratkoročnog karaktera) 29,57 mil. KM.

Prosječna prodajna cijena po osnovu dugoročne prodaje iznosi 9,73 F/kWh i u nivou je planirane, dok je za 19,2% niža u odnosu na prosječnu cijenu dugoročne prodaje u 2020. godini. Ostvarene količine prodaje su bile 4,1% niže u odnosu na plan/sagledavanje, dok su povećane za 36,6% u odnosu na prethodnu godinu.

Prosječna prodajna cijena po osnovu kratkoročne prodaje vlastito proizvedene energije iznosi 14,18 F/kWh i veća je, kako u odnosu na planiranu (12,68 F/kWh), tako i u odnosu na prosječnu cijenu kratkoročne prodaje postignutu u 2020. godini (10,70 F/kWh) pretežno zbog intenzivnog rasta cijena na regionalnom tržištu u toku II polugodišta 2021. godine. U kratkoročnu prodaju uključena je i prodaja energije NOS-u BiH za pokriće prijenosnih gubitaka (period juli - oktobar) s obzirom na to da je njihova prodaja ugovorena po tržišnim principima i to iz količina koje su bile planirane za kratkoročnu prodaju.

Prodaja energije po osnovu ugovora o poslovno-tehničkoj saradnji (UPTS) je blizu planirane, a cijena je bila identična planiranoj i ostvarenoj u prethodnim godinama.

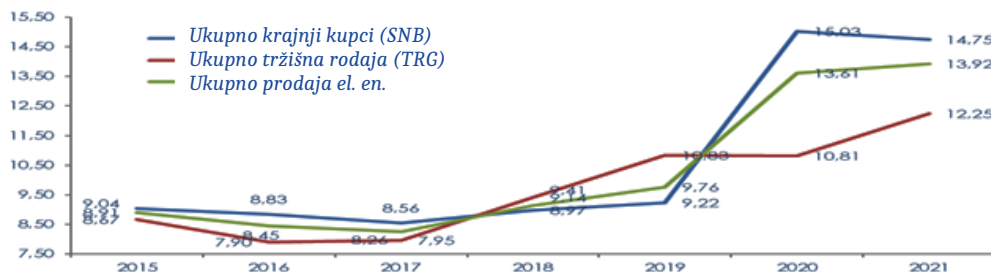


Prihod po osnovu kupoprodaje energije je ostvaren u iznosu 29,57 mil. KM za prodaju 150,9 GWh kupljene energije.

cijena el. en. F/kWh - energija



cijena el. en. F/kWh - mrežarina



Prosječna cijena F/kWh ukupno



## Struktura prodaje električne energije (uključena je prodaja kroz djelatnosti Snabdijevanja i Trgovine)

STRUKTURA	Ostv. 2021.				Plan (Sagledano) 2021.				Ostv. 2020.			
	Energija	Cijena	Prihod	udio	Energija	Cijena	Prihod	udio	Energija	Cijena	Prihod	udio
vrsta prodaje	GWh	F/kWh	mil.KM	%	GWh	F/kWh	mil. KM	%	GWh	F/kWh	mil. KM	%
<b>Krajnji kupci</b>												
- kupci na 110 kV	550,0	11,15	61,3	6%	561,5	10,98	61,7	6%	560,6	12,14	68,1	7%
- kupci na 35 kV	299,6	11,87	35,6	3%	301,9	11,83	35,7	4%	287,7	12,52	36,0	4%
- kupci na 10 kV	922,8	13,87	128,0	12%	911,8	13,77	125,6	12%	851,4	14,77	125,8	13%
- domaćinstva	2.224,8	14,50	322,5	31%	2.194,0	14,53	318,8	31%	2.189,5	14,53	318,2	32%
- ostali 0,4 kV	924,2	18,89	174,6	17%	928,7	18,88	175,3	17%	852,5	18,98	161,8	16%
- javna rasvjeta	82,9	19,28	16,0	2%	82,8	18,70	15,5	2%	82,9	18,13	15,0	2%
<b>Ukupno krajnji kupci (SNB)</b>	<b>5.004,3</b>	<b>14,75</b>	<b>738,0</b>	<b>71%</b>	<b>4.980,8</b>	<b>14,71</b>	<b>732,5</b>	<b>72%</b>	<b>4.824,5</b>	<b>15,03</b>	<b>724,9</b>	<b>73%</b>
<b>Tržišna prodaja</b>												
Ukupna prodaja u/izvan BiH	1.982,6	11,82	234,415	23%	1.979,6	11,06	218,9	21%	1.643,0	11,33	186,1	19%
Prodaja po osnovu UPTS (sa mrežarinom)	166,6	10,77	17,938	2%	165,7	10,65	17,6	2%	157,1	10,63	16,7	2%
Kupoprodaja u/izvan BIH vezana trgovina	<b>150,9</b>	<b>19,59</b>	<b>29,567</b>	<b>3%</b>	<b>168,0</b>	<b>17,68</b>	<b>29,7</b>	<b>3%</b>	<b>543,1</b>	<b>9,58</b>	<b>52,0</b>	<b>5%</b>
Prodaja u vezi s pomoćnim uslugama	47,8	14,67	7,020	1%	49,2	13,99	6,9	1%	33,1	6,03	2,0	0%
Prodaja operateru za OIEIK	117,2	11,22	13,152	1%	124,8	11,22	14,0	1%	61,3	10,99	6,7	1%
Ukupno tržišna prodaja (TRG)	2.465,2	12,25	302,1	29%	2.487,3	11,55	287,2	28%	2.437,6	10,81	263,6	27%
<b>Ukupno prodaja</b>												
<b>električne energije*</b>	<b>7.469,5</b>	<b>13,92</b>	<b>1.040,0</b>	<b>100%</b>	<b>7.468,1</b>	<b>13,65</b>	<b>1.019,7</b>	<b>100%</b>	<b>7.262,1</b>	<b>13,61</b>	<b>988,5</b>	<b>100%</b>

\* nisu obuhvaćeni prihodi po osnovu neovlaštene potrošnje, prihodi od distributivne mrežarine za kupce drugih snabdjevača i prihod od nefakturisane el.energije



## Prihod od pomoćnih usluga (energija i kapaciteti)

Prihodi od pomoćnih usluga iznose 17,97 mil. KM i manji su u odnosu na plan za 0,7 mil. KM ili 3,8%. U odnosu na 2020. godinu realizacija ovih prihoda je praktički udvostručena, tj. veća je za 9,06 mil. KM. Prihod na ime pomoćnih usluga se odnosi na:

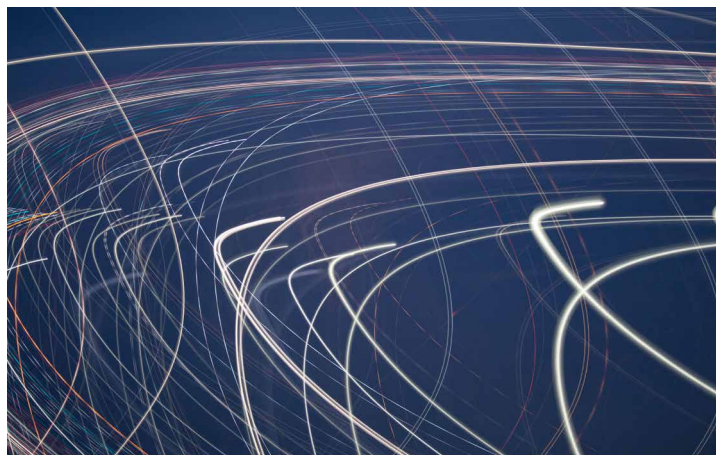
- **prihod po osnovu isporučene energije u vezi s pomoćnim uslugama 7,02 mil. KM (aktivacija energije po osnovu sekundarne i tercijarne regulacije, te energija debalansa, isporučeno u sumi 47,85 GWh);**
- **prihod po osnovu rezervisanih kapaciteta za pomoćne usluge 7,73 mil. KM (od čega 6,19 mil. KM kapacitet za sekundarnu regulaciju i 1,54 mil. KM po osnovu kapaciteta za tercijarnu regulaciju);**
- **prihod od usluge balansiranja od 3,22 mil. KM.**

## Prihod od prodaje tehnološke pare, toplotne energije i nus proizvoda

Prihod od prodaje tehnološke pare, toplotne energije i nus proizvoda ostvaren je u iznosu 15,53 mil. KM i obuhvata prihod po osnovu:

- **prodaje tehnološke pare u iznosu 3,54 mil. KM;**
- **prodaje toplotne energije (para za grijanje) u iznosu 10,30 mil. KM;**
- **prodaje sporednih i nus proizvoda (uglavnom šljaka i pepeo) u iznosu 1,69 mil. KM.**

Ovi prihodi su ostvareni u nivou plana (veći za 0,04 mil. KM ili 0,3 %). Svi prihodi iz ove stavke ostvareni su u termoelektranama i to u TE „Tuzla“ 12,93 mil. KM, a u TE „Kakanj“ 2,60 mil. KM.



## Troškovi i rashodi

Ukupno ostvareni troškovi i rashodi za 2021. godinu iznose 1.109,47 mil. KM, što je više od planiranih za 25,47 mil. KM ili 2,3%. Većina stavki je u nivou (ili ispod) planiranih, dok se najveće odstupanje na više bilježi kod troškova rezervisanja i drugih rashoda (pretežno zbog ispravke vrijednosti potraživanja za date avanse ZD rudnicima), te troškova u vezi s vodoprivrednim naknadama (zbog veće proizvodnje u HE). U odnosu na 2020. godinu, troškovi i rashodi su veći za 61,92 mil. KM ili 5,9%.

## Troškovi materijala za proizvodnju i prijevoza uglja

Troškovi materijala za proizvodnju električne energije iznose 304,35 mil. KM, dok su troškovi prijevoza uglja bili 20,81 mil. KM. Isti u zbiru čine 29,3% ukupnih troškova i rashoda Društva u 2021. godini.

## Troškovi nabavke električne energije i pomoćnih usluga

Ovi troškovi zbirno iznose 200,70 mil. KM i u nivou su plana/sagledavanja (veći za 0,68 mil. KM ili 0,3%). U odnosu na 2020. godinu veći su za 54,0 mil. KM ili 36,8 % i obuhvataju:

- **troškove nabavke električne energije na tržištu u iznosu 102,38 mil. KM;**
- **troškove nabavke električne energije iz obnovljivih izvora (zakonska obaveza otkupa po regulisanoj cijeni) u iznosu 46,1 mil. KM;**
- **troškove nabavke energije po osnovu ugovora o poslovno-tehničkoj saradnji (UPTS) 14,92 mil. KM;**
- **troškove nabavke od nezavisnih proizvođača (pretežno industrijske TE, zakonski obavezan otkup) u iznosu 1,01 mil. KM;**
- **troškove pomoćnih usluga od 36,31 mil. KM (uključujući nabavku energije u vezi s pomoćnim uslugama 11,97 mil. KM, od čega 10,05 mil. KM troškova nabavke u vezi s debalansom).**

U 2021. godini troškovi pomoćnih usluga iznose 36,31 mil. KM, a odnose se na:

- **troškove pomoćnih usluga - sistemska usluga u iznosu 23,87 mil. KM;**
- **troškove nabavke električne energije u vezi s pomoćnim uslugama u iznosu 11,97 mil. KM;**
- **troškove pomoćnih usluga - ostale usluge 0,48 mil. KM.**

## Troškovi amortizacije

Troškovi amortizacije iznose 156,20 mil. KM, što čini 14,1% ukupnih troškova i rashoda Društva za 2021. godinu i u nivou su planiranih. Najveći trošak amortizacije odnosi se na amortizaciju građevinskih objekata u iznosu 73,49 mil. KM i amortizaciju postrojenja i opreme u iznosu 65,07 mil. KM. U odnosu na 2020. godinu troškovi amortizacije su veći za 8,0%, što je razumljivo s obzirom na puštanje u rad VE „Podveležje“ (amortizacija 6,1 mil. KM, pri čemu se ovo ne odnosi na cijelu 2021. godinu).

## Troškovi mrežarina i naknada za NOS

Ovi troškovi su ostvareni u iznosu 53,63 mil. KM i odnose se na:

- **troškove prijenosa električne energije (44,95 mil. KM), gdje se 39,79 mil. KM odnosi na isporuke krajnjim kupcima na distributivnoj mreži, a 5,16 mil. KM na isporuke kupcima na mreži prijenosa;**
- **troškove naknada za rad NOS-a BiH u iznosu 4,27 mil. KM (od čega 0,37 mil. KM na djelatnost proizvodnje po osnovu cijene za G komponentu);**
- **troškove korištenja mreže za krajnje kupce u iznosu 4,41 mil. KM, gdje se radi o mrežarini kod kupovine energije od drugih elektroprivreda u BiH po osnovu isporuka na SN/NN mreži u skladu s UPTS-ima.**

## Troškovi dažbina

Obuhvataju sljedeće troškovne stavke:

Vodoprivredne naknade u iznosu 30,19 mil. KM odnose se na troškove vodnog doprinosa, naknade za zaštitu voda, doprinosa za korištenje hidroakumulacionih objekata, te troškove kantonalne naknade od posebnog značaja za HNK. Ostvareni troškovi su veći od planiranih za 2,15 mil. KM ili 7,7% s obzirom na to da je proizvodnja u HE na Neretvi bila veća za 8,1% od planirane/sagledane proizvodnje.

Razne dažbine, naknade i članarine obuhvataju troškove naknada (naknade za korištenje građevinskog zemljišta i komunalne naknade, članarine privrednim komorama, naknada za zagađenje zraka, naknade za NOS, FERK, RAK i dr.), gdje su troškovi ostvareni u iznosu 19,49 mil. KM, što je u nivou planiranih troškova, dok su u odnosu na ostvarenje iz 2020. godine manji (pretežno zbog manjeg obima termoproizvodnje) za 0,70 mil. KM ili 3,5%. Najveći trošak u okviru ove planske stavke jeste naknada po Zakonu o izdvajanju i usmjeravanju dijela prihoda ostvarenog radom TE u iznosu 7,67 mil. KM, a pored toga troškovi naknade za zagađenje zraka iznose 4,42 mil. KM.

## Drugi rashodi

Drugi rashodi za izvještajni period iznose 78,38 mil. KM i značajno su veći u odnosu na plan (za 28,17 mil. KM ili 56,1%) i ostvarenje iz 2020. godine (za 16,9%). Ovi rashodi se odnose na:

- **rashode po osnovu otpisa i ispravke vrijednosti potraživanja (po više osnova) 70,89 mil. KM;**
- **rashode po osnovu umanjenja vrijednosti i otpisa neupotrebljivih zaliha 2,30 mil. KM;**
- **naknadne troškove i rashode iz ranijih godina 2,53 mil. KM;**
- **rashode od gubitaka po osnovu umanjenja vrijednosti stalnih sredstava 1,62 mil. KM;**
- **kazne, penale, naknade šteta i ostale rashode u iznosu 0,69 mil. KM;**
- **ostalo (zbirno) 0,35 mil. KM.**





*6. FINANSIJSKI POKAZATELJI  
USPJEŠNOSTI POSLOVANJA*

<b>POKAZATELJI BILANSA USPJEHA</b>	<b>Ostvarenje 2021.</b>	<b>Plan 2021.</b>	<b>Ostvarenje 2020.</b>
Proizvodnja električne energije (GWh)	6.677,1	6.654,6	6.237,9
<b>Operativni prihod (hilj. KM)</b>	<b>1.098.436,2</b>	<b>1.076.299,9</b>	<b>1.037.324,0</b>
Prihod od prodaje električne energije i pomoćnih usluga	1.052.425,7	1.032.913,9	997.246,4
Prihod od prodaje sporednih proizvoda, materijala i usluga	46.010,5	43.386,0	40.077,6
<b>Gotovinski operativni troškovi (hilj. KM)</b>	<b>870.361,2</b>	<b>872.728,3</b>	<b>832.563,3</b>
- troškovi mat. za proiz. el. energije i prijevoza uglja	325.162,3	330.379,5	356.010,5
- materijal i usluge održavanja	27.577,5	28.710,0	26.505,7
- plate i drugi troškovi rada	173.380,6	174.798,1	173.847,8
- zavisni troškovi prodaje *	254.334,7	253.181,4	198.434,3
- troškovi dažbina	49.678,6	47.676,7	39.226,3
- ostali operativni troškovi	40.227,4	37.982,5	38.538,7
<b>EBITDA (hilj. KM)</b>	<b>228.075,1</b>	<b>203.571,6</b>	<b>204.760,7</b>
Prihod od donacija (amort. doniranih sredstava)	6.442,6	6.671,9	6.433,4
Amortizacija (hilj. KM)	156.201,9	156.341,4	144.649,6
<b>EBIT (hilj. KM)</b>	<b>78.315,8</b>	<b>53.902,1</b>	<b>66.544,6</b>
Operativni koeficijent (op. trošk. + amort.)/op. prihod	0,929	0,950	0,936
Racio ekonomičnosti (ukupni prihodi /ukupni troš. i ras.)	1,013	1,012	1,010
Radni koeficijent (operativni troškovi /operativni prihod)	0,792	0,811	0,803
Troškovi zaposlenih po radniku	41,59	40,98	40,00
Proizvodnja po radniku	1,60	1,56	0,00
Učešće troškova i rashoda u ukupnom prihodu	98,75	98,81	99,00
Prosječan broj zaposlenih (stanje kraj mjeseca / 12)	4.168	4.265	4.346
Trošak proizvodnje/operativni prihod	29,6%	30,7%	34,3%
Trošak mat. i usluga održavanja/operativni prihod	2,5%	2,7%	2,6%
Trošak rada/operativni prihod	15,8%	16,2%	16,8%
Zavisni troškovi prodaje/operativni prihod	23,2%	23,5%	19,1%
Troškovi dažbina/operativni prihod	4,5%	4,4%	3,8%
Ostali troškovi/operativni prihod	3,7%	3,5%	3,7%

\* zavisni troškovi nabavke obuhvataju troškove nabavke električne energije, troškove prenosa električne energije, troškove pomoćnih usluga (sistemska i ostale usluge) i naknade za NOS.

## 7. REALIZACIJA PLANA LJUDSKIH RESURSA

*Na dan 31. 12. 2021. godine u EPBiH je bilo **4.113** zaposlenih, od čega **4.075** na neodređeno vrijeme, **8** radnika sa statusom mirovanja ili na neplaćenom odsustvu, dok su u statusu pripravnika bile **22** osobe.*

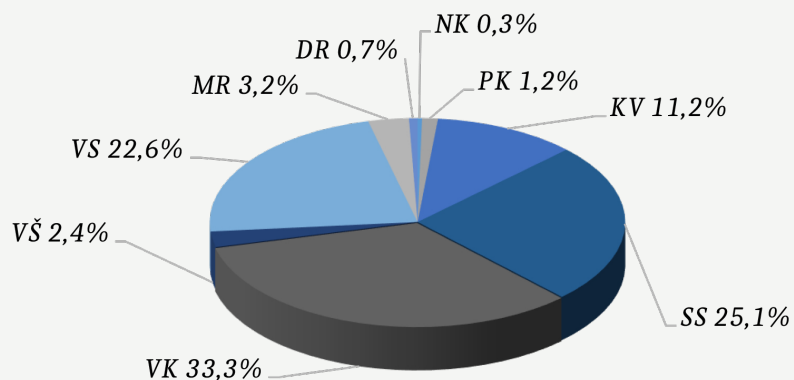
*Zapošljavanje novih radnika vršeno je u skladu s Odlukom o utvrđivanju načina realizacije zapošljavanja novih radnika i pripravnika u Javnom preduzeću Elektroprivreda Bosne i Hercegovine d.d. - Sarajevo, a prema planom utvrđenom broju.*



## Stanje zaposlenih EPBiH na dan 31. 12. 2021

Red broj	Organizacioni dio	Stanje 31.12. 2020.	Stanje na dan 31.12.2021.				Ukupno zamjena/ pripravnici	Ukupno
			Neodređeno	Određeno	Ostalo	Ukupno		
1	Uprava i org. jedinice uz Upravu	117	113			113		113
2	Sektor za proizvodnju	9	13			13		13
3	Sektor za distribuciju	13	12			12		12
4	Sektor za upravljanje i trgovinu	23	25			25	1	26
5	Sektor za snabdjevanje	13	14			14	1	15
6	Ekonomski poslovi	42	41			41		41
7	Pravni poslovi i ljudski resursi	37	37			37		37
8	Kapitalne investicije	30	28			28		28
9	Razvoj u Društvu	23	23		1	24		24
10	Zavisna i povezana društva	14	13			13		13
11	Ured sekretara Društva	4	3			3		3
12	Odjel za internu reviziju	7	8			8		8
<b>DIREKCIJA UKUPNO</b>		<b>332</b>	<b>330</b>	<b>0</b>	<b>1</b>	<b>331</b>	<b>2</b>	<b>333</b>
1	HE na Neretvi	332	320		2	322	7	329
2	TE "Kakanj"	575	552		1	553	8	561
3	TE "Tuzla"	621	595			595	1	596
4	ED Bihać	371	356		1	357	6	363
5	ED Mostar	204	204			204		204
6	ED Sarajevo	557	540		1	541	3	544
7	ED Tuzla	566	538		1	539	3	542
8	ED Zenica	672	640		1	641		641
EP BiH Ukupno		4.230	4.075	0	8	4.083	30	4.113

## Kvalifikaciona struktura zaposlenih na neodređeno vrijeme



U 2021. godini planirano je zapošljavanje 60 pripravnika, a do 31. 12. 2021. godine u Društvu je zaposleno po planu 17 pripravnika i 6 pripravnika po postupku koji je započet u 2020. godini.

U izvještajnom periodu bilo je 255 prestanaka ugovora o radu po svim osnovama (po sili zakona zbog odlaska u penziju, smrt zaposlenika, sporazumni prestanci, otkaz zaposlenika, otkaz poslodavca i istek ugovora o radu na određeno vrijeme).

Radi ograničenja okupljanja usljed nepovoljne epidemiološke situacije izazvane pandemijom Covid-19, značajan dio edukativnih aktivnosti je održan u online formi.

## 8. REALIZACIJA PLANA ULAGANJA

U EPBiH ukupan iznos investicionih ulaganja u 2021. godini u djelatnostima i podružnicama iznosi **88,5 miliona KM**, što je za **64%** manje u odnosu na plan (ne uključujući ulaganja u dokapitalizaciju i formiranje zavisnih društava), odnosno manje za **56,7%** u odnosu na realizaciju ulaganja u 2020. godini.

Glavni razlozi koji su onemogućili realizaciju Plana ulaganja su:

- **striktna primjena Zakona o javnim nabavkama, ponavljanje tenderskih postupaka zbog nedovoljnog broja prijavljenih ponuđača;**
- **dugotrajni procesi obezbjeđivanja neophodnih dozvola i saglasnosti za realizaciju projekata;**
- **kašnjenje u realizaciji projekata izgradnje novih i zamjenskih proizvodnih pogona usljed šireg utjecaja pandemije virusom Covid-19.**



## REALIZACIJA PLANA ULAGANJA PO PODRUŽNICAMA/DJELATNOSTIMA U 2021. GODINI (mil. KM)

Nivo ulaganja	Ostvareno 2020.	Plan za 2021.	Ostvareno 2021.	Struktura unutar djelatnosti	U odnosu na ukupna ulaganja
<b>Djelatnost Proizvodnje</b>					
TE „Tuzla“	1,5	23,0	16,8	58,7%	18,9%
TE „Kakanj“	4,0	41,9	8,7	30,5%	9,8%
HE na Neretvi	1,2	3,9	2,9	10,2%	3,3%
mHE	0,1	0,8	0,0	0,1%	0,0%
IKT za djel. Proizvodnje	0,1	0,7	0,2	0,5%	0,2%
<b>Ukupno djelatnost Proizvodnje</b>	<b>7,0</b>	<b>70,4</b>	<b>28,5</b>	<b>100,0%</b>	<b>32,2%</b>
<b>Djelatnost Distribucije</b>					
ED Bihać	10,7	10,1	8,9	18,9%	10,1%
ED Mostar	5,7	4,4	3,3	6,9%	3,7%
ED Sarajevo	9,9	15,8	12,0	25,4%	13,5%
ED Tuzla	10,0	14,5	11,6	24,5%	13,1%
ED Zenica	9,4	14,5	10,9	23,1%	12,3%
IKT za djel. Distribucije		1,0	3,4	0,5	1,2%
<b>Ukupno djelatnost Distribucije</b>	<b>46,8</b>	<b>62,7</b>	<b>47,2</b>	<b>100,0%</b>	<b>53,4%</b>
<b>Djelatnosti Snabd. i Trg.</b>					
Sve podružnice	0,00	0,9	0,01	100,0%	0,0%
IKT za djel. Snabd. i Trg.	0,00	1,8	0,00	0,0%	0,0%
<b>Ukupno djelatnosti Snabd. i Trg.</b>	<b>0,00</b>	<b>2,7</b>	<b>0,01</b>	<b>100,0%</b>	<b>0,0%</b>
<b>Ulaganja s nivoa Društva</b>					
Ulaganja u kapitalne projekte*	149,6*	106,5	12,2	96,4%	13,8%
Zajednički projekti	0,0	1,0	0,1	0,7%	0,1%
IKT	0,9	2,8	0,4	2,8%	0,4%
<b>Ukupno s nivoa Društva</b>	<b>150,6</b>	<b>110,3</b>	<b>12,7</b>	<b>100,0%</b>	<b>14,4%</b>
<b>Ukupno ulaganje EPBiH</b>	<b>204,4</b>	<b>246,1</b>	<b>88,5</b>	<b>-</b>	<b>100,0%</b>

\*bez uplate avansa EPC izvođaču za Blok 7 u TE „Tuzla“ (211,92 mil. KM) i izvođaču za mHE Neretvica (0,9 mil. KM)



**Kada su u pitanju ulaganja u zavisna društva u toku 2021. godine, u rudnike uglja je uloženo 8,05 mil. KM, što je za 68,9% manje od planiranih 25,9 mil. KM. U 2021. godini EPBiH je osnovala novo zavisno privredno društvo s ograničenom odgovornošću GEOLP d.o.o. Kakanj, s osnovnim kapitalom u iznosu 4,1 mil. KM. Iznos ukupnih ulaganja u ZD rudnike i EPBiH je 100,6 mil. KM**



## Realizacija plana ulaganja u djelatnosti Proizvodnje

U djelatnosti Proizvodnje za 2021. godinu predviđeno je ukupno ulaganje od 70,4 mil. KM, pri čemu su vlastita sredstva EPBiH u iznosu 26,9 mil. KM, s tim da je dio ovih sredstava u iznosu 842 hilj. KM planirano za ulaganja u djelatnost Proizvodnje u ED Tuzla, ED Bihać i ED Sarajevo, a dio sredstava u iznosu 733 hilj. KM je planirano za ulaganje u sistemske IKT projekte. U 2021. godini u djelatnosti Proizvodnje planirana je realizacija kreditnih sredstava u iznosu 43,5 mil. KM i planirana su da budu iskorištena za potrebe realizacije projekata izgradnje postrojenja za odsumporavanje dimnih plinova na Bloku 6 u TE „Tuzla“ i Bloku 7 TE „Kakanj“.

U toku 2021. godine ukupno je realizirano 28,3 mil. KM, a što u odnosu na planirana ulaganja iznosi 40,5%. U navedena ulaganja uračunata su i sredstva uplaćena za realizaciju projekta „Revitalizacija turbine Bloka 6“ u TE „Tuzla“ u iznosu 10,8 mil. KM.

Najznačajnije aktivnosti za projekte čija realizacija je bila planirana u 2021. godini, a koji imaju karakter i investicionog i tekućeg održavanja su:

- ugovorena nabavka roba i usluga za kapitalni remont Bloka 5 i redovne godišnje remonte blokova 3, 4 i 6 u TE „Tuzla“; te remonte blokova 5, 6 i 7 u TE „Kakanj“ koji su uspješno realizirani u razmatranoj planskoj godini;
- ugovorena nabavka roba i usluga za remont agregata A1 i A2 u HE „Grabovica“ te remont agregata A1, A2 i A3 u HE „Salakovac“ koji su uspješno realizirani u razmatranoj planskoj godini;
- određeni dio projekata je ugovoren, a za određeni dio projekata je pokrenut postupak nabavke, a sve u cilju realizacije projekta revitalizacije Bloka 6 u TE „Tuzla“, pri čemu je prema usvojenom EEB-u za period 2022. - 2024. godina planiran zastoj ovog bloka u periodu 1. 3. - 1. 8. 2022. godine;

- potpisan ugovor i u toku realizacija projekta „Angažovanje konsultanta na izgradnji postrojenja za odsumporavanje dimnih plinova na Bloku 6 u TE „Tuzla“;
- pokrenut postupak nabavke za potrebe realizacije projekta „Izgradnja postrojenja za odsumporavanje dimnih plinova na Bloku 6 u TE „Tuzla“;
- pokrenut postupak nabavke za potrebe realizacije projekta „Izgradnja postrojenja za odsumporavanje dimnih plinova na Bloku 7 u TE „Kakanj“.

Pored navedenog, u 2021. godini realizirani su sljedeći investicioni projekti:

### TE „Tuzla“

- nabavka i ugradnja T-komada T3L i T3P upusnih parovoda Bloka 4-III faza;
- sanacija specijalnog mašinskog alata;
- nabavka specijalnog viljuškara za demontažu mlinskih rotora;
- zamjena oštećenih dijelova turbine srednjeg pritiska Bloka 4;
- nabavka potapajućih drenažnih pumpi;
- reparacija tri mlinska rotora i nabavka jednog novog;
- zamjena dijela sistema upravljanja gorionicima potpale kotla 5;
- nabavka rotora pumpe rashladne vode Bloka 6;
- zamjena gumiranih cjevovoda i armatura na kolonama za demineralizaciju 5 i 6 i kolonama za regeneraciju onečišćenog kondenzata Bloka 6;
- nabavka i ugradnja kompresora regulacionog zraka;
- nabavka i ugradnja (zamjena postojećeg) pogonskog dizel-motora za Lokomotivu CZ Loko;
- sanacija AB plašta dimnjaka br. 5;
- nabavka i zamjena transportnih traka za rostove blokova 4 i 5;
- nabavka buldožera - 2 kom.

### TE „Kakanj“

- revitalizacija cirkulacionih pumpi kotla Bloka 7;
- nabavka vratila mlina Bloka 7;
- nabavka i ugradnja bubnja kotla Bloka 7;
- nabavka kompresora za vrećasti filter Bloka 7;
- nabavka ventilatora za rashladne tornjeve Bloka 7;
- nabavka i ugradnja opreme za ventilaciju HPV;
- nabavka i ugradnja uređaja za mjerenje protoka dimnih plinova u 300 m dimnjaku;
- nabavka reduktora za rashladne tornjeve Bloka 7;
- nabavka i ugradnja rashladne jedinice u prostoriji transformatora VDP i VSZ Bloka 6;
- nabavka dijelova parovoda međupregrijane pare (MPr) kotla Bloka 7;
- nabavka roto sita;
- nabavka usluga montaže i konsultantskih usluga nadzora nad montažom parovoda međupregrijane pare (MPr) kotla Bloka 7;
- nabavka ventilatora za rashladne tornjeve Bloka 7;
- nabavka pumpi za odšljakivanje;
- nabavka i ugradnja kalorimetra na vrelovodu;
- nabavka i ugradnja transformatora 31.5 MVA, 121/36,75/6,3 kV;
- nabavka i ugradnja transformatora 40 MVA, 121±8x1.25%/6.3 kV;
- nabavka i ugradnja UPS-a za Blok 5;
- ugovorena nabavka i u toku je izrada elaborata o snimku stanja kotlovske postrojenja Bloka 6 i prijedlog mjera za poboljšanje sagorijevanja;
- ugovorena nabavka i kompletirana isporuka analizatora vodika na Bloku 6 (ugradnja u vrijeme remonta Bloka 6 u 2022. godini);
- ugovorena nabavka i kompletirana isporuka VTZ 1 na Bloku 7 (ugradnja u vrijeme remonta Bloka 7 u 2022. godini);
- ugovorena nabavka, i u toku je realizacija radova na nastavku produženja kolektora Slapničkog potoka (plan je da se radovi završe u toku I kvartala 2022. godine);

- ugovorena nabavka, i u toku je realizacija radova na zaštiti površina neutralizacionih bazena na demineralizaciji (završen bazen br. 1, a plan je da se radovi na bazenu br. 2 završe u toku II kvartala 2022. godine);
- ugovorena nabavka, i u toku je realizacija radova na ugradnji cjevovoda deka vode na trasi HPV1/4 - Blok 7 (plan je da se radovi završe u toku I kvartala 2022. godine);
- ugovorena nabavka i u toku je realizacija ugovora za statički proračun mosta vanjske dopreme uglja usljed dodatnog opterećenja novog vrelovoda (plan je da se radovi završe u toku I kvartala 2022.g).

### HE na Neretvi:

- ugovoreni radovi na sanaciji betonske obloge dovodnog tunela broj 2 u pogonu HE „Jablanica“; planirano je izvođenje radova u vrijeme zastoja etape 2 (period juni - septembar 2022. godine i period juni - septembar 2024. godine);
- ugovorena nabavka za zamjenu uzbudnog sistema agregata 1, 2 i 3 u pogonu HE „Salakovac“. U toku 2021. godine je završena zamjena uzbudnog sistema agregata br. 1, a zamjena uzbudnih sistema agregata br. 2 i 3 je planirana u toku 2022. godine;
- sanacija betona brane i smanjenje filtracije vode kroz tijelo brane HE „Grabovica“;
- zamjena CO2 centrale i upravljačke opreme u pogonu HE „Jablanica“;
- nabavka opreme, specijalističkih radova i nadzora nad montažom hidrauličke i elektroopreme hidrauličkog pogona i sistema upravljanja ulaznih građevina 1 i 2 u pogonu HE „Grabovica“.

Također, u ED Bihać, djelatnost Proizvodnje, ugovorena je izrada i ugradnja fine rešetke u HE „Una Kostela“, Bihać. Realizacija predmetnog projekta je planirana u toku 2022. godine.

Razlozi zašto sredstva nisu realizirana u punom obimu su sljedeći:

- u 2021. godini nije ništa realizirano od planiranih kreditnih sredstava za potrebe realizacije projekata izgradnje postrojenja za odsumporavanje dimnih plinova na Bloku 6 TE „Tuzla“ i na Bloku 7 TE „Kakanj“, pri čemu su u 2021. godini, prema usvojenom Planu poslovanja djelatnosti Proizvodnje za period 2021. 2023. godina, za potrebe realizacije tih projekata planirana kreditna sredstva u iznosima 11 i 32,5 mil. KM respektivno;
- u razmatranom planskom periodu u djelatnosti Proizvodnje preispitane su određene ranije donesene investicione odluke u smislu potrebe za njihovom realizacijom, a sve u cilju obezbjeđivanja dodatnih sredstava za potrebe izgradnje novih proizvodnih objekata, realizacije projekta odsumporavanja Bloka 6 u TE „Tuzla“ i Bloka 7 u TE „Kakanj“, te se od nekih investicionih odluka odustalo;
- ulaganja u pojedine postojeće proizvodne jedinice koje će prema važećim planskim dokumentima (NERP) u narednom periodu raditi smanjenim brojem sati su minimalna s ciljem da se obezbijedi njihov siguran i pouzdan rad;
- praćenje tržišta roba, radova i usluga, poređenje sa stanjem iz prethodnih godina, te usaglašavanje procijenjene vrijednosti planirane nabavke rezultiralo je da su određeni projekti realizirani u planiranom obimu za novčani iznos manji od vrijednosti investicionog ulaganja odobrenog u predmetnoj investicionoj odluci;
- proglašenje pandemije virusa Covid-19 koja je za posljedicu imala probleme kod realizacije ugovora u smislu angažovanja radnika potrebnih za njihovu realizaciju;
- primjena ZoJN u smislu nedovoljnog broja ponuđača te prigovora i žalbi ponuđača.

## Realizacija plana ulaganja u djelatnosti Distribucije

Planom poslovanja u djelatnosti Distribucije predviđen je iznos ulaganja od 62,7 mil. KM. Dio sredstava u iznosu od 3,4 mil. KM odnosi se na ulaganje u systemske projekte IKT. Ostali iznos je planiran za realizaciju po podružnicama, pri čemu je 53,8 mil. KM vlastitih sredstava, 4,2 mil. KM kreditnih sredstava i 1,3 mil. KM grant sredstva. Planirana ulaganja u 2021. godini su za 8,3 % (5,6 mil. KM) manja u odnosu na ona za 2020. godinu (68,3 mil. KM). Tokom 2021. godine ostvaren je nivo investicionih ulaganja u projekte djelatnosti Distribucije u iznosu 46,7 mil. KM, što je 75,4% plana i za 1% više u odnosu na realizaciju ulaganja u 2020. godini.

Uzroci nepotpune realizacije Plana ulaganja su sljedeći:

- dugotrajna i kompleksna procedura nabavki roba/radova/usluga;
- dugotrajna i kompleksna procedura obezbjeđivanja neophodnih dozvola i saglasnosti za realizaciju investicionih projekata;
- kompleksna procedura rješavanja imovinsko-pravnih odnosa zbog neažurnih zemljišnih knjiga koje nisu usaglašene s katastrom;
- kredit Evropske investicione banke za proširenje AMM sistema nije postao operativan.

Pregled najznačajnijih projekata koji su realizirani u 2021. godini:

- izvršena izgradnja 67 TS 10(20)/0,4 kV i izgradnja distributivne mreže u dužini od 548 km, od toga 91 km srednjenaponske i 457 km niskonaponske distributivne mreže;
- izgrađene 4 TS 20/0,4 kV;
- izvršena rekonstrukcija građevinskog dijela 5 TS 35/10(20) kV i 7,3 km vodova nazivnog napona 35 kV;

- izvršena rekonstrukcija 26 TS 10(20)/0,4 kV i rekonstrukcija distributivne mreže u dužini 122 km, od toga 36 km srednjenaponske i 86 km niskonaponske distributivne mreže;
- izvršena rekonstrukcija 62.385 obračunskih mjernih mjesta;
- broj mjernih mjesta uveden u AMM sistemu je povećan za 2.979.

#### Realizacija zajedničkih projekata.

Okončani su radovi na implementaciji projekta SCA-DA/DMS/OMS i pripadajućih telekomunikacija na distributivnom nivou. Projekt je realiziran iz kreditnih sredstava i sredstava granta Njemačke razvojne banke i dijelom iz vlastitih sredstava EPBiH. Realizacija projekta je počela 30. 3. 2016. godine, a završena 31. 12. 2021. godine.

### **Realizacija plana ulaganja u djelatnost Snabdijevanja**

Planom ulaganja u djelatnost Snabdijevanja za 2021. godinu planirana su ukupna investiciona ulaganja u iznosu od 2,7 miliona KM, od čega se na projekte iz djelatnosti Snabdijevanja odnosi 1,8 miliona KM, a za sistemske IKT projekte iz ove djelatnosti 0,9 mil. KM.

Tokom 2021. godine nije bilo značajnijih investicionih ulaganja kako na projekte iz djelatnosti Snabdijevanja, tako i u dijelu sistemskih IKT projekata.

### **Realizacija plana ulaganja s nivoa Društva**

#### **Kapitalne investicije**

U periodu I - XII 2021. godine kapitalna ulaganja su realizirana u iznosu 12,2 miliona KM, što je 11,5% u odnosu na plan koji je iznosio 106,5 miliona KM. Aktivnosti organizacionih jedinica za

kapitalne investicije odnosile su se na izgradnju i pripremu izgradnje termoelektrana, hidroelektrana i elektrana iz obnovljivih i alternativnih izvora energije, a obuhvatile su: izgradnju VE „Podveležje 1“; izvođenje pripremnih radova za Blok 7 u TE „Tuzla“; investitorski nadzor; izradu investiciono-tehničke dokumentacije; ispitivanja i istraživanja; pribavljanje potrebnih dozvola i saglasnosti; vođenje postupaka za eksproprijaciju nekretnina; zatvaranje finansijske konstrukcije; pripremu tenderske dokumentacije za izbor isporučilaca opreme i izvođača za usluge i radove.

#### **Blok 7 - 450 MW u TE „Tuzla“**

Ugovor o inženjeringu, nabavci i izgradnji (EPC Ugovor) između JP Elektroprivrede BiH d.d. – Sarajevo i Kineskog Konzorcija potpisan je krajem augusta 2014. godine.

Nakon pribavljanja svih dozvola i saglasnosti potrebnih za realizaciju projekta izgradnje Bloka 7 u TE „Tuzla“, EPBiH je krajem 2019. godine izdala Obavijest o efektivnosti EPC Ugovora a sredinom jula 2020. godine Obavijest o početku realizacije EPC ugovora (NTP). Od ovog datuma teku rokovi izgradnje Bloka 7 (56 mjeseci).

Po završetku izvođenja pripremnih radova za izgradnju Bloka 7 (prva faza) koji su prema EPC Ugovoru u obavezi EPBiH, EPC ugovarač je preuzeo gradilište sredinom augusta 2021. godine o čemu je sačinjen zapisnik o preliminarnoj predaji gradilišta IPC Izvođaču.

EPBiH je sredinom augusta 2020. godine od EPC Ugovarača obaviještena dopisom u kojem se navodi da nominovani podizvođač ključne opreme (kotla, turbine i generatora) odbija izvođenje ugovora o isporuci jer napušta djelatnost Proizvodnje novih objekata za proizvodnju električne energije na ugalj.

Nakon zvanične objave da podizvođači ključne opreme napuštaju djelatnost Proizvodnje novih objekata za proizvodnju električne energije na ugalj, kako bi održao EPC Ugovor, EPC ugovarač je u martu 2021. godine investitoru predložio alternativne isporučioce ključne opreme (kotao, turbina i generator).

U skladu s odlukama Uprave Društva i zaključcima Nadzornog odbora, EPBiH je pismeno obavijestila EPC izvođača da EPBiH ostaje pri ranije iznesenom stavu da se projekt izgradnje Bloka 7 – 450 MW u TE „Tuzla“ treba realizirati u skladu sa zaključenim EPC Ugovorom za Blok 7 – 450 MW u TE „Tuzla“, ugovorom i pripadajućim aneksima 1. do 13. i u njemu imenovanim podizvođačima ključne opreme.

EPBiH je informirala resorno ministarstvo i Vladu FBiH o problemima u provedbi Ugovora, kao i o stavu Uprave i NO po pitanju prijedloga rješenja u vezi s podizvođačima ključne opreme.

Vlada FBiH je donijela zaključak da je o tome potrebno informirati i Parlament FBiH.

EPBiH je po ovom pitanju sačinila informaciju za premijera FBiH i ministra FMERI o aktuelnoj situaciji na realizaciji EPC Ugovora za izgradnju Bloka 7 - 450 MW u TE „Tuzla“. Informacija je razmatrana i prihvaćena od Nadzornog odbora i krajem maja 2021. godine dostavljena premijeru FBiH i ministru FMERI. Vlada FBiH je početkom jula 2021. godine usvojila Informaciju FMERI i dostavila je Parlamentu FBiH radi informiranja i eventualnog davanja određenih uputa u vezi s nastalom situacijom u realizaciji EPC Ugovora. Kolegij Predstavničkog doma Parlamenta FBiH je povodom predmetne informacije polovinom septembra 2021. godine donio zaključak da je primio k znanju Informaciju o aktuelnoj situaciji na realizaciji EPC Ugovora za izgradnju bloka 7 - 450 MW u TE „Tuzla“ i da od Vlade FBiH traži da dostavi prijedloge rješenja o kojim bi se Predstavnički dom trebao izjašnjavati. Povodom predmetnog zaključka Kolegija Predstavničkog doma Parlamenta FBiH, FMERI je dostavilo Zaključak Kolegija Predstavničkog doma

Parlamenta FBiH i zatražilo od Uprave i Nadzornog odbora EPBiH da dostave usaglašeni prijedlog rješenja u kontekstu aktuelne situacije na realizaciji EPC Ugovora i prijedlog teksta zaključka o kojem bi se Predstavnički dom Parlamenta FBiH trebao izjašnjavati.

Nakon izvršene analize mogućih rješenja za nastavak realizacije EPC Ugovora za izgradnju Bloka 7 u TE „Tuzla“, EPBiH je informirala FMERI, Vladu FBiH i Parlament FBiH o statusu projekta izgradnje Bloka 7 – TE „Tuzla“.

Na 289. sjednici Vlada FBiH donijela je zaključak V broj: 1660/2021 u kojem je navedeno:

(2) Zadužuje se JP Elektroprivreda BiH d.d. – Sarajevo da nastavi pregovore sa EPC Izvođačem s ciljem realizacije EPC Ugovora sa novim podizvođačima ključne opreme, uz obezbjeđenje najboljih uslova za JP Elektroprivreda BiH d.d. Sarajevo i Federaciju Bosne i Hercegovine, uzimajući u obzir okolnosti koje su se u međuvremenu desile.

(3) Zadužuje se JP Elektroprivreda BiH d.d. Sarajevo da oformi Stručni tim za pregovore sa EPC Izvođačem, koji će uključiti i nezavisnog konsultanta.

(4) Rok za okončanje pregovora sa EPC Izvođačem je šezdeset (60) dana od imenovanja stručnog tima.

EPBiH je provela postupke javne nabavke za usluge pružanja pravnih konsultantskih usluga u vezi s realizacijom Ugovora o inženjeringu, nabavci i izgradnji - EPC, za Blok 7 - 450 MW u TE „Tuzla“ i tehničkog konsultanta za konsultantske usluge za nastavak pregovora s EPC Izvođačem s ciljem realizacije EPC Ugovora za izgradnju Bloka 7 - 450 MW u TE „Tuzla“ s novim podizvođačima ključne opreme.

Generalni direktor EPBiH je početkom februara 2022. godine izdao Rješenje o formiranju Stručnog tima za tehničku ocjenu alternativnih podizvođača za ključnu opremu iz EPC Ugovora za izgradnju Bloka 7 - 450 MW u TE „Tuzla“ i Stručni tim za pregovore s EPC Izvođačem.

EPC Izvođač je u više navrata dostavio tražene dokumentaciju i odgovore na pitanja Stručnog tima i tehničkog konsultanta za alternativne ponuđače. Pregled dostavljene dokumentacije od strane tehničkog konsultanta i Stručnog tima EPBiH je u toku.

Tehnički konsultant je polovinom marta 2022. godine dostavio Preliminarni izvještaj za tehničku ocjenu alternativnih podizvođača ključne opreme iz EPC Ugovora za izgradnju Bloka 7 – 450 MW u TE „Tuzla“.

Usaglašavanje preliminarnog izvještaja za tehničku ocjenu alternativnih podizvođača je u toku i očekuje se da će konačni izvještaj po pitanju tehničke ocjene biti završen do 8. 4. 2022. godine.

O rezultatima tehničke ocjene alternativnih ponuđača i pregovora s EPC Izvođačem bit će sačinjen završni izvještaj Stručnog tima s uključenim nalazima stručnih nezavisnih konsultanata koji će nakon što ga usvoje Uprava Društva i Nadzorni odbor EPBiH biti dostavljen Vladi Federacije Bosne i Hercegovine i Parlamentu Federacije Bosne i Hercegovine.

### **Blok 8 - 350 MW u TE „Kakanj“**

U cilju nastavka daljnjih aktivnosti na realizaciji projekta zamjenskog Bloka 8 u TE „Kakanj“, a u skladu sa Zaključkom Vlade FBiH iz maja 2019. g., kojim je zadužila FMERI i EPBiH da ubrzaju aktivnosti u vezi s izgradnjom zamjenskog Bloka 8 u TE „Kakanj“, EPBiH je tokom 2020. izvršila inoviranje Investiciono-tehničke dokumentacije s investicionim programom u cilju ispunjavanja uvjeta da nova postrojenja za sagorijevanje moraju biti u skladu s graničnim vrijednostima iz Priloga V, dio 2 Direktive 2010/75/EU.

Uprava Društva i Nadzorni odbor EPBiH su u februaru 2021. godine razmatrali Informaciju o trenutnom statusu projekta izgradnje zamjenskog Bloka 8 u TE „Kakanj“ i prijedlog aktivnosti za naredni period i prihvatili je.

EPBiH je krajem februara 2021. godine FMERI-u dostavila Informaciju o trenutnom statusu projekta izgradnje zamjenskog Bloka 8 u TE „Kakanj“ i prijedlog aktivnosti za naredni period.

U narednom periodu potrebno je uraditi analize i ocjene ključnih utjecajnih faktora na definiranje razvojnih planova i poslovnih strategija FBiH i EPBiH i donijeti odluku za Blok 8 u TE „Kakanj“.

### **Vrelovod za snabdijevanje toplotnom energijom iz TE „Kakanj“ područja do/i Sarajeva**

Na osnovu urađenog Idejnog projekta snabdijevanja toplotnom energijom područja do/i Sarajeva iz TE „Kakanj“, s uključenim Laboratom eksproprijacije, stvoreni su preduvjeti za naredne faze implementacije pripremnih aktivnosti za realizaciju ovog investicionog projekta.

EPBiH je prema FMERI-u pokrenula zahtjev – inicijativu za utvrđivanje javnog interesa za realizaciju ovog projekta.

U važećim prostornim planovima FBiH i Prostornom planu Zeničko-dobojskog kantona, Prostornom planu općine Kakanj i Prostornom planu općine Visoko nije planirana trasa vrelovoda iz TE „Kakanj“ prema Sarajevu.

Prema raspoloživim informacijama, aktivnosti na proglašenju javnog interesa su u toku.

### **HE „Vranduk“**

FMPU je donijelo rješenje o odbacivanju zahtjeva za izdavanje urbanističke saglasnosti za izgradnju HE „Vranduk“. Predmetni zahtjev je odbačen kao neosnovan, uvažavajući odredbe Odluke o proglašenju nacionalnog spomenika graditeljska cjelina Stari grad Vranduk u Vranduku, Komisije za očuvanje nacionalnih spomenika.

EPBiH je u skladu s poukom o pravnom lijeku pokrenula upravni spor s ciljem poništenja Rješenja FMPU o odbacivanju zahtjeva za izdavanje urbanističke saglasnosti za HE „Vranduk“.

Zahtjev za produženje okolišne dozvole za HE „Vranduk“ predat je 26. 4. 2021. godine Federalnom ministarstvu okoliša i turizma, koji je odbačen 29. 12. 2021. godine, s obzirom na istek roka važenja ranije izdatih akata građenja.

Nakon raskida ugovora s izvođačem za izgradnju HE „Vranduk“ započet je arbitražni postupak.

Ove okolnosti mogu ugroziti planiranu dinamiku realizacije projekta.

EPBiH je dostavila inicijativu nadležnom ministarstvu da se zaključcima Vlade omogući FMPU-u da izda urbanističku saglasnost za izgradnju HE „Vranduk“, u kojoj bi investitoru bili naznačeni obavezujući uvjeti Komisije za očuvanje nacionalnih spomenika.

## Nastavak rekonstrukcije i proširenje HE

### „Una Kostela“

Budući da je 25. 6. 2020. godine FMPU odbilo zahtjev EPBiH za izdavanje urbanističke saglasnosti za projekt nastavka rekonstrukcije i proširenje HE „Una Kostela“ na rijeci Uni u Bihacu, od 23. 5. 2018. godine, 23. 7. 2020. godine je pokrenut upravni spor s ciljem pobjeđivanja Rješenja FMPU zbog:

- nepotpuno i nepravilno utvrđenog činjeničnog stanja, odnosno što je iz utvrđenih činjenica izveden nepravilan zaključak u pogledu činjeničnog stanja i u vezi s tim,
- nepravilne primjene materijalnog prava.

Rješavanje spora, prema dosadašnjem iskustvu, može se očekivati početkom 2022. godine.

S obzirom na to da je upravni postupak za sticanje urbanističke saglasnosti kod nadležne uprave razriješen nepovoljno za daljnji razvoj projekta, nije se pristupilo planiranim aktivnostima: provođenja eksproprijacije zemljišta i izrade glavnog projekta za pribavljanje građevinske dozvole.

Vijećnici Gradskog vijeća Bihaca su 8. 10. 2020. godine usvojili „Deklaraciju o zaštiti rijeke Une“ kojom se odbacuje vršenje bilo kakvih zahvata u vodotoku rijeke Une koja se nalazi na teritoriji ovog grada. Također, ovom deklaracijom ukida se mogućnost izgradnje i hidroelektrana. Trenutni status pripreme za nastavak rekonstrukcije i proširenja ne obećava održanje planirane dinamike implementacije i ukupnu efektivnost projekta. O svim aspektima ovog projekta upućene su informacije Vladi FBiH i FMERI-ju.

### HE „Janjići“ na rijeci Bosni

EPBiH je u skladu sa zakonom provela postupak sporazumnog pribavljanja prava vlasništva na nekretninama za koje je utvrđen javni interes za eksproprijaciju s ciljem izgradnje HE „Janjići“. Pristigle prijave nisu zadovoljile uvjete, te je postupak eksproprijacije prenesen na realizaciju u gradske službe. Nastavak aktivnosti na terenu u vezi s eksproprijacijom očekuje se u oktobru.

U toku je evaluacija pristiglih aplikacija na raspisani javni poziv za izbor projektanta glavnog projekta HE „Janjići“. Okončana je priprema tenderske dokumentacije za objavljivanje javnog poziva za izbor implementacionog konsultanta za HE „Janjići“.

### HE „Kovanići“ na rijeci Bosni

Okončana je izrada Idejnog projekta za HE „Kovanići“. U toku je izrada Zahtjeva za prethodnu procjenu utjecaja na okoliš za projekt izgradnje HE „Kovanići“ na rijeci Bosni, koji će biti podnesen Federalnom ministarstvu okoliša i turizma, s ciljem pribavljanja rješenja za izradu studije utjecaja na okoliš. Početak terenskih istraživanja planiran je za mart 2022. godine.

### HE „Ustikolina“ na rijeci Drini

U toku je upravni postupak po obnovljenom Zahtjevu za izdavanje urbanističke saglasnosti, pred Ministarstvom za urbanizam, prostorno uređenje i zaštitu okoline Vlade BPK Goražde, za obavljanje geološko-geotehničkih istražnih radova – misija G1 za potrebe pripreme izgradnje HE „Ustikolina“, koji je predat 7. 6. 2021. godine.

Pripremljena je tenderska dokumentacija za izbor izvođača istražnih radova putem otvorenog postupka. Dana 14. 9. 2021. godine pribavljena je načelna saglasnost Elektroprenosa za priključak HE „Ustikolina“ na prijenosnu mrežu 110 kV, 220 kV i 400 kV.

### MHE „Kakanj“ na rijeci Bosni

Aneksom 4 na Ugovor, sklopljenim 29. 9. 2021. godine, omogućeno je izvršiocu usluge izrade investiciono-tehničke dokumentacije da realizira svoje obaveze.

Projektant-izvršilac usluge prema sklopljenom Ugovoru, aneksima na osnovni Ugovor, dostavljenoj ponudi i Projektom zadatku, kompletirao je preliminarnu verziju Idejnog projekta MHE „Kakanj“ na rijeci Bosni, općina Kakanj i dostavio na reviziju Stručnom timu EPBiH.

### MHE na slivu rijeke Neretvice

Na realizaciji Projekta mHE na slivu rijeke Neretvice poduzete su sljedeće aktivnosti:

- urađeni idejni projekti za svih 15 mHE;
- urađeni i revidirani glavni projekti za mHE „Srijanski most“ 3,03 MW, mHE „Gorovnik ušće“ 3,43 MW, mHE „Crna rijeka“ 2,11 MW, mHE „Gorovnik“ 0,86 MW;
- ishodovane urbanističke saglasnosti za mHE „Srijanski most“, mHE „Gorovnik ušće“, mHE „Crna rijeka“, i mHE „Gorovnik“;
- ishodovane pravosnažne građevinske dozvole za mHE „Srijanski most“ i mHE „Gorovnik ušće“;

- izvršena eksproprijacija i pretvorba u građevinsko zemljište područja za mHE „Srijanski most“ i mHE „Gorovnik ušće“;
- po ZJN s domaćim kompanijama ugovorena je realizacija projekata mHE „Srijanski most“ i mHE „Gorovnik ušće“;
- izvršena prijava početka radova Općini Konjic i počela realizacija koja je obustavljena duže od godinu dana (juni 2020. - juli 2021.) od strane nepoznatih lica i raznih udruženja;
- EPBiH je za aktivnosti projektiranja, prijateljskog okruženja, eksproprijaciju, općinske i druge takse i avanse prema izvođačima, a do trenutka blokade izvođenja, uložila finansijska sredstva u projekt vrijednosti 5,3 miliona KM;
- u toku je ishodovanje energetskih dozvola za mHE „Srijanski most“ i mHE „Gorovnik ušće“ kod Federalnog ministarstva energije, rudarstva i industrije u svrhu obnavljanja postupka izdavanja građevinskih dozvola, a shodno Rješenju Ministarstva građenja i prostornog uređenja HNK koje je na bazi zahtjeva udruženja „Zeleni Neretva“ poništilo građevinske dozvole za mHE „Srijanski most“ i mHE „Gorovnik ušće“; te vratilo na ponovni postupak Općini Konjic, budući da prilikom izdavanja dozvola Općina Konjic nije zahtijevala energetske dozvole.

### MHE „Modrac“ – na rijeci Spreči

Na osnovu Pisma namjere od 19. 6. 2017. godine od JP Spreča d.d. Tuzla kojim je upućen poziv EPBiH na zajedničko ulaganje u izgradnju MHE „Modrac 2“; na rijeci Spreči, s ciljem korištenja viška raspoloživih voda rijeke Spreče na profilu Modrac, za proizvodnju električne energije, doneseni su sljedeći akti:

- Sporazum o saradnji na projektu pripreme izgradnje MHE „Modrac 2“; potpisan 11. 3. 2021 g. između EPBiH i JP Spreča.
- izdato Rješenje od 18. 3. 2021 g. o imenovanju Stručnog tima za realizaciju Sporazuma o saradnji na projektu pripreme izgradnje MHE „Modrac“;

Članovi tima su zaposlenici iz EPBiH i JP Spreča. EPBiH je na osnovu prethodno pregledane postojeće tehničke dokumentacije, urađene od JP Spreča, dostavila Projektni zadatak za inoviranje Glavnog projekta za MHE „Modrac 2“. Prema obavezama iz Sporazuma, u toku je izrada inovirane tehničke dokumentacije (Glavni projekt) od strane JP Spreča, koja će biti osnova za izradu Studije opravdanosti ulaganja u projekt (obaveza EPBiH).

### VE „Podveležje 1“, grad Mostar

LOT 1 (15 vjetroagregata s temeljima) Ishodovana je pravosnažna upotrebna dozvola za izgrađenih 15 vjetroagregata VE „Podveležje 1“.

LOT 2 (trafostanica 110/30kV i 30kV kablovska i fiberoptička mreža) Aktivnosti na kablovskom uvezivanju (SN i FO kablovi) 15 vjetroagregata s trafostanicom Podveležje su završene i ishodovana je pravosnažna upotrebna dozvola.

LOT 3 (pristupni putevi, servisne saobraćajnice i montažni platoi za kranove) Za pristupne puteve, servisne saobraćajnice i montažne platoe za kranove ishodovana je pravosnažna upotrebna dozvola.

110kV priključak na prijenosnu mrežu Priključni dalekovod 110kV je izgrađen, priključen na TS „Podveležje“ i posjeduje pravosnažnu upotrebnu dozvolu

### VE „Vlašić“, općina Travnik

Dostavljen je revidiran Elaborat eksproprijacije nekretnina na koncesionom području buduće Vjetroelektrane „Vlašić“ (VE „Vlašić“). Održano je više sastanaka s nadležnim u ministarstvu Vlade SBK za izdavanje urbanističke saglasnosti, te su vršene dopune i izmjene tehničkog dijela zahtjeva za urbanističku saglasnost. Izdavanje urbanističke saglasnosti će uslijediti nakon donošenja izmijenjenog

prostornog plana.

Konsultant angažovan od KfW-a za obradu i filtriranje svih raspoloživih mjernih podataka potencijala vjetra sa lokaliteta VE „Vlašić“ dostavio je izvještaj na koji je EPBiH dostavila komentare.

Priprema tenderske dokumentacije za implementacionog konsultanta na Projektu – aktivnost vode KfW i EIB uz konsultacije s EPBiH.

Priprema tenderske dokumentacije za konsultanta za izradu studije kritičnih staništa – aktivnost vodi EIB uz konsultacije s EPBiH.

### Pripreme izgradnje fotonaponskih elektrana (FNE)

#### FNE „Divkovići 1“ i FNE „Divkovići 2“, Tuzlanski kanton, Grad Tuzla

Prije nego što se pristupi pripremi zahtjeva za urbanističku saglasnost za FNE „Divkovići 1“ i FNE „Divkovići 2“ (lokalitet Plane, Divkovići 1 i Divkovići 2 – Grad Tuzla), ukupne procijenjene instalisane snage 56 MW, potrebno je riješiti dva prethodna pitanja kako slijedi:

- zatvaranje industrijske deponije (odlagališta) šljake i pepela „Plane, Divkovići I i Divkovići II“ od strane EPBiH – TE „Tuzla“, na okolinski prihvatljiv način,
- osigurati prostorno-planske pretpostavke za izgradnju FNE „Divkovići 1“ i FNE „Divkovići 2“ koje u ovom momentu ne postoje.

#### FNE „Gračanica“, Srednjobosanski kanton, općina Bugojno

Još se nisu stekli uvjeti za podnošenje zahtjeva za urbanističke saglasnosti iz razloga što još nisu usvojene izmjene i dopune Prostornog plana SBK 2005 - 2025, koje, između ostalog, uzimaju u obzir i planirane zahvate u prostoru za projekte FNE „Gračanica 1“ i FNE „Gračanica 2“.

EPBiH je prema Ministarstvu privrede SBK uputila 27.

1. 2022. godine samoinicijativnu ponudu za dodjelu koncesije za izgradnju FNE „Gračanica 1“ i FNE „Gračanica 2“.

Na osnovu Odluke Vlade SBK o pokretanju postupka za dodjelu koncesije za izgradnju, uređenje, opremanje, korištenje i održavanje fotonaponske elektrane FNE „Gračanica 1“ i FNE „Gračanica 2“, općina Bugojno (ukupne maksimalne snage 50MW), broj: 01-11.7-1596/22 od 3. 2. 2022. godine, Ministarstvo privrede SBK je 9. 3. 2022. godine objavilo JAVNI POZIV za prikupljanje ponuda radi dodjele koncesije za izgradnju, uređenje, opremanje, korištenje i održavanje FNE „Gračanica 1“ i FNE „Gračanica 2“, općina Bugojno (ukupne maksimalne snage 50MW) - po samoinicijativnoj ponudi šifra S 2/22.

Urađeni idejni projekti za FNE „Gračanica 1“ i FNE „Gračanica 2“, s ukupnom procijenjenom instalisanom snagom od cca 44 MW.

### **FNE „Kreka“ - Šiški Brod, Tuzlanski kanton, općina Lukavac**

Prije nastavka realizacije projekta, EPBiH treba s predstavnicima Autocesta Federacije BiH riješiti problem kolizije s budućom autocestom Žepče – Tuzla, koja prolazi kroz područje lokacije FNE „Kreka“ - Šiški Brod.

### **FNE „Podveležje“, Hercegovačko-neretvanski kanton, Grad Mostar**

Gradsko vijeće Grada Mostara na 18. redovnoj sjednici održanoj 17. 2. 2022. godine donijelo je Odluku o donošenju i provođenju izmjena i dopuna Prostornog plana Opštine Mostar/Grada Mostara, a koja je objavljena na stranici Gradskog vijeća 11. 3. 2022. godine („Službeni glasnik Grada Mostara“, broj 2). Usvajene izmjene i dopune Prostornog plana obuhvataju, između ostalog, i područja koja su prostornim planom predviđena za izgradnju vjetroelektrana i to na način da se na istim lokacijama mogu postavljati i

solarni paneli, a što se odnosi i na koncesiono područje VE „Podveležje 1“.

Urađeni idejni projekti za FNE „Podveležje 1“ i FNE „Podveležje 2“, iz kojih je dobivena ukupna izlazna snaga za obje FNE od cca 43 MW.

Podneseni zahtjevi za okolišnu dozvolu za FNE „Podveležje 1“ i FNE „Podveležje 2“, prema nadležnom ministarstvu Hercegovačko-neretvanskog kantona.

### **FNE „Gornja Breza“ i FNE „Bijele Vode“, Zeničko-dobojski kanton, općina Breza i općina Kakanj**

Početak realizacije projekta FNE „Bijele Vode“ će biti odgođen jer, na osnovu dobivenih informacija iz RMU „Kakanj“, neće biti moguća potpuna i trajna obustava rudarskih radova i izvođenje tehničke rekultivacije samo na lokalitetu na kojem je planirana izgradnja FNE „Bijele Vode“ (plato 1, plato 2 i plato 3), budući da odlaganje jalovog materijala neposredno u blizini spomenuta tri platoa još uvijek nije završeno. Potrebno je najprije završiti odlaganje iskopanog jalovog materijala na kompletnoj planiranoj površini, a potom pokrenuti zahtjev prema nadležnom ministarstvu za trajno zatvaranje rudarskih radova u skladu sa Zakonom o rudarstvu FBiH.

Pravna služba RMU „Kakanj“ pokrenula je proceduru prijenosa prava posjeda s identificiranih fizičkih i pravnih lica na lokaciji planirane gradnje FNE „Bijele Vode“ na RMU „Kakanj“. U momentu finaliziranja ovog izvještaja preostalo je 18 čestica za koje je potrebno izvršiti prijenos prava posjeda na RMU „Kakanj“. Nakon završetka navedenog postupka potrebno je prema nadležnom sudu u Visokom pokrenuti proceduru prijenosa vlasništva na RMU „Kakanj“ (stotinjak parcela, koje su najvećim dijelom u vlasništvu fizičkih lica).

Dana 16. 2. 2022. godine podnesen je zahtjev za urbanističku saglasnost za FNE „Gornja Breza“ prema nadležnom Ministarstvu za prostorno uređenje, promet i komunikacije i zaštitu okoline Zeničko-dobojskog kantona.

### **Aktivnosti s međunarodnim/domaćim finansijskim institucijama i izabranim konsultantskim kompanijama u cilju finansiranja i izrade investiciono-tehničke dokumentacije do nivoa tenderskih podloga**

#### **Projekti FNE „Gračanica 1“, FNE „Gračanica 2“ i FNE „Gornja Breza“**

Evropska banka za obnovu i razvoj (u daljnjem tekstu: EBRD), početkom novembra 2021. godine, odobrila je grant sredstva u iznosu 800.000,00 eura, za kandidirane projekte FNE „Gračanica 1“, FNE „Gračanica 2“ i FNE „Gornja Breza“, iz kojih bi se finansirala izrada studija izvodljivosti u cilju provjere tehno-ekonomske isplativosti i održivosti spomenutih projekata, te priprema tenderske dokumentacije za izbor izvođača radova. U isto vrijeme, iz predviđenih grant sredstava planirano je i finansiranje dubinskog snimanja/analize kompanije u slučaju eventualnog kreditnog zaduženja za navedene projekte.

#### **Projekt FNE „Bijele Vode“**

Projekt FNE „Bijele Vode“ je kandidiran za tehničku pomoć i finansiranje prema investicionom fondu GGF (Green for Growth Fund), kojim upravlja kompanija „Finance in Motion“. Spomenuta kompanija potvrdila je da možemo računati na tehničku pomoć za pripremu projekta, izradu tenderske dokumentacije i nabavku, odnosno finansiranje, ukoliko se projekt pokaže isplativim.

## Informaciono-komunikacione tehnologije – IKT

U oblasti IKT u 2021. godini Planom poslovanja bilo je predviđeno investiciono ulaganje u ukupnom iznosu od 8,733 miliona KM. U toku 2021. godine u realizaciji investicionih projekata iz oblasti IKT uloženo je 1,067 miliona KM za zajedničke projekte i projekte djelatnosti. Planirana i realizirana ulaganja, po djelatnostima, prikazana su u sljedećoj tabeli:

Ulaganja po tačkama plana - IKT	Plan za 2021.	Ostvareno 2021.	Procenat realizacije
I.b IKT Produkcija	0,733	0,083	11,32 %
II.b IKT Distribucija	3,400	0,298	8,76 %
III.b IKT Snabdijevanje i Trgovina	1,800	0,044	2,44 %
V.a IKT Zajednički	2,800	0,642	22,93 %
<b>IKT Ukupno</b>	<b>8,733</b>	<b>1,067</b>	<b>12,22 %</b>

U 2021. godini Sektor za IKT aktivno je učestvovao u planiranju, realizaciji i davanju tehničke podrške za SCADA/DMS/OMS projekt, novi proizvodni EEO – VE „Podveležje“, Projekt „Elektromobilnosti i proširenje AMM sistema“:

Oblasti u kojima su implementirani IKT projekti s najznačajnijim projektima u njima:

### Optički kablovski sistem

- uvezivanje 13 objekata u optički kablovski sistem EPBiH;

### Telekomunikaciona oprema

- ugrađeni industrijski switchevi u dva objekta;

### Sistem govornih i digitalnih radioveza

- izvršena isporuka opreme za sistem digitalnih radiomodema za objekte u ED Bihać, ED Mostar, ED Tuzla i Direkciji (11 kompleta);
- izvršena isporuka opreme za RR veze za objekte u ED Mostar, TE „Kakanj“ i Direkciji (18 kompleta);

### Sistem besprekidnog napajanja

- realizacija ispravljačkog sistema u jednom objektu;
- implementacija softvera za nadzor sistema besprekidnog napajanja IKT opreme;

### Objekti radiosistema

- izvršena realizacija infrastrukture antenskog sistema za šest objekata;
- implementacija sistema za nadzor TK infrastrukture radiosistema i radioobjekata;
- nadogradnja SCALAR aplikacije (nadzor atmosferskih pražnjenja);
- sanacija pristupnog puta do radioobjekata Mahovski vis i Klopačke stijene;

### Sistemi daljinskog nadzora i upravljanja

- dorade postojećeg SCADA/LFC sistema u DC EPBiH u skladu s operativnim zahtjevima nabavke telemetrijske opreme u funkciji uvođenja TS u SDNiU za potrebe EPBiH;
- održavanje ULR za potrebe ED podružnica;
- održavanje telemetrijskih uređaja za potrebe ED podružnica;
- održavanje Triangle Microworks driver (SCADA DC EPBiH);

### IT oprema i servisi

- nabavka IT opreme: računara, laptopa, monitora;

### Informacioni sistemi

- Blue Trader: dorade i izmjene shodno potrebama procesa;
- Hydras: zamjena dotrajalih data logera, izvršen dio mjerenja za QH krive; kontinuirano praćenje rada sistema;
- AMM sistem u proizvodnji (Advance): kontinuirano praćenje rada sistema;
- DEEO: implementacija specifičnih FGU servisa unutar DEEO-a;
- QGIS: nastavak razvoja Web Map servisa za praćenje topoloških grešaka unutar QGIS-a, Weba i AutoCAD-a;
- AMR sistem u distribuciji: pokretanje nabavke koncentratora podataka za potrebe AMM sistema;
- DMS (Document Management sistem):
  - implementacija integriranog informacionog sistema za upravljanje dokumentima, modul DMS-Protokol; u toku implementacija integriranog informacionog sistema za upravljanje dokumentima (DMS), (moduli DMS-Protokol, DMS-KUF i DMS-Arhiviranje registraturne građe);
- SAP sistem:
  - implementacija elektronske PDV prijave za uvoz i izvoz (elektronska forma KUF i KIF);



prilagodba obračuna plate u vezi s porodijskim odsustvom te promijenjenom radnom sposobnosti prema Uputstvu za obračun naknade plaće;

- DISP/DISP poslovna inteligencija:
  - aktivnosti na migraciji DISP baze na novu platformu ODA X8-2-HA;
  - implementacija normativa radova trećih lica iz okvirnog sporazuma za područje Kantona Sarajevo i za poslovne jedinice ED Tuzla, implementacija novih procesnih tokova kao i novih izdanja obrazaca rješenja EES i PEES, dopisa, zahtjeva, zapisnika i ugovora;
- Baza sporova:
  - projektiranje, razvoj, testiranje i puštanje u produkciju aplikativnog rješenja za evidentiranje pravnih sporova/postupaka u EPBiH;
- DataWarehouse/BI sistem u distribuciji:
  - proširenje interfejsa DWH sistema prema bazama MDM, DEEO, SAP FMIS, SAP HR, CRM, SOEE i ZASTOJI (dodavanje novih kolona s izvornih sistema za potrebe naprednih BI analiza);
  - kreiranje BI izvještaja i podešavanje mail notifikacije (pregled podataka o radnicima i ugovorima);
- Sistem za upravljanje investicionim projektima (Project server)
  - implementiran podsistem za upravljanje projektima kapitalnih investicija i kreirani BI izvještaji s pregledom projekata;
  - implementiran podsistem za upravljanje investicionim projektima u proizvodnoj djelatnosti;
  - implementiran podsistem za upravljanje projektima strateškog razvoja;
- Aplikacija „Skupština dioničara“: prilagodba aplikacije za podršku u radu Skupštine tokom 2021.godine;
- Kontaktni centar i CRM:
  - funkcionalna testiranja integracije sa SCADA/DMS/OMS sistemom;
  - integracija s mobilnom aplikacijom kupca – puštanje u rad;
  - integracija s novim sistemom DMS-Protokol– testno okruženje;
- Aplikacija Nabavke: projektiranje i razvoj novog aplikativnog rješenja za praćenje procesa javnih nabavki, od momenta usvajanja plana pa sve do realizacije ugovora; aplikacija Nabavke tokom 2021.g. je počela s produkcijom korištenjem u svim dijelovima EPBiH;
- Realizacija plana JN:
  - prilagođen modul za unos plana JN u skladu sa zahtjevima vlasnika;
  - zastoji: razvoj aplikacije na novoj tehnologiji (SpringBoot + ReactJS) za potrebe produkcionog korištenja početkom 2022. godine;
- SOEE/SONN/SODM:
  - pušteni u produkciju redizajnirani obrasci računa za električnu energiju, mrežarinu i neovlaštenu potrošnju; unapređenje transfera analitičkih i sintetičkih podataka;
  - izdatim računima između sistema SOEE i SAP;
  - programski unaprijeđen algoritam knjiženja uplata iz pošte i banaka koji omogućava automatsko učitavanje i knjiženje uplata po transakcijskim računima na različ-

tim organizacionim nivoima (podružnica, OOiN), omogućene zasebne blagajne za knjiženje transfera uplata iz banaka za svaki transakcijski račun unutar podružnice;

- Nova infrastruktura za rad Oracle baza podataka:
  - završena instalacija, konfiguracija i puštanje u produkcionu rad nove hardversko-softverske platforme (Oracle Database Appliance) dedikirane za rad Oracle baza podataka u Direkciji;
  - završene migracije Oracle baza podataka na novu verziju (SOEE/SONN/SODM, MDM, DISP, DEEO, PROCES itd.);
- Novi informacioni sistem za obračun i naplatu u snabdijevanju (Billing sistem):
  - usvojena investiciona odluka za implementaciju novog informacionog sistema za obračun i naplatu električne energije u djelatnosti Snabdijevanja;
  - završen tehnički dio tenderske dokumentacije za implementaciju novog informacionog sistema za obračun i naplatu električne energije u djelatnosti Snabdijevanja;
- DWH za snabdijevanje – dorade sistema – izrada nove kocke Ugovori transformacijom podataka iz SPP softvera za tržišno ugovaranje i SOEE; kreiranje novih interfejsnih tabela sa SPP; korekcije OT-2 izvještaja u skladu s analizom izmjena izvještaja 8R iz SOEE;
- Novi informacioni sistem za obračun i naplatu u ODS-u:
  - završen dokument „Funkcionalni zahtjevi i integracije Informacionog sistema za obračun, fakturisanje i naplatu u djelatnosti distribucije el. energijom - Billing ODS s drugim sistemima“;
- MDM sistem
  - implementacija nadgradnje MDM sistema – nova verzija MDM sistema;
  - implementacija izmjena u kodu zbog upradea MDM baze na novu verziju;
  - izmjene na MDM sist. vezane za integracije s DEEO sistemom, zbog ukidanja DEEO-SOEE veze;
  - izmjene na MDM sistemu zbog uprade SEP2W sistema i konfiguracije za nove tipove brojila;
  - izmjene na MDM sistemu vezane za integracije s mobilnom aplikacijom za očitavače;
  - izmjene pravila pripadnosti MM kroz korekciju DISP/SOEE validacije;
  - izmjena šifarnika za kat. mjernog mjesta u skladu s odredbama Općih uslova za kat. kupaca;
  - izmjena MDM sistema za unos konfigurabilnog broja dozvoljenih estimacija u toku jedne godine;
  - implementacija izmjena procesnog toka obračuna potrošnje u MDM sistemu;
  - implementacija procesa vezanog za virtuelna mjerna mjesta u MDM sistemu;
  - izmjene na preuzimanju podataka između MDM sistema i Backenda mobilnih aplikacija;

- izmjene intregacije MDM – DEEO (dodavanje novih podataka);
- Mobilne aplikacije za kupce i očitache
  - realizirana implementacija mobilnih aplikacija za kupce i očitache, završen probni rad, interni tehnički prijem, te puštanje u produkciju za aplikaciju za očitache;
  - završen dio nadgradnji mobilnih aplikacija za očitache i kupce;

#### SCADA/DMS/OMS (SDO) i pripadne TK za potrebe ED podružnica

SCADA/DMS/OMS i integracije:

- dostavljanje eksporta podataka iz postojećih baza i nestruktuiranih izvora: postojeći SCADA sistemi, DEEO, crteži dispečerskih shema;
- uređivanje postojećih podataka u DEEO bazi za potrebe SDO sistema;
- puštanje u rad sistema, intenzivno praćenje svih funkcionalnosti;

TK dio projekta:

- završena instalacija i testiranje switcheva u 11 objekata;
- završena instalacija i testiranje optičkih kablovskih dionica za uvezivanje šest objekata; izvršena ugradnja 7 RR linkova i 40 digitalnih radiomodema.

#### Ostala ulaganja

U dijelu ostalih ulaganja u toku 2021. godine od planiranih 975 hiljada KM nije bilo ulaganja.

#### Rudnici uglja

Za dokapitalizaciju sedam zavisnih društava rudnika uglja po odlukama o dokapitalizaciji, u 2021. godini planom je predviđeno ulaganje u iznosu 25,9 miliona KM, dok je za taj period realizirano 8,05 miliona KM ili 31,1% od plana. Po rudnicima, ulaganja tokom 2021. godine su iznosila:

- Rudnici uglja „Kreka“ d.o.o. Tuzla 8,045 miliona KM,
- Rudnik mrkog uglja „Đurđevik“ d.o.o. Đurđevik 3,5 hiljada KM.

U ostalim rudnicima nije bilo ulaganja. Za realizaciju u 2022. godini, po već potpisanim ugovorima za investiciona ulaganja, preostalo je 5,97 mil. KM.

Najznačajnije investicije u zavisna društva rudnike uglja tokom 2021. godine su:

Rudnici uglja „Kreka“ d.o.o. Tuzla

- Eeksprijacija zemljišta PK Dubrave i PK Šikulje 636 hiljada KM;
- revitalizacija BTO i BTK kompleksa PK Dubrave i PK Šikulje 6,6 miliona KM;
- izrada bunara za odvodnjavanje s pripadajućom opremom 809 hiljada KM;

Rudnik mrkog uglja „Đurđevik“ d.o.o. Đurđevik

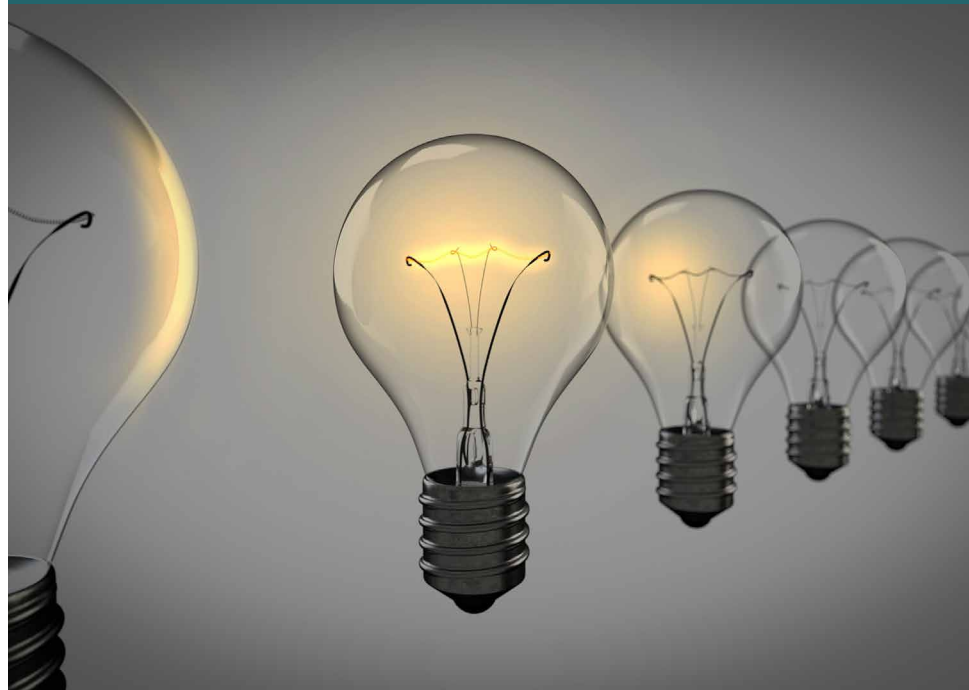
- servisne usluge za samohodnu udarno-rotacionu bušaću garnituru 3,5 hiljade KM.

Glavni razlozi koji su onemogućili realizaciju plana ulaganja u ZD rudnike su:

- striktna primjena Zakona o javnim nabavkama, što onemogućava dovoljno efikasnu realizaciju ulaganja;
- nedovoljna pripremljenost rudnika da realiziraju investiciona ulaganja (nedostatak investiciono-tehničke dokumentacije, organizaciona nepripremljenost, nedostatak kadrova i sl.).

#### Nova zavisna društva

Planom poslovanja u 2021. godini (te Odlukom Skupštine Društva iz jula 2021. godine) za formiranje novih zavisnih privrednih društava bilo je planirano 10 mil. KM. Shodno urađenom Elaboratu tehno-ekonomske opravdanosti za osnivanje, na sjednici Skupštine Društva, održanoj 30. 7. 2021. godine, donesena je odluka o osnivanju privrednog društva s ograničenom odgovornošću GEOLP d.o.o. Kakanj, s osnovnim kapitalom u iznosu 4,1 mil. KM. Osnivački kapital je uplaćen i novo privredno društvo je registrirano kod nadležnog suda u septembru 2021. godine.



## 9. IZVJEŠTAJ O NABAVKAMA

*Ukupna vrijednost ugovora koje je EPBiH zaključila u toku 2021. godine iznosi 336.217.131 KM, od čega je:*

- zaključenih ugovora za potrebe EPBiH, koji su uneseni u SAP sistem u iznosu 332.851.408 KM;*
- za potrebe zavisnih društava rudnika uglja po osnovu odluka o dokapitalizaciji rudnika proveli postupke za koje su direktori rudnika zaključili ugovore u iznosu 3.365.723 KM.*

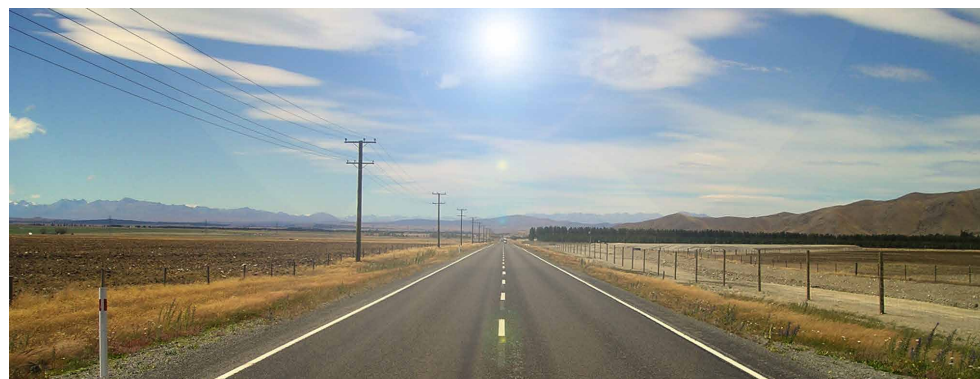
## I Pregled zaključenih ugovora o nabavkama u 2021. god. za potrebe EPBiH

Vrsta postupka	Broj postupaka	Vrijednost u KM	% vrijednosti
Direktni sporazum	1.171	1.470.627,32	0,44%
Konkurentski postupak s objavom	242	2.194.660,25	0,66%
Pregovarački postupak s objavom	33	21.875.337,74	6,57%
Pregovarački postupak bez objave	24	120.905.853,21	36,32%
Otvoreni postupak	1.567	71.945.044,77	21,61%
Ograničeni postupak s pretkvalifikacijom	-	-	-
Ugovori koji se dodjeljuju po posebnom režimu	29	1.599.196,15	0,48%
Nabavka od zavisnih društava	77	112.491.061,40	33,80%
Izuzeće od primjene ZJN-a	300	369.627,57	0,11%
<b>UKUPNO:</b>	<b>3.443</b>	<b>332.851.408,41</b>	<b>100,0%</b>

EPBiH je putem otvorenog postupka (1.567 postupak) zaključila ugovore u iznosu 72,84 mil KM, što čini 45,51% broja ukupno zaključenih ugovora u 2021. godini. Broj otvorenih postupaka, kao najtransparentnijih, povećan je u odnosu na 2020. godinu (30 postupaka više u odnosu na prethodnu godinu).

Za nabavke od zavisnih društava provedeno je 77 postupaka, što čini 33,8% ukupne vrijednosti nabavke EPBiH, s tim da se većina vrijednosti odnosi na ugovore o nabavci uglja od šest zavisnih društava rudnika u sastavu Koncerna EPBiH. Od 112,49 mil. KM vrijednosti nabavke od zavisnih društava, na nabavke uglja odnosi se cca 99 mil. KM, a s ostalim zavisnim društvima zaključili smo ugovore za isporuku roba/usluga/radova u sljedećim ukupnim iznosima:

1. Iskraemeco d.o.o. Sarajevo – 7,5 mil. KM
2. Eldis-tehnika d.o.o. Sarajevo – 5,57 mil. KM
3. TTU Energetik d.o.o. Tuzla – 0,4 mil. KM



Nabavka pregovaračkim postupkom bez objave je izvršena putem 24 postupka u vrijednosti 120,9 mil. KM, što čini 36,32% ukupne vrijednosti nabavke, odnosno 0,7% ukupnog broja zaključenih ugovora u 2021. godini. Analizom vrijednosti zaključenih ugovora može se utvrditi da se pretežno radi o postupcima i ugovorima koji se odnose na transport uglja putem Željeznica FBiH u vrijednosti cca 23,2 mil. KM; zatim nabavku uglja iz RMU „Banovići“ i RU „Gračanica“ u vrijednosti od 77,1 mil. KM. Također, značajno je napomenuti da smo za isporuku uglja zaključili 2 ugovora po ovom postupku s kompanijom EFT-R Stanari u iznosu 17 mil. KM. Ostatak vrijednosti po ovom postupku čine komercijalne nabavke specifičnih roba/usluga/radova, a koje su provedene u skladu sa Zakonom o javnim nabavkama. Postupci „izuzeća“ od ZJN uglavnom se odnose na ugovore zaključene po osnovu zakonskih monopola, kao što su objave obavještenja u „Službenom glasniku“, i drugi zakonski monopoli (korištenje baze podataka iz katastra nekretnina FBiH; usluge dopune ACC TAG-a za vozila Direkcije i dr.); usluge produkcije videosadržaja itd., a sve u skladu sa izuzećima definiranim Zakonom o javnim nabavkama.

## II Pregled zaključenih ugovora o nabavkama roba/usluga/radova za ZD rudnike

Vrsta postupka	Broj postupaka	Vrijednost u KM	% vrijednosti
Otvoreni postupak	6	3.365.722,60	100 %
<b>UKUPNO:</b>	<b>6</b>	<b>3.365.722,60</b>	<b>100,0%</b>

Sektor za komercijalne poslove u EPBiH vršio je ugovaranje nabavki za potrebe ZD rudnika, a u vezi s odlukama o dokapitalizaciji ZD rudnika iz sredstava EPBiH. Vrijednost ovih nabavki je 3,36 mil. KM, od čega se kompletna nabavka provela putem otvorenog postupka, i sve za potrebe RMU „Kreka“.

Posebno naglašavamo postupak nabavke roba po „Sistemu kvalifikacije“ (na Portalu se prikazuje kao pregovarački postupak s objavom obavještenja), za djelatnost Proizvodnje električne energije i to energenta (mazut, dizel-gorivo i lož-ulje), gdje smo ostvarili značajno niže cijene u odnosu na prethodne otvorene postupke javne nabavke, koje smo radili po principu „promjenljive cijene“.

Također, po „sistemu kvalifikacije“ u toku 2021. godine uspješno je izvršena nabavka roba i za potrebe djelatnosti Distribucije i to:

- betonska galanterija (AB stubovi, AB nogare i betonske cijevi);
- kablovi (samonosivi kablovski snopovi i energetske kablovi);
- spojni i ovjesni materijal (razne stezaljke, stopice, čahure itd).

U toku 2021. godine imali smo veliki broj žalbi, od kojih su najvećim brojem bile neuredne žalbe pojedinih ponuđača koji su se stalno žalili na tendersku dokumentaciju, izmjene tenderske dokumentacije, odluke o izboru itd. a da pri tome nisu izvršili uplate za pokretanje žalbenog postupka. To znači da takvi ponuđači i nisu imali ozbiljne namjere da izvrše korekciju dokumentacije, nego je isključivi cilj odugovlačenje postupaka nabavki. Sve ovo je znatno otežavalo realizaciju Plana nabavki u 2021. godini, posebno u djelatnosti Distribucije električne energije.

Kao primjer navodimo Direkciju Društva, gdje su od 128 riješenih žalbi bile čak 74 neuredne žalbe, zatim 29 žalbi gdje se ponuđači uopće nisu žalili drugostepenom organu, a što sve govori da ponuđači nisu imali

ozbiljnu namjeru da riješe primjedbe po njihovim žalbama. Ured za razmatranje žalbi usvojio je 14 žalbi, a 11 žalbi je proglasio neosnovanim.

U Direkciji Društva za nabavke po osnovu Odluke o dokapitalizaciji rudnika, od devet riješenih žalbi dvije su bile neuredne; pet žalbi usvojio je Ured za razmatranje žalbi, a jednu žalbu je odbio kao neosnovanu, dok je u jednom slučaju ponuđač odustao od svoje žalbe.

Kada su u pitanju javne nabavke (centralizirane i decentralizirane) za potrebe EPBiH tokom 2021. godine izjavljena je od ponuđača ukupno 361 žalba od kojih je:

- u Direkciji Društva na centralizirane nabavke - 140 žalbi;
- u Direkciji Društva za nabavke po osnovu Odluke o dokapitalizaciji rudnika - 9 žalbi;
- u podružnicama Društva na decentralizirane nabavke u djelatnosti Proizvodnje - 86 žalbi;
- u podružnicama Društva na decentralizirane nabavke u djelatnosti Distribucije - 126 žalbi.





## 10. ZAŠTITA OKOLIŠA

*EPBiH i njena zavisna društva odlučni su u nastojanju da odgovorno pristupe svim svojim poslovnim aktivnostima, uzimajući u obzir utjecaje na okoliš i poštovanje načela održivog razvoja. Težimo kontinuiranom napretku u smislu primjene standarda zaštite okoliša te, uporedo s razvojem poslovanja, nastojimo smanjiti negativan utjecaj na okoliš i na taj način ispuniti definirane poslovne ciljeve. Tokom 2021. godine nastavilo se s provođenjem planova zaštite okoliša i prirodnih resursa u okviru nadležnih službi u Direkciji Društva i podružnicama te stručnim timovima koji se formiraju prema nastaloj tekućoj problematici.*

## Praćenje međunarodne i domaće legislative

EPBiH kontinuirano prati međunarodnu i domaću legislativu i pravovremeno izvještava o nastalim obavezama. Aktivno učestvuje i u aktivnostima Energetske zajednice u pravnoj stečevini za pitanja zaštite okoliša, kroz članstvo u radnoj grupi za okoliš EnZ.

## Okolišne i vodne dozvole

U 2021. godini nastavljeno je s provođenjem aktivnosti naloženih putem važećih okolišnih i vodnih dozvola u proizvodnim i distributivnim podružnicama Društva.

## Kapitalni projekti

### HE „Kovanići“

Nastavljeno kontinuirano praćenje nivoa podzemnih voda na instaliranim pijezometrima tokom 2021. godine

### Blok 8 u TE „Kakanj“

Inoviranje investiciono-tehničke i okolišne dokumentacije zamjenskog Bloka 8 TE „Kakanj“:

### Blok 7 u TE „Tuzla“, HE „Janjići“ i HE „Vranduk“

Izrada zahtjeva za izdavanje okolišne dozvole - obnavljanje

## Izrada planskih i studijskih dokumenata

U segmentu studijskih i planskih dokumenata u 2021. godini realizirani su sljedeći projekti/studije:

### Razvojni projekti:

- Elaborat opravdanosti izgradnje fotonaponskih elektrana na slobodnim površinama rudnika Koncerna EPBiH i odlagalištima šljake i pepela TE EPBiH – FNE „Gračanica“ + revizija
- Elaborat opravdanosti izgradnje fotonaponskih elektrana na slobodnim površinama rudnika Koncerna EPBiH i odlagalištima šljake i pepela TE EPBiH – FNE „Kreka“ + revizija

- Elaborat opravdanosti izgradnje fotonaponskih elektrana na slobodnim površinama rudnika Koncerna EPBiH i odlagalištima šljake i pepela TE EPBiH – FNE „Divkovići“ + revizija
- Elaborat opravdanosti ulaganja u fotonaponsku elektranu za vlastite potrebe za Fabriku cementa Lukavac
- Analiza shema taksi na emisije CO2 s prijedlogom optimalnog održivog scenarija za EPBiH - Elaborat
- Analiza i projekcije potreba za ugljem u EPBiH do 2050. godine s projekcijom dinamike obustave rudnika - Elaborat
- Uspostava sistema upravljanja energijom u svim djelatnostima / dijelovima EPBiH u skladu s ISO EN 50001
- Formiranje instituta za energetiku, klimu i okolinu - Elaborat
- Elaborat opravdanosti izgradnje fotonaponskih elektrana na slobodnim površinama rudnika Koncerna EPBiH i odlagalištima šljake i pepela TE EPBiH - FNE „Kakanj“ Bijele Vode + revizija
- Elaborat opravdanosti izgradnje fotonaponskih elektrana na slobodnim površinama rudnika Koncerna EPBiH i odlagalištima šljake i pepela TE EPBiH - FNE „Gornja Breza“ + revizija
- Mogućnosti zasada energetskih usjeva/biomase na zemljištu rudnika Koncerna EPBiH - Prethodna elaboracija s master planom aktivnosti
- Razvojni program korištenja alternativnih goriva SRF/RDF u EPBiH: Mogućnost korištenja alternativnih goriva SRF/RDF u termoelektranama EPBiH u okvirima održivih ekonomskih i tehnoloških parametara te okolišno-regulatornih uvjeta
- Izrada logističke studije o nabavci, transportu, kvalitetu i dugoročnom snabdjevanju SRF/RDF
- Plan implementacije uvođenja biogoriva/alternativnih goriva EPBiH (I. SRF/RDF, II. Otpadna drvena biomasa, III. Brzorastuća biomasa).
- Polazni elaborat primjene vodika u energetici

### VE „Podveležje“

Završne aktivnosti na izgradnji VE „Podveležje“, funkcionalna ispitivanja, puštanje u pogon, test usaglašenosti s Mrežnim kodeksom, test krive snage.

## Sistem upravljanja okolišem

### TE „Tuzla“

Interni auditi IMS provedeni su u januaru, februaru i martu 2021. godine. Rezultat internih audita pokazao je potrebu za korektivnim akcijama i poboljšanjima u pojedinim procesima.

Od strane ICS-a d.o.o. Sarajevo u dane 7, 8. i 9. 9. 2021. godine proveden je kontrolni audit Integriranog sistema poslovnog upravljanja kvalitetom i okolinom u TE "Tuzla", a prema zahtjevima standarda ISO 9001:2015 i ISO 14001:2015.

Sve aktivnosti u Sektoru za sisteme upravljanja izvršavane su uz primjenu preventivnih mjera za sprečavanje širenja koronavirusa (COVID-19). ICS-a d.o.o. Sarajevo je izdao Certifikat za integrirani sistem poslovnog upravljanja kvalitetom i okolinom s rokom važenja do 26. 9. 2024. godine.

### TE "Kakanj"

TE „Kakanj“ je certificirana prema zahtjevima Standarda BAS EN ISO 14001:2017. Usklađivanje sistema okolišnog upravljanja sa zahtjevima navedenog standarda je podrazumijevalo uvođenje sljedećih principa:

- da se zaposlenici kontinuirano upoznavaju sa značajem ispunjavanja okolišnih zakonskih zahtjeva;
- da se definira i javno objavi okolišna politika;
- da su definiraju okolišni ciljevi.

### HE na Neretvi

Urađen je Program poboljšanja integriranog sistema upravljanja (ISU) za 2021. godinu na osnovu kojeg su provedene sljedeće aktivnosti:

- izvršeno je preispitivanje dokumenata ISU-a (Management review) od strane rukovodstva, u decembru 2021. godine;
- proveden je interni audit u svim pogonima/sektorima tokom maja i juna 2021. godine;
- izvršena je analiza okolišnih aspekata koji se odnose na proces proizvodnje električne energije u pogonima/sektorima, u januaru 2021. godine;
- ocjena usklađenosti rada sa zakonskim i drugim okolišnim zahtjevima izvršena je u oktobru 2021. godine;
- ciljevi kvaliteta i okolišni ciljevi za 2021. godinu su urađeni u aprilu 2021. godine.

Dostavljen izvještaj od ICS-a o provedenom nadzornom auditu Integriranog sistema upravljanja (ISU) u Podružnici „Hidroelektrane na Neretvi“ Jablanica – Instituta za certificiranje sistema prema zahtjevima standarda ISO 9001:2015 i ISO 14001:2015. koji je održan od 15. 12. 2021. do 16. 12. 2021. godine.

### ED Tuzla

Prvi nadzorni audit Sistema okolišnog upravljanja BAS EN ISO 14001, izvršen je u junu 2021. godine, uz audit Sistema prema ISO 9001, koji zajedno čine Integrirani sistem upravljanja - ISU. Podružnica kontinuirano radi na poboljšanju odnosa prema okolini, kroz



sistemski pristup upravljanju otpadom, kontrolu okolišnih aspekata, identifikaciju i primjenu zakonske regulative, ispunjenje postavljenih okolišnih ciljeva te korektivnim mjerama.

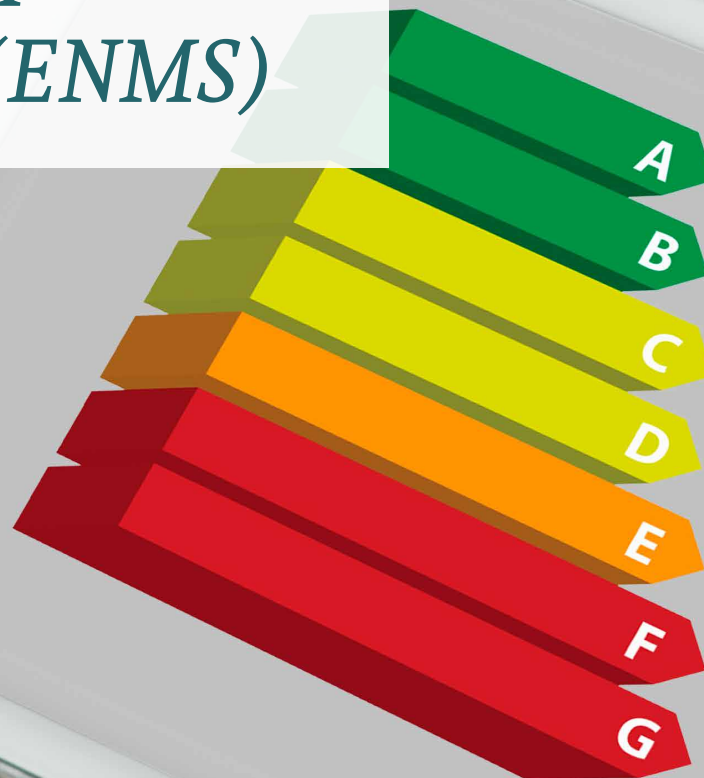
Upravljanje okolišem, koje je prepoznato kao zaseban proces, vrednovano je u smislu određivanja konteksta organizacije i potencijalnih rizika, te su razmatrane mjere za identificirane rizike i prilike.

### ED Sarajevo

Certifikat sistema upravljanja kvalitetom, dobijen u skladu za zahtjevima standarda ISO 9001:2015, od Instituta za certificiranje sistema d.o.o. Sarajevo važi do 9. 7. 2022. godine. U 2021. godini realiziran je drugi nadzorni audit. Iz oblasti okolišnog upravljanja podružnica kontinuirano radi na poboljšanju odnosa prema okolišu kroz sistemski pristup upravljanju otpadom i primjeni zakonske regulative. Cilj je izgradnja integriranog sistema upravljanja - ISU.



# 11. IZVJEŠTAJ O UVOĐENJU SISTEMA UPRAVLJANJA ENERGIJOM (ENMS)



EPBiH provodi proces upravljanja energetskom efikasnošću u svojim organizacionim jedinicama prema ranijim odlukama o uspostavi strukture upravljanja energetskom efikasnošću. Usljed rastuće potrebe za povećanjem energetske efikasnosti i ušteda energije na strani proizvodnje (s fokusom na vlastitu potrošnju i specifičnim utroškom toplote kao ključnim energetskim indikatorima), distribucije (smanjenje mrežnih distributivnih gubitaka) i potrošnje (posebno u domaćinstvima, ali i industriji), s ciljem ostvarivanja direktnih finansijskih efekata kao i radi smanjenja negativnog utjecaja na okoliš, te smanjenja emisije CO<sub>2</sub> i povezanih finansijskih obaveza, potrebno je unaprijediti sistem upravljanja energijom u cijeloj organizaciji EPBiH, te ga uskladiti sa zahtjevima Sistema energetskog upravljanja ISO 50001. U vezi s tim u 2021. godini radilo se na provođenju energetskih audita u svim djelatnostima i dijelovima Koncerna EPBiH te uspostavi ključnih energetskih pokazatelja u dijelovima gdje do sada nisu bili uspostavljeni (Direkcija PTZ EPBiH, Snabdijevanje, Rudnici), uz definiranje mjera za unapređenje praćenja i poboljšanja energetskih indikatora. Sistem upravljanja energijom je sada potrebno kontinuirano i striktno provoditi u kratkoročnim i dugoročnim okvirima u svim djelatnostima/dijelovima, uz dokumentiranje cjelokupnog procesa, kroz instrumente postavljanja ciljeva, te planiranja i realizacije mjera za unapređenja i poboljšanja, s jasnim kvantificiranim i ambicioznim ciljevima povećanja energetske efikasnosti i ušteda energije.



*U pogledu ključnih energetskih indikatora Proizvodnje i Distribucije u 2021. godini, postignuta su određena poboljšanja u odnosu na 2020. godinu. Ukupni ostvareni specifični utrošak toplote u TE EPBiH u 2021. godini iznosio je **11.737 kJ/kWh (neto efikasnost 30,67%)** i bolji je za **180 kJ/kWh** ili za **1,50%** u odnosu na 2020. godinu. **Mrežni gubici u Elektrodistribuciji EPBiH su u 2021. godini iznosili 7,78%** u odnosu na bruto energiju, što je u potpunosti u skladu s elektroenergetskim bilansom za 2021. godinu, te su nešto bolji u odnosu na 2020. godinu kada su iznosili **8,0%**. Konačno, treba potvrditi da je **prodaja krajnjim kupcima (ukupno snabdijevanje) u 2021. godini ostvarena u količini od 5.004,3 GWh** i bila je za **149,0 GWh**, odnosno **3,1%** veća od plana, a za **179,7 GWh** ili za **3,7%** veća od ostvarene u 2020. godini.*

S ciljem nastavka kontinuiranog upravljanja energetskim performansama te uspješnog okončanja procesa izgradnje i implementacije Sistema upravljanja energijom u svim organizacionim dijelovima koncerna EPBiH, tj. u djelatnostima Proizvodnje, Distribucije i Snabdijevanja, kao i u rudnicima i drugim zavisnim društvima, u 2022. godini predlaže se sljedeće:

- 1. nastaviti praćenje energetskih indikatora u svim djelatnostima/dijelovima EPBiH, uz daljnje unapređenje praćenja i poboljšanja energetskih performansi;**  
.....
- 2. okončati audit (certificiranje EPBiH prema standardu EN ISO 50001:2018 od strane akreditirane kuće) PTZ Direkcija EPBiH;**  
.....
- 3. završiti prema postojećem master planu izgradnju i implementaciju sistema upravljanja energetskom efikasnošću u skladu sa zahtjevima standarda ISO 50001 i integraciju s postojećim sistemima upravljanja u Proizvodnji, Distribuciji, Snabdijevanju i Rudnicima, prema organizacionim uvjetima i važećim standardima. Izvršiti pripreme (angažman akreditiranih kuća) za preaudit i audit (certificiranje prema EN ISO 50001:2018 od strane akreditirane kuće) u Proizvodnji, Distribuciji, Snabdijevanju i Rudnicima.**

# Rezime

**EPBiH je u 2021. godini ostvarila ukupan prihod u iznosu milijardu i 123,47 miliona KM, dobit prije oporezivanja u iznosu 14,0 miliona KM, što je bolji finansijski rezultat od planiranog i ostvarenog u 2020. godini.**

Osnovne odrednice poslovanja EPBiH u 2021. godini su:

- proizvodnja električne energije u obimu 6.677 GWh, što je povećanje u odnosu na 2020. godinu i elektroenergetski bilans;
- snabdijevanje krajnjih kupaca realizirano uredno, kao i ugovorene dugoročne isporuke u djelatnosti trgovine;
- okončanje izgradnje VP „Podveležje“ i realizacija značajnih investicija u distribuciji i proizvodnji;
- ulaganje više od 100 miliona KM u vlastite djelatnosti i ZD rudnike;
- likvidno poslovanje i pružanje podrške održanju likvidnosti ZD rudnika;
- aktivno učešće na regionalnom tržištu električne energije i tržištu pomoćnih usluga u BiH, uz ostvarenje zavidnih efekata po osnovu kupoprodaje električne energije i pružanja pomoćnih usluga.

U 2021. godini ukupna proizvodnja električne energije bila je veća za 1,9 % od predviđene EEB-om, te veća za 7,0% u odnosu na 2020. godinu. Ostvarena je veća proizvodnja u hidroelektranama u odnosu na plan i EEB, a učešće hidroenergije u ukupnoj proizvodnji električne energije bilo je 25,9 % . Ukupna potrošnja električne energije bila je veća od bilansirane za 2,8 %.

Ostvaren je ukupan prihod od prodaje električne energije veći od plana, kod snabdijevanja krajnjih kupaca i kod tržišne prodaje, pretežno zbog većeg obima proizvodnje u hidroelektranama, što je rezultiralo većim obimom kratkoročne prodaje i postignutim većim prodajnim cijenama za kratkoročnu prodaju.

EPBiH je ostala jedan od najvećih investitora u BiH s ulaganjima koja prelaze 100 miliona KM, iako su realizirana ulaganja bila značajno manja od planiranih zbog objektivnih i subjektivnih razloga. Pored značajnih ulaganja u kapitalne investicije i djelatnosti Distribucije i Proizvodnje, u zavisna društva rudnike putem dokapitalizacije uloženo je 8 miliona KM. U procesu prestrukturiranja rudnika formirano je novo zavisno društvo GEOLP d.o.o. Kakanj.

Početkom godine okončana je izgradnja prve vjetroelektrane u vlasništvu EPBiH, VE „Podveležje“, a u martu 2021. godine u vjetroparku je započela komercijalna proizvodnja koja je, sagledano kroz tržišnu vrijednost proizvedene energije, rezultirala efektima boljim od očekivanih.

Završeni su pripremni radovi na gradilištu Bloka 7 TE „Tuzla“. Za realizaciju projekta izgradnje Bloka 7 EPBiH je ispunila sve potrebne preduvjete i obaveze po dinamičkom planu.

U okviru aktivnosti na promjeni organizacije, u januaru 2021. godine donesen je novi Pravilnik o organizaciji Društva, gdje su djelatnosti Proizvodnje i Snabdijevanja izdvojene iz ED podružnica. Ovim je učinjen dodatni korak u odvajanju distributivne djelatnosti od ostalih elektroprivrednih djelatnosti, što je obaveza po Zakonu o električnoj energiji u FBiH i evropskim direktivama.

U 2021. godini, EPBiH je ostala jedan od najvećih poreznih obveznika u Bosni i Hercegovini i Federaciji BiH - na ime PDV po mjesečnim PDV prijavama prijavljeno i uplaćeno rekordnih 92,0 miliona KM PDV obaveza (kao razlike izlaznog i ulaznog PDV-a). Na ime ostvarene proizvodnje u hidroelektranama i termoelektranama uplaćeno je oko 42 miliona KM raznih dažbina.





*2021*  
*ANNUAL BUSINESS REPORT*

# General Manager's Foreword



**The first  
company-owned  
WP commissioned**

**BAM 1 billion and  
123.5 million of  
revenue generated**

*Despite the more difficult business circumstances caused by the coronavirus pandemic, which in 2021 significantly affected the activities of business entities at the global level, JP Elektroprivreda BiH generated 6,677 GWh of electricity, achieved BAM 1 billion and 123.5 million of revenues and 14 million of profit before tax. The results achieved are higher than planned and those that marked 2020. All customers were properly supplied and the contracted long-term deliveries in the Trade activity were fulfilled.*

*The reporting year is particularly significant for JP Elektroprivreda BiH due to the fact that the construction works were completed in the first quarter and the 48 MW Wind Power Plant "Podveležje 1", the first owned by the company, was commissioned. The Wind Farm on the Podveležje plateau, which exceeded the expected effects with the generation of 15 wind turbines, has contributed to increasing the share of electricity generation from renewable sources within the system of JP Elektroprivreda BiH and represents an important step forward in fulfilling international obligations in the energy sector on BiH's integration path to the EU.*

*During the year, preliminary works on the construction site of TPP "Tuzla" Unit 7 were also completed, thus fulfilling all the necessary prerequisites and obligations for the implementation of the project for the construction of a new 450 MW plant.*

*Thanks to investments in capital projects, but also in Generation and Distribution activities in the amount exceeding BAM 100 million, JP Elektroprivreda BiH retained its position as the most significant and largest investor in the country in the past year as well. In parallel with the implementation of the demanding process of the coal mines restructuring, by investing BAM 8 million, JP Elektroprivreda BiH, as the Parent Company of the EPBiH Concern, continued with the process of recapitalization of the coal mines, while supporting the maintenance of the liquidity of their business.*

*The leading position in BiH was also retained on the basis of revenues in the amount of BAM 1 billion and 123.5 million. This financial result, among other things, was achieved due to the higher volume of short-term sales on the market, with higher sales prices mainly due to the increased share of generation in hydroelectric power plants, which participated with almost 26 percent in total generation of 6,677 GWh.*

*By paying BAM 92.0 million in VAT liabilities, which is a record amount, JP Elektroprivreda BiH remained one of the largest taxpayers in BiH and the Federation of BiH, while BAM 46 million was paid on the basis of various fees on the realized generation in hydro and thermal plants.*

*Fulfilling the obligations under the Law on Electricity in FBiH and European Directives related to the separation of distribution from other electricity utility activities, the new Ordinance on the organization of the Company's activities of Generation and Supply separated them from the electricity distribution subsidiaries. The process of restructuring the coal mines of the EPBiH Concern members within which the new subsidiary company GEOLP d.o.o. Kakanj was formed, continued.*

*JP Elektroprivreda BiH has maintained its primacy in the reporting year in ensuring the integrity and stable functioning of the Power System of BiH through responsible and professional activities, with the aim of enabling the continuous running of the electricity production process and the orderly supply of customers, strengthening the competitive position on the open market and fulfilling the tasks of the Parent Company of the EPBiH Concern.*

*By implementing activities in the implementation of the strategy of its development based on the goals and policies of the EU, JP Elektroprivreda BiH has also played a significant role in fulfilling the obligations of the State of BiH derived from the Energy Community Treaty in 2021.*

**General Manager  
Admir Anđelić**

# Vision

## **Public Enterprise**

## **Elektroprivreda Bosne i**

## **Hercegovine d.d. - Sarajevo**

## **(Public Electric Utility of**

## **Bosnia and Herzegovina) by**

*its socially responsible business and professional integrity in the generation, distribution, supply of electricity and developing of electricity market will be carrier of reliable partner to other economic entities in economic development of Bosnia and Herzegovina.*

## Mission

*Mission of the company is generation and distribution of electricity, reliable supply to customers and electricity trade in a competitive environment, using domestic resources and meeting environmental requirements, contributing to the sustainable development of quality of life of society .*

*Public enterprise Elektroprivreda Bosne i Hercegovine d.d.-Sarajevo will:*

- Generate electricity and heat energy from domestic renewable and non- renewable resources in accordance with environmental requirements, applicable legal regulations and European standards;*
- Provide an efficient distribution system for electricity delivery to end-customers and enable access to the network to all users of power supply according to safely prescribed norms of quality and providing information;*
- Safely and reliably supply electricity and trade in electricity generated from domestic resources at competitive prices;*
- Ensure economically sustainable coal production for needs of thermal power plants, industry and wide consumption at competitive price;*
- Invest in the development and realization of new capital investments, paying special attention to investing in the electricity production from renewable sources increasing the flexibility of the energy portfolio and energy efficiency;*
- Restructure all activities in order to increase the efficiency of operations and fulfill the requirements within Energy Community and European standards.*

*Efficiency business of Elektroprivreda Bosne i Hercegovine d.d.-Sarajevo is based on consistent application of regulations and standards on principles:*



**quality assurance of  
products and services**



**increasing of customers  
satisfaction,  
security and confidence**



**environment  
preservation**



**strategic plannings  
and development of  
employees**



**protection of  
occupational health  
and safety**



**providing security of  
information**



**risk management**



**increasing of energy  
efficiency**



**socially responsible  
business**





## 1. STATUTORY COMPANY ELEMENTS

*The public enterprise Elektroprivreda Bosne i Hercegovine d.d.-Sarajevo is an electric power company, performing the following activities: production of electricity, distribution of electricity, supply and trade in electricity, and other activities determined by the Statute.*



**JP Elektroprivreda BiH operates within the following eight subsidiaries:**

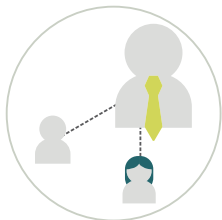
- Hydropower plants on the Neretva, Jablanica
- Thermal power plant "Kakanj", Kakanj
- Thermal power plant "Tuzla", Tuzla
- „Elektrodistribucija“, Bihać,
- „Elektrodistribucija“, Mostar
- „Elektrodistribucija“, Sarajevo
- „Elektrodistribucija“, Tuzla
- „Elektrodistribucija“, Zenica
- with the organised Directorate at the headquarters of the Company.



**The Company is represented by the general manager, executive managers, and subsidiary managers, in accordance with the Statute and a separate act of the Company Management.**

**Bodies of the Company are:**

- General meeting,
- Supervisory board,
- Management, and
- Audit committee



**Management of the Company, pursuant to the Law on Companies, Law on Public Enterprises, and Statute, is performed by the Company Management, which includes:**

- General manager,
- Executive manager for production,
- Executive manager for distribution,
- Executive manager for supply and trade,
- Executive manager for economic affairs,
- Executive manager for legal affairs and human resources,
- Executive manager for capital investments.

The Company has a company secretary, whose competencies are provided for by law and the Statute.

**The Company Directorate is organised at the Company's headquarters to perform joint functions for the needs of the Company as a whole, and for the needs of individual electric power activities and subsidiaries.**

## APPLICATION OF CORPORATE GOVERNANCE RULES

*In 2021, the Company followed and essentially applied all the recommendations set out in the Corporate Governance Code of JP Elektroprivreda BiH d.d. - Sarajevo, of 20 April 2012. In the Corporate Governance Code of JP Elektroprivreda BiH d.d.-Sarajevo the specifics arising from the fact that the Company is a public enterprise, to which the Law on Public Enterprises in the Federation of BiH applies, have been taken into account.*

*In 2021, all obligations with reference to disclosure of information provided for by the Corporate Governance Code of JP Elektroprivreda BiH d.d.-Sarajevo and the Rulebook on information disclosure and reporting on the securities market were fulfilled in a timely manner.*

*JP Elektroprivreda BiH d.d. - Sarajevo is a joint stock company. As at 30 November 2021, there were a total of 2,556 shareholders (31,506,541 shares), of which the first 10 were:*

No	Shareholder	Number of shares	Share (%)
1.	<b>Federation of Bosnia and Herzegovina</b>	<b>28,472,181</b>	<b>90.3691</b>
2.	<b>Raiffeisen BANK d.d. Bosna i Hercegovina</b>	<b>413,437</b>	<b>1.3122</b>
3.	<b>ZIF CROBIH FOND d.d. Mostar</b>	<b>272,468</b>	<b>0.8648</b>
4.	<b>ZIF HERBOS FOND d.d. Mostar</b>	<b>230,895</b>	<b>0.7328</b>
5.	<b>ZIF „PROF-PLUS“ d.d. Sarajevo</b>	<b>206,577</b>	<b>0.6557</b>
6.	<b>ZIF „prevent INVEST“ d.d. Sarajevo</b>	<b>204,113</b>	<b>0.6478</b>
7.	<b>ZIF „BONUS“ d.d. Sarajevo</b>	<b>180,904</b>	<b>0.5742</b>
8.	<b>OAIF „VIB FOND“ a.d. Banja Luka</b>	<b>149,950</b>	<b>0.4759</b>
9.	<b>ASA FINANCE d.d. Sarajevo</b>	<b>87,750</b>	<b>0.2785</b>
10.	<b>ZIF „FORTUNA FOND“ d.d.</b>	<b>74,929</b>	<b>0.2378</b>

## General Meeting of the Company

Competencies of the General Meeting of the Company, which includes shareholders, are provided for by the law and Statute of the Company. The General Meeting is convened at the time provided for by the law, other regulations, and Statute, and when it is deemed to be in the best interest of the Company and shareholders, and not less than once a year.

In 2021, the Company held a total of four sessions of the General Meeting.

## Supervisory Board

The Supervisory Board supervises the Company's operations and operates pursuant to the Law on Companies, Law on Public Enterprises, Company's Statute, and Rules of Procedure of the Supervisory Board.

In 2021, 34 sessions of the Supervisory Board were held.

At the 68th (extraordinary) session of the General Meeting, held on 11 February 2021, due to the expiration of term for which they were appointed, which ended on 10 February 2021, the members of the Supervisory Board appointed on behalf of the state capital were dismissed:

- **dr. sci. Iset Žigić – chair,**
- **dr. sci. Milenko Obad – member,**
- **Selvedin Subašić – member,**
- **dr. sci. Izudin Džafić – member,**
- **dr. sci. Safet Isić – member,**
- **dr. sci. Ramiz Kikanović – member.**

Also, at the 68th (extraordinary) session of the General Meeting, held on 11 February 2021, the following members of the Supervisory Board were appointed on behalf of the state capital:

- **dr. sci. Izet Žigić – chair,**
  - **dr. sci. Admir Softić – member,**
  - **dr. sci. Safet Isić – member,**
  - **dr. sci. Milenko Obad – member,**
  - **Muhidin Zametica – member,**
  - **Selvedin Subašić – member,**
- for the term until 27 August 2023.

The seventh member of the Supervisory Board is mr. sci. Hasen Mašović, who was appointed on behalf of a group of shareholders with more than 5% of voting shares, at the 58th session of the General Meeting, held on 27 August 2019, for the term of four (4) years.

## Audit Committee

The Audit Committee includes three members. At the 68th session of the General Meeting, held on 11 February 2021, resignations and dismissals of two members of the Audit Committee were accepted:

- **dr. sci. Haris Jahić, dipl. ecc. – member,**
- **Fikreta Bešović, dipl. ecc. – member.**

At the same session of the General Meeting, the Decision on the election and appointment of two members of the Audit Committee was passed, as follows:

- **Mustafa Šakić, dipl. ecc.,**
- **Ismeta Jakupović-Divković, dipl. ecc.,**

for the period starting from 12 February 2021 until the expiration of term of the Audit Committee, appointed on 28 May 2020 for a term of four years from the date of appointment.

The Audit Committee includes:

- **mr. sci. Almira Zulić, dipl. ecc.,**
- **Mustafa Šakić, dipl. ecc.,**
- **Ismeta Jakupović-Divković, dipl. ecc.**



## Company Management

The Company Management includes seven members appointed by the Supervisory Board of the Company for a term of four years, starting from 13 April 2020, as follows:

- **Admir Anelija - General manager,**
- **mr. sci. Samir Selimović, Executive manager for production,**
- **mr. sci. Elvir Lojić, Executive manager for distribution**
- **Zlatan Planinčić, Executive manager for supply and trade,**
- **Muhamed Kozadra, Executive manager for economic affairs**
- **Ružica Burić – Executive manager for legal affairs and human resources,**
- **dr. sci. Senad Salkić - Executive manager for capital investments.**



## 2. KEY COMPANY INDICATORS

*In 2021, EPBiH generated 6,677.1 GWh of electricity. Total income of BAM 1,123.47 million and profit before tax of BAM 14.00 million were generated.*

*In terms of capital value, installed capacity, total electricity generation and sales, EPBiH is the largest electricity company in Bosnia and Herzegovina, serving more than 788 thousand customers in seven Cantons in the Federation of BiH.*

Description		31. 12. 2021	Plan 2021	31. 12. 2020
Share capital	bill. BAM	2,237	2,237	2,237
Operating income	mil. BAM	1,098.4	1,076.3	1037.3
Operating expense	mil. BAM	870.4	873.0	832.5
<b>EBITDA</b>	<b>mil. BAM</b>	<b>228.1</b>	<b>203.4</b>	<b>204.8</b>
Description		2021	Plan 2021	2020
Total income	mil. BAM	1,123.47	1,097.09	1,058.10
Income from the sale of electricity and ancil. services	mil. BAM	1,052.43	1,032.91	997.20
Other income	mil. BAM	71.04	64.17	60.80
Total expenses and costs	mil. BAM	1,109.47	1,084.00	1,047.50
Depreciation	mil. BAM	156.20	156.34	144.70
<b>Profit before tax</b>	<b>mil. BAM</b>	<b>14.00</b>	<b>13.09</b>	<b>10.54</b>
Description		2021	Plan 2021	2020
Production	GWh	6,677.1	6,654.6	6,237.9
Net distribution of EPBiH	GWh	4,454.3	4,419.3	4,263.9
Market sales	GWh	2,465.2	2,487.3	2,437.6
Number of customers (end of the year)		788,168	785,000	778,962
Number of employees (as at 31 December, for an indefinite period)		4,075	4,265	4,206



### *3. IMPLEMENTATION OF BUSINESS POLICY AND COMPANY OBJECTIVES*

## Activities of production

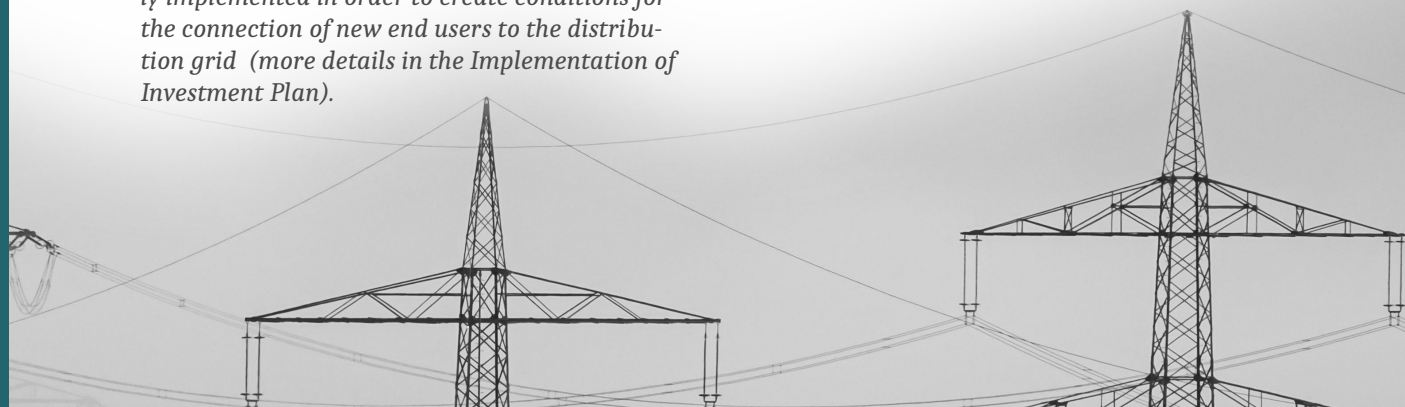
- Total electricity generation in 2021 was 6,677.1 GWh, which is 123.8 GWh or 1.89% more than the planned generation under EEB for 2021; compared to the total generation in 2020, the total electricity generation in 2021 is higher by 439.2 GWh or 7.04%;
- Total electricity generation in HPPs (including SHPPs) in 2021 was 1,729.1 GWh and it is higher by 300.5 GWh or 21.03 % compared to the planned under EEB for 2021;
- Total electricity generation in WPP "Podveležje" in 2021 was 107.2 GWh and it is higher by 7.2 GWh or 7.17 % compared to the planned under EEB for 2021;
- Total electricity generation in TPPs in 2021 was 4,840.8 GWh and it is lower by 183.9 GWh or 3.66 % compared to the planned under EEB for 2021;
- Share of electricity generation from renewable sources in the total generation in 2021 was 27.50%, of which HPPs on the Neretva participate with 24.95%, SHPPs with 0.95 %, and WPP "Podveležje" with 1.60 %;
- Share of electricity generation in TPPs in the total generation in 2021 was 72.50 %, of which TPP "Tuzla" participated with 42.88 %, and TPP "Kakanj" with 29.62 %;
- For the purpose of electricity, heat and technological steam production in thermal power plants, the total of 4,990,301 tons of coal was used, of which 3,093,512 tons of coal were used in TPP "Tuzla", and 1,896,789 tons of coal were used in TPP "Kakanj". Of the total quantity of coal used, 4,812,674 tons of coal, or 96.44%, was used in electricity generation, and 177,627 tons of coal, or 3.56%, was used in the production of thermal energy and technological steam

## Activities of distribution

- Gross distribution consumption was 4,861,7 GWh and it was 0.6% higher compared to the gross balance consumption for 2021, and 184 GWh (3.9 %) higher than in 2020;
- Distribution losses were 375.6 GWh (7.73% compared to gross consumption) and they are lower than the losses planned in 2021 (planned 7.78%); percentage of distribution losses was lower compared to the percentage for 2020 (when they were 8.01%);
- Considering the entire electricity distribution system, the system average interruption frequency index (SAIFI) per customer was about 13% lower (better) than it was the year before, while the system average interruption duration index (SAIDI) per customer was about 13% lower (better) than in 2020;
- Works on the implementation of the SCADA/DMS/OMS project and associated telecommunications at the distribution level have been completed;
- Activities to expand the system of remote monitoring and control and activities to eliminate sub-consumption continue;
- Activities in the construction and reconstruction of electricity distribution facilities are continuously implemented in order to create conditions for the connection of new end users to the distribution grid (more details in the Implementation of Investment Plan).

## Activities of supply

- Total electricity supply to end customers was 4,992 GWh (excluding power for own consumption), which is 3.72% more than in 2020;
- Decision on the application of the Decision on the implementation of measures to reduce electricity costs to households and stimulate energy efficiency was implemented;
- Implementation of a redesigned electricity and grid fee;
- Regular printing, enveloping, and delivery of bills and other accompanying documents (reminders, disconnection notices, interest sheets, IOS forms) to electricity customers via BH Post;
- collection rate was 100.3 % (excluding the balance of receivables from previous years), and 96.6 % (including the balance of receivables from previous years) observing the ratio of invoiced and total collected income in the current year;
- Regular, continuous monitoring of the implementation of decision of the FBiH Government on subsidising electricity customers, and informing the relevant minister about the number of users, period of use, and total approved and paid subsidies.





## Activities of trade

- Total electricity sold was 2.348,0 GWh, which is 14.5 GWh or 0.61% less than the planned sales volume, or 28.3 GWh or 1.19% less than the sales in 2020;
- Total income from the sale of electricity was BAM 286.28 million, which is BAM 15.57 million or 5.75% more than the planned income, and BAM 31.76 million or 12.48% more than the total income from electricity sales in 2020;
- Income in capacity from ancillary services was BAM 7.73 million, which is BAM 1.39 million or 15.27% less than the planned income on this basis, and BAM 1.0 million or 14.85% more than the total income in capacity from ancillary services in 2020;
- Total income from the balancing service of WPP "Jelovača" was BAM 3.22 million;
- Cumulative income (income from the sale of electricity, income from capacity for ancillary services, and income from the balancing service of WPP "Jelovača") was BAM 297.23 million, which is BAM 14.18 million or 5.22% more than the planned total income, or BAM 32.75 million or 13.77% more than the total income in 2020;
- Contracts for long-term sales of electricity on the market of 1,051.0 GWh, or in the total value of BAM 102.29 million (level of collection of supplied volume of electricity is 100%), have been implemented;
- Short-term sales of electricity included 821.9 GWh, or the total value of BAM 119.02 million (level of collection of supplied volume of electricity is 100%);
- Related electricity trade included 150.9 GWh, with total income of BAM 29.57 million and total costs of BAM 25.66 million, which generated earnings of BAM 3.91 million;
- Total purchase of electricity included 738.2 GWh, which is 31.8 GWh or 4.12% less than the planned volume of purchase, or 243.0 GWh or 24.77% less than the purchase in 2020;
- Total costs for the purchase of electricity were BAM 129.27 million, which is BAM 2.31 million or 1.75% less than the planned costs, and BAM 53.13 million or 69.77% more than the total costs for the purchase of electricity in 2020;
- Costs for capacity from ancillary services were BAM 0.47 million, which is BAM 0.22 million or 88.87% more than the planned costs on this basis, and BAM 0.20 million or 71.42% more than the total costs for capacity from ancillary services in 2020;
- Cumulative costs (costs of purchasing electricity and costs for capacity from ancillary services) were BAM 129.74 million, which is BAM 2.09 million or 1.58% less than the planned total costs, or BAM 53.32 million or 69.77% more than the total costs in 2020.

## Economic affairs

*In the field of economic affairs, which includes financial management (including PIU), accounting, planning, reporting and analysis, the most important activities in the reporting period, with engagement in project teams, expert teams and committees, were the following:*

- Annual statement for 2020 and all accompanying activities were completed;
- Completed tax balance for 2020;
- Completed Transfer Pricing Study for 2020;
- Prepared consolidated financial statements for 2020;
- Accounting implementation of loan agreements with mines in the Concern;
- Prepared data for information control of the Indirect Taxation Authority regarding the transfer of paid, but unjustified advances for the delivery of coal to ZD - coal mines into long-term loans;
- Accounting records of activation of WPP "Podveležje" (1st project of this type in EPBiH);
- Completed operating statement of JP Elektroprivreda BiH for 2020, semi-annual operating statement for 2021, and cash flow estimate of the Company for the period 2021-2030;
- Completed business plan of the Directorate for the three-year period 2021-2023, and coordination with other competent sectors and services from the Directorate and subsidiaries in the development of three-year plans of activities and subsidiaries; plan dynamics entered into the SAP application;
- In May, completed the revised business plan of the Company adopted at the General Meeting session held on 25 May 2021, and at the beginning of December a new revised business plan was adopted for the period 2021-2023, adopted at the General Meeting session held on 30 December 2021;
- Prepared information on the age structure of stocks as at 30 June 2021;

- Completed activities of regular annual financial reporting to FERK (for all regulated activities) for 2020;
- Completed and recorded in accounting the distribution of income from electricity and ancillary services for 2020;
- In the reporting period, term deposits of BAM 20.0 million were made, and for 2021, from interest on term deposits, income of BAM 1.22 million was generated;
- Completed financial activities related to the implementation of ongoing projects: WPP "Podveležje", SCADA/DMS/OMS, Unit 7 in TPP "Tuzla", HPP "Janjići", WPP "Vlašić" Project;
- With reference to the implementation of the Unit 7 Project in TPP "Tuzla", activities were performed to meet the obligations defined by the loan agreement with a consortium of domestic banks;
- Activities in entering into a new three-year contract for selective insurance of EPBiH property were successfully completed, the contract was signed, as well as insurance policies, which were distributed to insurance beneficiaries;
- Completed activities to provide guarantees for the Company in accordance with the concluded new framework agreement with five banks for the services of issuing bank guarantees for the needs of JP Elektroprivreda BiH – Company Directorate, prepared the Procurement Plan of the Financial Management Sector for 2022;
- Activities in coordination and preparation of tender documents "Development of the main design for HPP 'Janjići'" and "Consulting services for the development of a feasibility study for PVPP 'Podveležje' and services of implementation consultant";
- Activities in monitoring the implementation of contract: updating the feasibility study based on additional measurements by Lidar for the WPP "Vlašić" Project and bird and bat monitoring at the WPP "Podveležje" site, funded from additional KfW

grant funds;

- Application of renewable energy power plant projects for funding from grants of international financial institutions, confirmed the willingness of EBRD and GGF (Green for Growth Fund) to finance the Feasibility Study of PVPP "Gracanica", PVPP "Gornja Breza", and PVPP "White Waters" projects;
- Reporting to the relevant ministries regarding loan arrangements, as well as reporting in accordance with concluded loan agreements.

### Legal, personnel, and general affairs

- Continuous provision of legal support to the basic activities of the Company, as well as support activities;
- Activities in representation of EPBiH in proceedings before courts in BiH;
- Registration activities related to changes of the persons authorized for representation;
- Activities in drafting and analysis of normative acts;
- Participation in resolving requests of subsidiaries - coal mines;
- Participation in the activities of drafting complex and high value contracts in the Company;
- Implementation of land expropriation procedures for Unit 7 of TPP "Tuzla", SHPP on the Neretvica;
- Legal affairs related to WF "Podveležje" and other projects implemented through capital investments as well as providing other types of legal support for capital investments;
- Legal representation activities related to the Company's property abroad;
- Harmonisation of the acts of subsidiaries with the acts of the Parent Company, as well as preparation and drafting of instructions, decisions, guidelines, etc.;
- Implementation of activities related to the arbitration procedure of HPP "Vranduk";
- Participation in activities of restructuring and reorganisation of EPBiH and the Concern; Activities and tasks in human resources management;
- Participation in personnel selection procedures based on public announcements, in accordance with the Decree on the procedure of hiring in the public sector in the Federation of BiH and Decision on the selection, procedure, and criteria for selection of new employees and trainees in EPBiH;
- Participation in the drafting of general acts and drafting of quality system acts with reference to strategic management of human resources, education, employment, and personnel affairs at the level of the Company;
- Activities and tasks related to employment and exercise of employment rights, drafting of employment contracts and all other individual acts in the field of employment;
- Activities in job classification, staff development, and training of workers;
- Representation of the Company in labour disputes and other activities;
- Regular activities in transportation of employees, storage of archives and technical documentation, services to the Management, Supervisory Board, and other necessary materials for consideration and decision-making;
- Continuous activities in receiving, recording, delivering, and sending mail;
- Activities in completion of planned activities of servicing, insurance, and registration of vehicles of the Directorate;
- Continuous implementation of the process for maintenance of equipment and infrastructure;
- Continuous activities in the implementation of agreement with Elektroprijenos OP Sarajevo;
- Preparation of the technical part of tender documentation and monitoring implementation of contracts for goods and services within the competence of the OU for general affairs;
- Continuous implementation of planned activities in the procurement of DC charging station for electric vehicles at the location of the rest area Lepenica of the A1 motorway, and ten AC charging stations for electric vehicles;
- Continuous implementation of planned activities in satellite vehicle monitoring.

## Capital investments

**In 2021, activities of organisational units for capital investments referred to the construction and preparation for the construction of thermal power plants, hydropower plants, and power plants based on renewable and alternative energy sources, and included:**

- Construction of WPP "Podveležje 1";
- Execution of preparatory works for Unit 7 in TPP "Tuzla" - investor supervision;
- Development of investment-technical documentation, testing and research;
- Obtaining necessary permits and approvals and implementing procedures for expropriation of property;
- Closing financial structure;
- Preparation of tender documentation for the selection of equipment suppliers and contractors for services and works.



## Development

### Business development

- Completed preliminary draft of the new job classification, methodology of evaluation, and evaluation of EPBiH jobs, in accordance with the adopted new Rulebook on the organisation of EPBiH with focus on the organisational separation of distribution activities and adjustment to operations in the open electricity market;
- Completed study of reorganisation of EPBiH generation activities;
- Prepared a draft of the new Rulebook on the organisation of EPBiH, in accordance with the adopted Concept of the new organisation (reorganisation) of the generation activities of EPBiH;
- Completed study of technological-economic justification for the establishment of a new subsidiary for geological research, testing, design, and protection;
- Prepared the Operational plan of activities for the establishment of a new subsidiary for geological research, testing, design, and protection (adopted by the EPBiH Management), and the implementation of the Operational plan is ongoing;
- Completed "Analysis of needs for protective equipment, tools, and vehicles in the generation activity of EPBiH with a proposal of standard needs";
- Completed "Analysis of the function of human resources management in EPBiH with a proposal to improve its procedures and organisation";
- Completed Study of technical-economic justification for the establishment of a new subsidiary for the provision of maintenance and ancillary mechanisation services to ZD mines of the EPBiH Concern;
- Prepared, and adopted by the EPBiH Management, the document "Strategy and Action Plan for the implementation of strategy of the electromobility development project in EP BiH for the period 2021-2023";
- Completed five editions of the bulletin "Energy Sector News" and posted on the Intranet portal of EPBiH.

### Strategic development

#### Strategic planning documents and system activities

- Completed "Analysis of CO2 emission fee schemes with a proposal of the optimal sustainable scenario for EP BiH", final version adopted at the sessions of the Management and Supervisory Board (March 2021);
- Completed "Analysis and projections of coal needs in EPBiH until 2050 with a projection of the dynamics of mine closure", final version adopted by the Management and Supervisory Board (March 2021) + updated version of the Study - Annex 1 (December 2021);
- Participation in the development of the Indicative Production Development Plan 2022-2031 (coordination with ISO BiH); prepared the basis for the Indicative Production Development Plan 2023-2032;
- Established Energy Management System in all activities/parts of EPBiH in accordance with ISO EN 50001, under the Master Plan of Activities for 2021;
- Completed study of "Establishment of the Institute for Energy, Climate, and Environment", introductory chapters;
- Update of Technical Recommendations TP 2 and TP 3.

### Production development / RES

- Measuring wind potential and global solar radiation at several locations in the Federation of BiH, maintenance of measuring stations, data collection and processing;
- Finalisation of the construction of WPP "Podveležje", completed functional tests, commissioning, test of compliance with the Grid Code and power curve test;
- Development of the PVPP "Podveležje" Preliminary Design;
- Development and preparatory activities for the

implementation of WPP "Vlašić" project; continued measurement of wind parameters at the Vlašić location, systematisation of the previous measurement campaign, activities in innovating the feasibility study;

- Development of the WPP "Bitovnja" project and preparation of accompanying development and investment documentation;
- Preparation and revision of the Feasibility Study for the construction of photovoltaic power plants on the free surfaces of mines of EPBiH Concern and slag and ash dumps of TPP EPBiH (PVPP "Gračanica", PVPP "Kreka", PVPP "Divkovići", PVPP "Kakanj Bijeke Vode", PVPP "Gornja Breza");
- Development of a preliminary study with a master plan of activities. Possibilities of planting energy crops/biomass on the land of EPBiH Concern mines;
- Implementation of the Pilot project of experimental plantations of fast-growing energy culture Swedish willow at the mines RU "Kreka" and RMU "Breza" (2 x 1 ha), in cooperation with E3 International;
- Drafting the Development Programme for the use of SRF/RDF alternative fuels in EPBiH: Possibility of using SRF/RDF alternative fuels in EPBiH thermal power plants within the framework of sustainable economic and technological parameters and environmental regulatory conditions;
- Development of a logistic study on procurement, transport, quality, and long-term supply of SRF/RDF - Lukavac Cement Factory for the needs of EPBiH;
- Development of Feasibility Study for investments in PVPP for own needs for the Lukavac Cement Factory;
- Implementation plan for the introduction of biofuels/alternative fuels of EPBiH (I. SRF/RDF, II. Waste wood biomass, III. Fast-growing biomass);
- Development of baseline study of the application of hydrogen in energy;
- Preparation of the pilot project "Tests of coal combustion with waste wood biomass in Unit 6 of TPP "Tuzla" and Unit 5 of TPP "Kakanj". The biomass procurement process has been completed. Test plants have been initiated in TPP "Tuzla"; complet-

ed preliminary test of the mill-burner line on the boiler of Unit 6 of TPP "Tuzla".

### Development of electromobility

- Implementation of the Pilot Project "Introduction of electric vehicle charging service in EPBiH through the implementation of CPMS software system";
- Launched Pilot Project "Integration on a commercial basis of charging stations for electric vehicles owned by third parties in the CPMS monitoring and control system";
- Within the Pilot Project "DC charging station for electric vehicles on the A1 motorway - Lepenica rest area", completed technical acceptance of the charging station; issuance of a use permit is expected, which will mean the official project completion;
- Within the Pilot project "Construction of infrastructure of public AC charging stations for electric vehicles in Bosnia and Herzegovina" (10 AC charging stations), completed development of conceptual designs, obtained urban planning approvals, launched a tender;
- Participation in the work of the Association for Electromobility within the FBiH Chamber of Commerce.

### International projects, cooperation

- Implementation of activities within the Horizon 2020 project Upgrade DH (Improving the efficiency of existing district heating systems in Europe, with the integration of RES modules; Case study Tuzla DHS) - according to the implementation plan for 2021; project successfully completed;
- Implementation of activities within the Horizon 2020 project BIOFIT (Retrofit of the European biofuels industry; Case study 0.15 biomass co-firing in Unit 6 of TPP "Tuzla" and Case study of full repowering of Unit 5 of TPP "Kakanj");
- Implementation of activities within the Erasmus +



project ELEMEND (Cooperation of universities and industry in creating curricula with the aim of improving the employment of graduates) - according to the implementation plan for 2021;

- Implementation of activities within the Erasmus + project SUCCESS (Cooperation between universities and industry in order to enable better competitiveness of universities in the Western Balkans with curricula in electrical engineering in the field of smart technologies, micro grids, and electricity markets) - according to the implementation plan for 2021;
- Participation in the preparation of the Horizon Europe application of the BringHeat project;
- Participation in the preparation of the Horizon Europe application of the project "Predictive maintenance with digital twin".

## Quality system

- Continuous activities - supervision, maintenance, and improvement of the management system in accordance with ISO 9001:2015 and ISO 45001:2018 in the Company Directorate;
- Completed supervisory audit of the integrated management system in the Company Directorate by the authorised certification company and confirmed that the management system applied in the organisation complies with the requirements of ISO 9001:2015 and ISO 45001:2018 standards (certificates MS 2004119.00 valid until 14 March 2022 and MS 2004219.00 valid until 8 April 2022);
- Continuous contract monitoring activities (successive delivery and updating of international and European standards: ISO, IEC, IEE, DIN, EN, etc. and BiH standards (BAS) by the Standardisation Institute of BiH for EPBiH);
- Activities of introduction and implementation of energy management system in accordance with the requirements of ISO 50001:2018 and integration with the applied management systems (in accordance with ISO 9001:2015 and ISO 45001:2018) in line with the Decision on innovating the structure and functioning of efficiency management system in JP Elektroprivreda BiH d.d. - Sarajevo and the Decision on construction and implementation of energy efficiency management system in accordance with the requirements of ISO 50001:2018 and integration with the existing management systems in JP Elektroprivreda BiH d.d. - Sarajevo, and the Action Plan for documenting and controlling the energy management system in accordance with ISO 5001:2018;
- Preparation and implementation of internal audit in accordance with the requirements of ISO 90001:2015, ISO 450001:2018 and 50001:2018 in the Company Directorate.

## ICT

**In addition to the specified ICT projects implemented in 2021, and described in detail in section Implementation of Investment Plan, in information and communication technologies operational support was provided for 58 business services, whose users are various activities within EPBiH. The following can be particularly emphasised:**

- Providing operational support for business services defined by the Catalogue of Business ICT Services, whose users are various activities within EPBiH;
- Providing ICT infrastructure and service base for the introduction of new services, in order to support successful management, administration and maintenance of the electric power system, and efficient implementation of all operating processes and planning the development of electric power system;
- Building ICT infrastructure in accordance with the legislation and regulations of the Communications Regulatory Agency, and the security policy of the ICT system;
- Ensuring the information integrity in the ICT system (single entry of information and its multiple use) through the consolidation of technical and operating information system;
- Continuous improvement of the service management system;
- Active participation in the implementation of development and capital projects.

## Security and protection

- Completed contracted works related to the provision of physical and technical protection services in EPBiH;
- Completed contracted works in designing and provision of technical protection system services for the new facility of TS "Podveležje";
- Authorized company performed testing of the initial fire extinguishing apparatus, correctness and functioning built-in system of active fire protection and integrity and functionality of the hydrant network, as well as testing and functioning of the fire alarm system;
- Within fire protection, continuous cooperation was carried out with persons who perform these tasks in subsidiaries of the Company, and professional assistance was also provided;
- Implementation of the service "Development of study, threat and risk assessment, updating of protection plans and rescue and fire protection in EPBiH" is underway;
- In accordance with the obligations provided for by the Law on Agencies and Internal Security Services in FBiH, training, testing of physical fitness and shooting with firearms practice for the members of the Internal Protection Service of EPBiH were carried out in the Company Directorate;
- Activities in the implementation of the adopted Occupational Health and Safety Management System OHSAS 18001:2007 were continuously performed;
- In accordance with the Rulebook on Occupational Safety and Collective Agreement, a regular medical examination of employees of the Directorate and periodic medical examinations of workers in jobs with special working conditions were completed.

## Mining

**Activities related to mining in 2021 were very intensive and complex, and they can be summarised as follows:**

- Completed analyses of ZD coal mine operations, including production indicators (technical-technological parameters and organisation), financial position with special emphasis on overdue arrears, and identification of causes of poor operations of most ZD mines in the past period;
- Support and active participation in the implementation of measures to overcome the difficult technical-technological, organisational, and financial situation in ZD coal mines;
- Participation in the development of the 'Analysis and projections of coal needs in EPBiH until 2050 with a projection of the dynamics of suspension of mine pits/plants';
- Participation and coordination in the activities of forming new ZDs as part of the restructuring process;
- Preparation of acts related to the implementation of financial support to mines, and direct activities in the implementation of decisions of the general meeting from May 2021 on the approval of loans;
- Participation in the development and harmonisation of acts of ZD mines to improve their operations;
- Analyses of organisational solutions and IT infrastructure;
- Support in the implementation of decisions on the recapitalisation of ZD mines (more in section Implementation of Investment Plan).

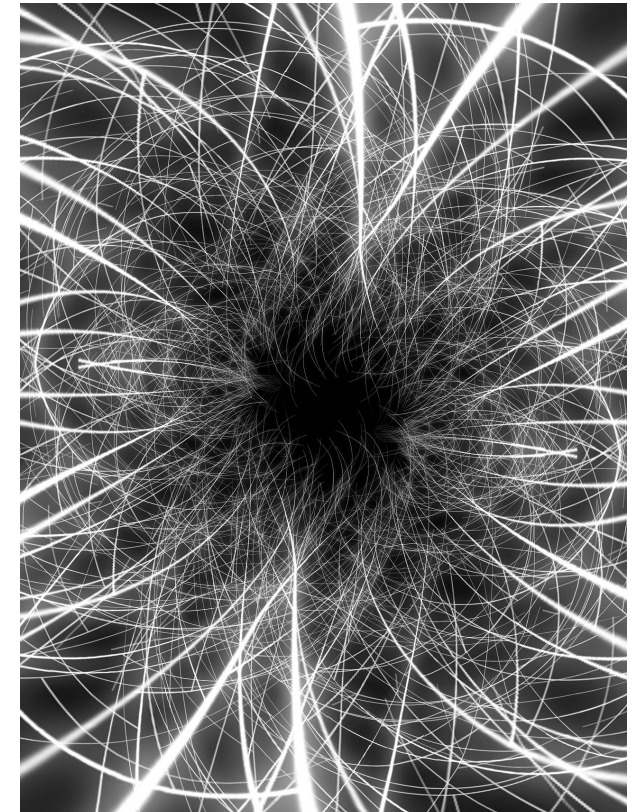
**Measures to overcome the difficult technical-technological, organisational, and financial situation in ZD coal mines have been taken in multiple**

### directions:

- Implementation of the ZD coal mine restructuring programme,
- Intensified investments through recapitalisation decisions,
- Financial support by providing loans that reschedule the existing obligations of ZD mines towards EPBiH and create preconditions to resolve the surplus of non-production workers in ZD mines.

### Activities of Service for other subsidiaries and affiliates and assets

- Continuous monitoring of non-electricity assets in terms of lease, sale, or purchase;
- Activities related to the allocation of apartments in EPBiH in accordance with the Rulebook on the return, allocation, and sale of apartments;
- Continuous activities with the Privatisation Agency to regulate the status and repossession of property in the Republic of Croatia, which is entered into the Central Register of Liabilities Sub-Balance;
- Development of terms of reference for the development of preliminary and main design of the operating facility PJD Ključ with auxiliary facilities and continued activities to monitor the implementation of preliminary and main design of the PJD Ključ facility; completed the main design and initiated activities to obtain municipal approvals;
- Examined condition of the facility - resort in Sutivan, island of Brač, Republic of Croatia, in favour of SEER, Trade Union "TE Tuzla", in order to develop a specification of necessary investments for the purchase of equipment, inventory, and other materials for the period of 5 (five) years;
- Continuous monitoring and reporting on the implementation of activities of subsidiaries (Eldis Tehnika d.o.o. Sarajevo, Hotel "ELBIH" d.d. Ma-



- karska, TTUenergetik d.o.o. Tuzla, Iskraemeco d.o.o. Sarajevo, and ETI Sarajevo d.o.o. Sarajevo), through business plans and annual business reports; quarterly reporting on the operations of subsidiaries and affiliates;
- Participation in activities for the establishment of subsidiary GEOLP d.o.o. Kakanj - drafting of general acts.

## Implementation of environmental policy and protection plans

### TPP "Tuzla":

- Continued initiated activities in the process to obtain the environmental permit for desulphurisation of flue gases of Unit 5 and Unit 6;
- Continued initiated activities in the process to obtain the environmental permit for closing the landfills of Plana and Divkovići process products - FBiH Ministry of Environment and Tourism issued the decision on issuing an environmental permit for closing and remediation of slag and ash landfills "Plane", "Divkovići I", and "Divkovići II" in an environmentally acceptable manner, with specific measures to reduce the impact on the environment, human health, and safety;
- Completed activities to obtain an exploitation permit for the landfill for the Jezero process products and closed system of return technological waters in the TPP;
- Continuous maintenance of measuring devices of the system for monitoring emission of pollutants into the air in the chimneys of Units 3, 4, 5, and 6 – maintenance is performed continuously for Units 4, 5, and 6, and for Unit 3 maintenance is suspended until the completion of works in order to ensure safe access to the pollutant measuring equipment in Unit 3;
- Completed activities in the implementation of Action Plan of 17 October 2016 under the conditions from the renewed environmental permit of 30 June 2016, with a validity period until 13 July 2021; documentation submitted to the FBiH Ministry of Environment and Tourism to obtain the environmental permit for TPP "Tuzla" within the legal deadline;
- Activities are underway under the conditions from the water permit no. UP-I/25-3-40-432-04/17 of 6 September 2017, valid until 6 September 2022;
- After the selection of a consultant, activities for the preparation of documentation and construc-

tion of flue gas desulphurisation plant in Unit 6 continued;

- Completed disposal of hazardous waste; measuring of ambient noise and radioactivity;
- Continued use of the closed cycle of return wastewater from the landfill of the Jezero process products;
- Completed a supervisory audit of the integrated business quality and environmental management system in accordance with the requirements of ISO 9001:2015 and ISO 14001:2015 standards;
- EBS measuring;
- Measuring content of suspended particles (PM10) in the air at a maximum distance of 20 m from the edges of the landfill "Divkovići" and the landfill "Jezero" towards populated areas.

### TPP "Kakanj":

- Initiated procurement procedure for the construction of a flue gas desulphurisation plant for Units 6 and 7;
- Completed disposal of hazardous waste by an authorised operator;
- Completed noise emission measurement;
- Completed measurement of radioactivity levels in the area of the thermal power plant and at the slag and ash landfill;
- Conducted a supervisory audit of the integrated business quality and environmental management system in accordance with the requirements of ISO 9001:2015 and ISO 14001:2015 standards;
- Implemented activities for the extension of the Slapnički Potok collector;
- Completed and submitted in accordance with the legal deadlines the application to obtain a new environmental permit in the FBiH Ministry of Environment and Tourism;
- Completed calibration of the automatic air emission monitoring system;
- Completed replacement of the flue gas flow meter on a 300 m chimney;
- Performed periodic and continuous measuring of the quality of discharged waters;

- Performed regular selective collection and removal of waste material from the TPP area;
- Performed regular cleaning, removal, disposal, and management of sludge from water treatment plants;
- Completed procurement of equipment for remediation of environmental incidents;
- Regularly and in accordance with the legal deadlines the following fees were paid:
  - Utility fee,
  - Water contributions,
  - Air emission charges;
- Regular reports to the competent state authorities on impacts of TPPs on the environment, and on the resulting environmental aspects in terms of:
  - Air emissions,
  - Discharges into water,
  - Production and management of generated waste.

### HPPs on the Neretva:

- Completed the supervisory audit of ISU in the subsidiary in mid-December 2021, in accordance with the requirements of ISO 9001:2015 standard; ISO 14001:2015 by a representative of the authorised certification body "ICS - Institute for System Certification ICS" d.o.o. Sarajevo;
- Completed testing of chemical, physical, and biological properties of wastewater (wastewater monitoring), twice a year in accordance with the environmental permits of HPP "Jablanica", HPP "Grabovica", and HPP "Salakovac";
- Completed testing of emission of pollutants into the air from the boiler room;
- Completed procurement of materials for absorption (absorbent wipes for oil and absorbents);
- Hazardous waste is successively disposed of by the authorised operator "Kemeko-BH" Lukavac;
- Continuous disposal of floating waste from the accumulations of HPP "Jablanica", HPP "Grabovica", and HPP "Salakovac";
- Completed procurement of non-indigenous species of juvenile fish/fish to restock the Neretva river

basin for 2021 (lake trout, California trout, carp), and there was no procurement of Arctic charr and eel (no bidder), and procurement of indigenous species of juvenile fish/fish (river trout, marble trout, and softmouth trout);

- Signed agreements in 2021 with sport fishermen associations U.G. "OSR Konjic" Konjic, USR "Glavatica" Jablanica, and SRTD "Ramske vode" Prozor-Rama on the settlement of arrears referred to in Article 35 of the Law on Inland Fishing for 2019 and 2020.

### ED Bihać:

- Continued initiated activities in the construction of a temporary waste disposal storage in Bosanski Petrovac after obtaining the main design;
- Continuous contracting of the sale of secondary raw materials and waste materials, as well as disposal of hazardous waste and its delivery to authorised operators;
- Completed procurement of resources for environmental protection (absorbents) for the electricity generation activities;
- Implemented activities and measures for water and environmental protection ordered under valid environmental and water permits;
- In accordance with the concluded agreements, the rivers of Una and Krušnica were restocked;
- Completed terms of reference for rehabilitation and construction of oil pits in TS 35/10 kV. The process to procure the service of drafting project documentation is in progress.

### ED Mostar:

- In accordance with the legislation on water protection, continuous monitoring of the functioning of oil pits in built TS 35/10 kV and 20(10)/04 kV and, if necessary, interventions there;
- All new power facilities (substations 10(20)/0.4 kV), built in 2021, were constructed with hermetically sealed oil transformers, and under each transformer in cable substations the foundations

were designed in a way to provide collection of the entire quantity of oil from the power transformer, so that the technical design meets the standards from the aspect of environmental protection.

### ED Sarajevo:

- Azići temporary storage facility in operation (continuous reporting on the fulfilment of requirements from the waste management permit);
- Completed measuring of ambient ionizing radiation in the temporary storage facility Azići (in accordance with the waste management permit);
- Completed reconstruction of the temporary waste storage facility in PJD Goražde and activities initiated to obtain an exploitation permit and put the storage into operation;
- Continuous contracting of hazardous waste disposal and waste sales services;
- Continuous procurement of environmental protection products (absorbents); in 2021, the subsidiary completed a centralised procurement;
- Continuous annual restocking of the river Osanica in Goražde;
- Continuous handover of discarded electrical and electronic equipment to the operator for waste electrical and electronic equipment management system for processing and disposal; in 2021, the handover was carried out on three occasions;
- In 2021, the implementation of the UNDP project 'Environmentally friendly management of persistent organic pollutants (POPs) in the industrial and waste management sector in Bosnia and Herzegovina' began; as part of this project (funded by the Government of Sweden), the subsidiary will dispose of dismantled capacitors suspected of being charged with PCBs;
- Measuring the flow on the river Osanica for fifteen (15) months. The measuring is performed in accordance with the contract for the preparation of the Study for determining the environmentally acceptable flow (EPP) on the river Osanica in order to obtain a new water permit for sHPP "Osanica".

### ED Tuzla:

- Continuously contracted service for hazardous waste disposal and sale of secondary raw materials and waste materials, and waste is handed over to authorised operators;
- Completed water quality testing at the outlet of two separators in the operating circuit at the location of Mitra T. Uče do no. 5, Tuzla;
- Completed restocking of the hydro-accumulation "Sniježnica";
- As needed, necessary containers/bins for selective waste collection and disposal are procured; in 2021, an additional container for waste toners collecting was procured;
- Performed the first supervisory audit in accordance with the requirements of ISO 9001:2015 standard; and ISO 14001:2015, 14 June 2021;
- Announced tender for the rehabilitation of landslide on the sides of the dam "Sniježnica", but the contract was not concluded, and the funds are transferred to 2022.

### ED Zenica:

- Prepared and submitted documentation (updated as of 7 September 2021) for the public announcement for collection of bids for the sale of secondary raw materials and waste materials collected in the subsidiary of ED Zenica;
- Electronic waste was handed over to the operator of system for collection of electrical and electronic waste (C.I.B.O.S. d.o.o. Sarajevo, Zenica subsidiary), with the issuance of an accompanying sheet for electrical and electronic waste;
- Attendance at the seminar 'Environmental Protection and Waste Management' (new Law on Environmental Protection, rulebook and regulations) organised by Ceteor d.o.o. Sarajevo.





## 4. ELECTRIC POWER BALANCE

*The total electricity generation was **6,677.1 GWh**, which is **123.8 GWh** or **1.9%** more than the balance generation, and **439.2 GWh** or **7.0%** more than the generation in 2020.*

## The operation of the electric power system of EPBiH in 2021 is characterised by:

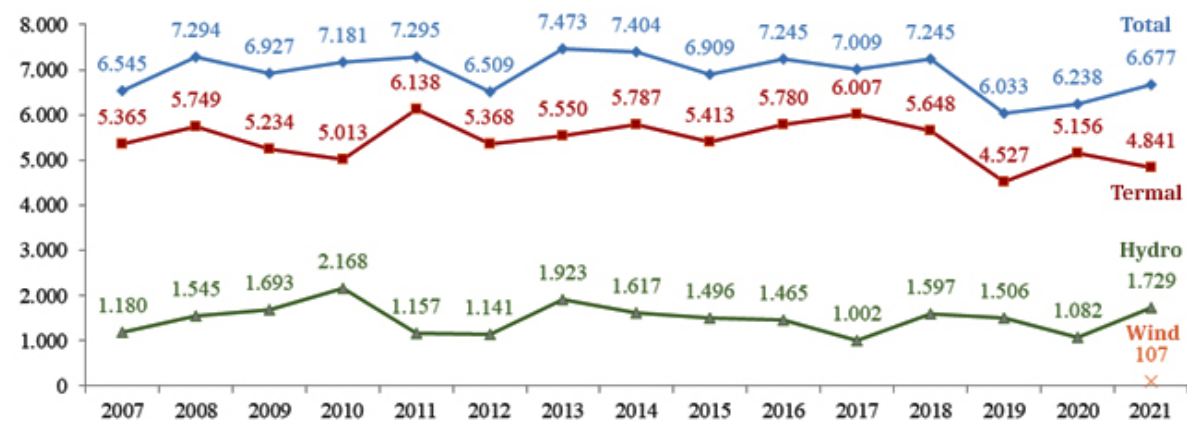
- Total electricity generation 1.9% higher than balance under EEB, and 7.0% higher than the generation in 2020;
- Total natural water inflows 622.5 GWh or 31.5% higher than balance, and 1,034.4 GWh or 66.1% higher than the inflows in 2020;
- Total coal purchase 6.7% lower than the balance volume, and 8.2% lower than the purchase in 2020;
- Total electricity consumption 148.3 GWh or 2.8% higher than balance, and 183.9 GWh or 3.5% higher than the total consumption in 2020;
- Market sales of electricity (including sale of transmission losses, and excluding sale or purchase (where volume under EEB was not planned) is higher than the balance, or realised market sales from 2020.

In terms of quantity and dynamics, electricity deliveries in 2021:

- Fully met all the needs of end customers supplied by EPBiH in the volume of 5,004.3 GWh;
- Fulfilled contractual obligations for the sale of electricity in the volume of 1,872.8 GWh;
- Total sales of electricity in related trade in the volume of 150.9 GWh;
- Total sales from the coverage of transmission losses in the volume of 109.8 GWh;
- Sales from business and technical cooperation agreements in the volume of 166.6 GWh;
- Sales of electricity on the basis of imbalance and regulation in the volume of 47.9 GWh.

Generation (GWh)	2014	2015	2016	2017	2018	2019	2020	2021
HPP	1.617	1.496	1.465	1.002	1.597	1.506	1.082	1.729
TPP	5.787	5.413	5.780	6.007	5.648	4.527	5.156	4.841
WPP								107
<b>Total</b>	<b>7.404</b>	<b>6.909</b>	<b>7.245</b>	<b>7.009</b>	<b>7.245</b>	<b>6.034</b>	<b>6.238</b>	<b>6.677</b>

### TREND – Electricity Generation (GWh)



Hydropower plants ("Jablanica", "Grabovica", "Salakovac" and small hydropower plants owned by EPBiH) generated 1,729.1 GWh, which is 300.5 GWh or 21.0% more than the balance, and 647.0 GWh or 59.8% more than the generation in 2020.

Thermal power plants "Tuzla" and "Kakanj" generated 4,840.8 GWh, which is 183.9 GWh or 3.7% less than the balance, and 315.0 GWh or 6.1% less than the TPP generation in 2020. At TPP "Tuzla", the generation was below the balance with the percentage of 95.4%, and at TPP "Kakanj" that percentage was 97.8%. The overall electricity situation was conditioned by total coal purchases, electricity prices on the market, as well as hydrological conditions.

Generation (%)	2021	Balance 2021	2020	2019	2018	2017	2016	2015	2014
Hydropower plants	25.9	21.8	17.3	25.0	22.0	14.3	20.2	21.7	21.8
Thermal power plants	72.5	76.7	82.7	75.0	78.0	85.7	79.8	78.3	78.2
Wind power plants	1.6	1.5							

Of the total generation for 2021, 72.5% refers to the generation of thermal power plants, 25.9% to the generation of hydropower plants, and 1.6% refers to the generation of wind power plants, which, in addition to two traditional sources, also participate in the mix of electricity generation as of this year. This is a more favourable hydro-thermal ratio compared to the balance and the previous few years, where wind power plants also contributed to an even more favourable ratio.

## Consumption

Total electricity consumption includes gross distribution consumption (excluding net consumption of other suppliers) and consumption of direct consumers. The total electricity consumption was 5,379.9 GWh, which is 148.3 GWh or 2.8% more than the balance, and 183.9 GWh or 3.5% more than the consumption in 2020.

Total consumption includes:

- Gross distribution consumption (excluding net consumption of other suppliers) of 4,861.7 GWh
- Consumption of direct consumers (end customers at 110 kV voltage) of 549.9 GWh (0.3% more than the balance).

The total gross distribution consumption includes net distribution consumption of EPBiH customers of 4,454.3 GWh, net distribution consumption of customers of other suppliers of 31.7 GWh, and distribution losses of 375.6 GWh. The percentage of distribution losses in relation to gross distribution consumption is 7.73%, which is better than the balance percentage.



From the electric power system of EPBiH, 1,297.2 GWh (sale and delivery of 2,479.3 GWh, purchase and receipt of 1,182.2 GWh) was delivered in the balance.

The total volume of market sales was 2,348.0 GWh, which is 130.2 GWh or 5.9% more than the balance under EEB, and 28.4 GWh or 1.2% less than in 2020.

In 2021, the volume of purchased electricity was 1,165.7 GWh.

## Generation of by-products

In addition to electricity, the generation of by-products in thermal power plants was as follows:

- Thermal energy and technological steam, total 125.8 GWh in TPP "Tuzla",
- thermal energy of 23.9 GWh in TPP "Kakanj".

Total purchase of coal for thermal power plants was 4,676.5 thousand tonnes, which is 335.5 thousand tonnes or 6.7% less than the balance volume. Compared to 2020, the total purchased quantities of coal were 419.1 thousand tonnes or za 8.2% lower.

The total stocks at the depots of thermal power plants at the end of 2021 were 119.3 thousand tonnes, which is 307.8 thousand tonnes less than the balance.

The total calorific value of the consumed coal was 11,822 kJ/kg, which is 682 kJ/kg or 5.5% lower than the balance.

## ELECTRIC POWER BALANCE FOR 2021 (Summary)

BALANCE ELEMENTS	Realisation	Balance	Realisation	Compared to Balance 2021	Compared to 2020
	2021 GWh	2021 GWh	2020 GWh	change %	change %
<b>1. GENERATION</b>	<b>6,677.1</b>	<b>6,553.3</b>	<b>6,237.9</b>	<b>1.9</b>	<b>7.0</b>
Hydropower plants	1,729.1	1,428.6	1,082.1	21.0	59.8
- HPPs on the Neretva	1,665.5	1,352.2	1,024.1	23.2	62.6
- small HPPs	63.6	76.4	58.0	-16.8	9.6
Thermal power plants	4,840.8	5,024.8	5,155.8	-3.7	-6.1
- TPP "Tuzla"	2,862.9	3,001.5	3,124.2	-4.6	-8.4
- TPP "Kakanj"	1,977.9	2,023.3	2,031.6	-2.2	-2.6
Wind power plants	107.2	100.0	-	7.2	-
<b>2. RECEPTION - purchase and correction</b>	<b>1,182.2</b>	<b>1,072.4</b>	<b>1,403.3</b>	<b>10.2</b>	<b>-15.8</b>
<b>3. TOTAL AVAILABLE (1+2)</b>	<b>7,859.1</b>	<b>7,625.8</b>	<b>7,641.2</b>	<b>3.1</b>	<b>2.9</b>
<b>4. CONSUMPTION</b>	<b>5,379.9</b>	<b>5,231.6</b>	<b>5,196.0</b>	<b>2.8</b>	<b>3.5</b>
Gross distribution consumption	4,861.7	4,834.6	4,677.6	0.6	3.9
Direct consumers	549.9	547.6	560.6	0.4	-1.9
<b>5. DELIVERY - sales and correction</b>	<b>2,479.3</b>	<b>2,394.1</b>	<b>2,445.2</b>	<b>3.6</b>	<b>1.4</b>
<b>6. TOTAL NEEDS (4+5)</b>	<b>7,859.1</b>	<b>7,625.7</b>	<b>7,641.2</b>	<b>3.1</b>	<b>2.9</b>



5. IMPLEMENTATION  
OF FINANCIAL PLAN

TOTAL INCOME In thousand BAM	plan			index	index
	2021	2021	2020	21/pl	21/20
	1	2	3	4	5
<b>1. Income from el. prod. and ancillary services</b>	<b>1.052.426</b>	<b>1.032.914</b>	<b>997.246</b>	<b>101,9</b>	<b>105,5</b>
- income from sales to end customers of EP BiH	739.385	733.962	726.786	100,7	101,7
- customers in 110 kV	61.328	61.650	68.059	99,5	90,1
- customers in 35 kV *	35.797	35.972	36.262	99,5	98,7
- customers in 10 kV *	128.629	126.271	126.759	101,9	101,5
- customers in 0,4 kV households	322.641	318.791	318.423	101,2	101,3
- customers in 0,4 kV * other consumption	174.596	175.355	161.855	99,6	107,9
- customers in 0,4 kV Public lighting	15.978	15.487	15.025	103,2	106,3
- unauthorised consumption (all voltages)	417	436	403	95,7	103,4
- long-term and short-term sales in/outside BiH	234.415	218.916	186.117	107,1	126,0
- income from UPTS (energy+ grid fee)	17.938	17.648	16.696	101,6	107,4
- income from sales or purchase ( related trade)	29.567	29.707	52.005	99,5	56,9
- income od sales from renewable sources	13.152	14.007	6.739	93,9	195,2
- income from anc. serv. including power related to PU	17.969	18.673	8.903	96,2	201,8
<b>2. Income from sales of techn.steam and therm.ener.</b>	<b>15.527</b>	<b>15.483</b>	<b>14.522</b>	<b>100,3</b>	<b>106,9</b>
-income from technological steam	3.539	3.518	3.049	100,6	116,1
- income from thermal energy	10.297	10.396	9.815	99,1	104,9
- income from sale of other by-products	1.690	1.569	1.658	107,8	102,0
<b>3. Income from sales of materials and services</b>	<b>30.483</b>	<b>27.903</b>	<b>25.510</b>	<b>109,2</b>	<b>119,5</b>
- income from connection fees	21.473	19.867	17.788	108,1	120,7
- other income from sales of materials and services	9.011	8.036	7.722	112,1	116,7
<b>4. Income from financing</b>	<b>6.553</b>	<b>5.877</b>	<b>6.060</b>	<b>111,5</b>	<b>108,1</b>
<b>5. Other income</b>	<b>18.482</b>	<b>14.911</b>	<b>14.749</b>	<b>123,9</b>	<b>125,3</b>
<b>TOTAL (1 through 5)</b>	<b>1.123.471</b>	<b>1.097.088</b>	<b>1.058.087</b>	<b>102,4</b>	<b>106,2</b>

\* including the distribution network of end-customers of other suppliers and own consumption which is taken over from 10kV and 0.4kV.

<b>6. Material for electricity production</b>	<b>304.354</b>	<b>308.020</b>	<b>331.762</b>	98,8	91,7
<b>7. Maintenance material</b>	<b>9.958</b>	<b>9.983</b>	<b>9.047</b>	99,8	110,1
<b>8. Other material costs (electricity consumption, PP equipment, fuel, office supplies)</b>	<b>5.431</b>	<b>5.427</b>	<b>5.353</b>	100,1	101,5
<b>9. Coal transportation costs</b>	<b>20.809</b>	<b>22.359</b>	<b>24.248</b>	93,1	85,8
<b>10. Maintenance services</b>	<b>17.619</b>	<b>18.728</b>	<b>17.459</b>	94,1	100,9
<b>11. Costs of electricity procurement and ancillary services</b>	<b>200.704</b>	<b>200.024</b>	<b>146.692</b>	100,3	136,8
<b>12. Insurance premiums</b>	<b>2.078</b>	<b>2.532</b>	<b>1.830</b>	82,1	113,6
<b>13. Other costs of services</b>	<b>13.869</b>	<b>15.130</b>	<b>11.394</b>	91,7	121,7
<b>14. Depreciation costs</b>	<b>156.202</b>	<b>156.341</b>	<b>144.650</b>	99,9	108,0
<b>15. Costs of grid fees and fees for ISO</b>	<b>53.631</b>	<b>53.158</b>	<b>51.742</b>	100,9	103,7
<b>16. Salaries and wages</b>	<b>148.617</b>	<b>149.800</b>	<b>149.547</b>	99,2	99,4
<b>17. Other labour costs</b>	<b>24.763</b>	<b>24.998</b>	<b>24.301</b>	99,1	101,9
<b>18. Water management fees</b>	<b>30.185</b>	<b>28.031</b>	<b>19.032</b>	107,7	158,6
<b>19. Miscellaneous duties, fees and membership fees</b>	<b>19.494</b>	<b>19.645</b>	<b>20.195</b>	99,2	96,5
<b>20. Other operating expenses</b>	<b>7.436</b>	<b>8.233</b>	<b>7.034</b>	90,3	105,7
<b>21. Financial costs and expenses</b>	<b>4.783</b>	<b>5.120</b>	<b>3.540</b>	93,4	135,1
<b>22. Other expenses (write-offs, cost impairment losses from previous years)</b>	<b>78.379</b>	<b>50.209</b>	<b>67.059</b>	156,1	116,9
<b>23. Expenses of provisions (litigation, dismantling, actuarial reserve...)</b>	<b>11.156</b>	<b>6.258</b>	<b>12.662</b>	178,3	88,1
<b>TOTAL COSTS AND EXPENSES (6 through 23)</b>	<b>1.109.469</b>	<b>1.083.996</b>	<b>1.047.546</b>	<b>102,3</b>	<b>105,9</b>
<b>PROFIT BEFORE TAX</b>	<b>14.001</b>	<b>13.092</b>	<b>10.542</b>	<b>106,9</b>	<b>132,8</b>
<b>NET PROFIT FOR THE PERIOD</b>	<b>12.325</b>	<b>10.824</b>	<b>7.249</b>	<b>113,9</b>	<b>170,0</b>

# Income

*In 2021, EPBiH continued its positive, liquid, and stable operations, with regular settlement of trade payables and liabilities to government authorities and institutions, employees and creditors.*

*The total income of EPBiH for 2021 was BAM 1,123.47 million and is higher than planned by BAM 23.38 or 2.4%, and by BAM 65.38 million or 6.2% higher than the income in 2020.*

## Income from sales of electricity and ancillary services

*In the structure of total generated income, the largest segment is income from the sale of electricity and ancillary services of BAM 1,052.43 million, which is 93.7% of the total Company income for 2021.*

*This income refers to income from:*

- *Sales to end customers of EPBiH of BAM 739.39 million,*
- *Sales of energy from renewable sources of BAM 13.15 million,*
- *Sales under the Agreement on PTS (energy and grid fee) of BAM 17.94 million,*
- *Long-term and short-term sales in/outside BiH of BAM 234.41 million,*
- *Sales and purchases (connected trade) of BAM 29.57 million, and*
- *Ancillary services (energy, capacity, and balancing services) of BAM 17.97 million*

## Income from sale of electricity to end customers

*Amounts, shares, and indicators, observed by distribution subsidiaries, with reference to the generation of income from end customers in the distribution grid (data do not include income from unauthorised consumption, cut-offs, or income from grid fees to customers of other suppliers):*

<i>Subsidiary / Indicators</i>	<i>ED Bihać</i>	<i>ED Mostar</i>	<i>ED Sarajevo</i>	<i>ED Tuzla</i>	<i>ED Zenica</i>	<i>Total</i>
<i>Income (million BAM)</i>	<i>73,83</i>	<i>37,91</i>	<i>213,17</i>	<i>186,48</i>	<i>164,78</i>	<i>676,63</i>
<i>Share of income distr. cust. (%)</i>	<i>10,9</i>	<i>5,6</i>	<i>31,5</i>	<i>27,6</i>	<i>24,4</i>	<i>100,0</i>
<i>Sold volume (GWh)</i>	<i>473,4</i>	<i>245,3</i>	<i>1.387,2</i>	<i>1.265,5</i>	<i>1.079,5</i>	<i>4.454,3</i>
<i>Average price (F/kWh)</i>	<i>15,60</i>	<i>15,46</i>	<i>15,37</i>	<i>14,74</i>	<i>15,26</i>	<i>15,19</i>



# Overview of the structure of sales to end customers broken down to energy and grid fee

(income and average price include the segment related to the tariff element of Measuring point (MP)).

SALES	Real. 2021.			Real. 2020.			Real. 2019.			Real. 2018.			Real. 2017.			Real. 2016.			Real. 2015.		
STRUCTURE	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income
ENERGY	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM
<i>End customers</i>																					
- customers in 110 kV	549,9	9,66	53,1	560,6	10,64	59,6	493,3	10,14	50,0	464,3	9,49	44,1	485,3	8,20	39,8	458,0	8,62	39,5	449,6	9,05	40,7
- customers in 35 kV	299,6	9,56	28,7	287,7	10,18	29,3	296,6	9,83	29,1	303,9	9,61	29,2	286,7	8,71	25,0	274,8	8,77	24,1	274,5	8,86	24,3
- customers in 10 kV	922,8	10,44	96,4	851,4	11,29	96,2	887,1	10,90	96,7	860,0	10,49	90,2	830,1	9,61	79,7	790,4	10,65	84,2	827,4	11,29	93,4
- households	2.224,8	7,41	164,8	2.189,5	7,43	162,6	2.143,1	7,44	159,5	2.110,7	7,46	157,5	2.141,8	7,44	159,4	2.132,4	7,44	158,7	2.121,2	7,40	156,9
- others i0,4 kV	924,2	11,05	102,1	852,5	11,11	94,7	904,5	11,03	99,7	893,7	10,58	94,6	885,0	10,50	93,0	856,2	10,88	93,1	829,5	11,07	91,8
- public lighting	82,9	11,43	9,5	82,9	10,29	8,5	83,2	10,11	8,4	81,9	9,08	7,4	81,2	7,46	6,1	80,4	7,44	6,0	77,4	8,62	6,7
<b>Total end customers (SNB)</b>	<b>5.004,3</b>	<b>9,08</b>	<b>454,6</b>	<b>4.824,5</b>	<b>9,35</b>	<b>450,9</b>	<b>4.807,6</b>	<b>9,22</b>	<b>443,5</b>	<b>4.714,4</b>	<b>8,97</b>	<b>422,9</b>	<b>4.710,1</b>	<b>8,56</b>	<b>403,0</b>	<b>4.592,3</b>	<b>8,83</b>	<b>405,6</b>	<b>4.579,5</b>	<b>9,04</b>	<b>413,8</b>

SALES	Real. 2021.			Real. 2020.			Real. 2019.			Real. 2018.			Real. 2017.			Real. 2016.			Real. 2015.		
STRUCTURE	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income	Energy	Price	Income
GRID FEE	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM	GWh	F/kWh	million-BAM
<i>End customers</i>																					
- customers in 110 kV	549,9	1,49	8,2	560,6	1,50	8,4	493,3	1,43	7,1	464,3	1,34	6,2	485,3	1,35	6,6	458,0	1,38	6,3	449,6	1,49	6,7
- customers in 35 kV	299,6	2,30	6,9	287,7	2,34	6,7	296,6	2,32	6,9	303,9	2,28	6,9	286,7	2,34	6,7	274,8	2,32	6,4	274,5	2,41	6,6
- customers in 10 kV	922,8	3,43	31,6	851,4	3,48	29,6	887,1	3,42	30,3	860,0	3,37	29,0	830,1	3,36	27,9	790,4	3,39	26,8	827,4	3,39	28,0
- households	2.224,8	7,09	157,7	2.189,5	7,11	155,6	2.143,1	7,12	152,5	2.110,7	7,13	150,5	2.141,8	7,13	152,6	2.132,4	7,13	152,0	2.121,2	7,13	151,2
- others i0,4 kV	924,2	7,84	72,5	852,5	7,88	67,2	904,5	7,84	70,9	893,7	7,85	70,1	885,0	7,91	70,0	856,2	7,94	68,0	829,5	7,95	66,0
- public lighting	82,9	7,85	6,5	82,9	7,84	6,5	83,2	7,84	6,5	81,9	7,84	6,4	81,2	7,84	6,4	80,4	7,83	6,3	77,4	7,82	6,1
<b>Total end customers (SNB)</b>	<b>5.004,3</b>	<b>5,66</b>	<b>283,4</b>	<b>4.824,5</b>	<b>5,68</b>	<b>274,0</b>	<b>4.807,6</b>	<b>5,70</b>	<b>274,2</b>	<b>4.714,4</b>	<b>5,71</b>	<b>269,2</b>	<b>4.710,1</b>	<b>5,74</b>	<b>270,1</b>	<b>4.592,3</b>	<b>5,79</b>	<b>265,8</b>	<b>4.579,5</b>	<b>5,78</b>	<b>264,6</b>

## Income from the sale of electricity from renewable sources

EPBiH has concluded contracts for the purchase of electricity with the Operator for RES, under which the Operator buys off the produced electricity from seven small hydroelectric power plants within ED subsidiaries, and WF "Podveležje" for which we have the status of a qualified generator from renewable sources. The purchase is made at the reference price determined by FERK, based on the historical movement of trade prices in the Federation of BiH. On this basis, income was generated in the amount of BAM 13.15 million for energy in the amount of 117.2 GWh.

## Income from electricity sales in the market

The total generated income from electricity sales in the market through the Trade activity was BAM 281.92 million (without the power sold through the system of ancillary services) and it is BAM 15.65 million or 5.9% higher than the planned. The average sales price for purchase and sale was 10.8% higher than the planned.

Structure of generated income in the activity of Trade:

- **Income from long-term sales of own energy BAM 102.29 million**
- **Income from short-term sales of own energy BAM 132.13 million (including sale to ISO BiH to cover transmission losses during four months of BAM 13.11 million)**
- **Income from UPTS BAM 15.28 million (excluding grid fee), or BAM 17.94 million including grid fee**
- **Income from sale and purchase (also short-term) BAM 29.57 million**

The average sales price from long-term sales is 9.73 F/kWh and it is at the planned level, and 19.2% lower compared to the average long-term sales price in 2020. The sales volumes were 4.1% lower than planned/considered, and 36.6% higher compared to the previous year.

The average sales price from long-term sales of self-generated power is 14.18 F/kWh and it is higher than both the planned (12.68 F/kWh) and the average short-term sales price in 2020 (10.70 F/kWh), primarily due to the intensive price growth on the regional market in the second half of 2021. The short-term sale also includes the sale of power to ISO BiH to cover transmission losses (July-October), given that their sale was contracted on market principles and from the volume planned for short-term sales.

Sales of power under the business and technical cooperation agreements (UPTS) are close to the planned, and the price was identical to that planned and achieved in previous years.



**Income from the sale and purchase of power was BAM 29.57 million for the sale of 150.9 GWh of purchased power.**

Electricity price F/kWh - Power



Electricity price F/kWh - Grid fee



Average price F/kWh Total



## Structure of electricity sales (sales through Supply and Trade activities included)

SALES	Real. 2021.				Plan (Considered) 2021.				Real. 2020.			
	Energy	Price	Income	Share	Energy	Price	Income	Share	Energy	Price	Income	Share
Type of sale	GWh	F/kWh	mil KM	%	GWh	F/kWh	mil KM	%	GWh	F/kWh	mil KM	%
<b>End customers</b>												
- customers 110 kV	550,0	11,15	61,3	6%	561,5	10,98	61,7	6%	560,6	12,14	68,1	7%
- customers 35 kV	299,6	11,87	35,6	3%	301,9	11,83	35,7	4%	287,7	12,52	36,0	4%
- customers 10 kV	922,8	13,87	128,0	12%	911,8	13,77	125,6	12%	851,4	14,77	125,8	13%
- households	2.224,8	14,50	322,5	31%	2.194,0	14,53	318,8	31%	2.189,5	14,53	318,2	32%
- other 0,4 kV	924,2	18,89	174,6	17%	928,7	18,88	175,3	17%	852,5	18,98	161,8	16%
- public lighting	82,9	19,28	16,0	2%	82,8	18,70	15,5	2%	82,9	18,13	15,0	2%
<b>Total end customers (SNB)</b>	<b>5.004,3</b>	<b>14,75</b>	<b>738,0</b>	<b>71%</b>	<b>4.980,8</b>	<b>14,71</b>	<b>732,5</b>	<b>72%</b>	<b>4.824,5</b>	<b>15,03</b>	<b>724,9</b>	<b>73%</b>
<b>Market sale</b>												
Total sale in/outside BiH	1.982,6	11,82	234,415	23%	1.979,6	11,06	218,9	21%	1.643,0	11,33	186,1	19%
Sale from UPTS (with grid fee)	166,6	10,77	17,938	2%	165,7	10,65	17,6	2%	157,1	10,63	16,7	2%
Sales or purchase in/outside BiH connected trade	<b>150,9</b>	<b>19,59</b>	<b>29,567</b>	<b>3%</b>	<b>168,0</b>	<b>17,68</b>	<b>29,7</b>	<b>3%</b>	<b>543,1</b>	<b>9,58</b>	<b>52,0</b>	<b>5%</b>
Sales related to ancillary services	47,8	14,67	7,020	1%	49,2	13,99	6,9	1%	33,1	6,03	2,0	0%
Sales to operator for OIEIK (PRO)	117,2	11,22	13,152	1%	124,8	11,22	14,0	1%	61,3	10,99	6,7	1%
<b>Total market sale (TRG and PRO)</b>	<b>2.465,2</b>	<b>12,25</b>	<b>302,1</b>	<b>29%</b>	<b>2.487,3</b>	<b>11,55</b>	<b>287,2</b>	<b>28%</b>	<b>2.437,6</b>	<b>10,81</b>	<b>263,6</b>	<b>27%</b>
<b>Total electricity</b>												
<b>sale*</b>	<b>7.469,5</b>	<b>13,92</b>	<b>1.040,0</b>	<b>100%</b>	<b>7.468,1</b>	<b>13,65</b>	<b>1.019,7</b>	<b>100%</b>	<b>7.262,1</b>	<b>13,61</b>	<b>988,5</b>	<b>100%</b>

\* income from unauthorised consumption, income from distribution grid fee for customers of other supplier, and income from non-invoiced electricity are not included

## Income from ancillary services (power and capacity)

Income from ancillary services is BAM 17.97 million and it is BAM 0.7 million or 3.8% lower than the planned. Compared to 2020, this income practically doubled, i.e. it is higher by BAM 9.06 million. Income from ancillary services refers to:

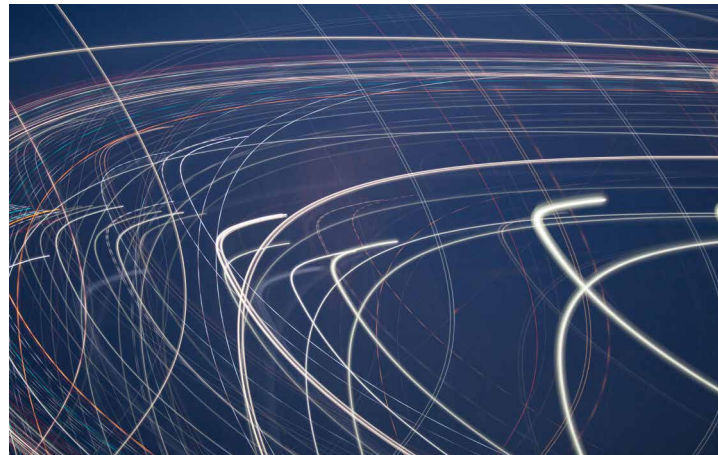
- **Income from power delivered in connection with ancillary services BAM 7.02 million (activation of energy in accordance with secondary and tertiary regulation, and energy imbalance, delivered in the volume of 47.85 GWh);**
- **Income from reserved capacities for ancillary services BAM 7.73 million (of which BAM 6.19 million is capacity for secondary regulation and BAM 1.54 million capacity for tertiary regulation);**
- **Income from balancing services of BAM 3.22 million**

## Income from sale of technological steam, thermal energy, and by-products

Income from sale of technological steam, thermal energy, and by-products was BAM 15.53 million and it includes income from:

- **Sales of technological steam of BAM 3.54 million;**
- **Sales of thermal energy (heating steam) of BAM 10.30 million;**
- **Sales of by-products (mainly slag and ash) of BAM 1.69 million**

This income was generated at the planned level (higher by BAM 0.04 million or 0.3 %). All income from this item was generated in thermal power plants, in TPP "Tuzla" BAM 12.93 million, and in TPP "Kakanj" BAM 2.60 million



## Costs and expenses

The total costs and expenses for 2021 were BAM 1,109.47 million, which is BAM 25.47 million or 2.3% more than the planned. Most items are at (or below) the planned level, and the highest level of deviation was in the costs of provisions and other expenses (mainly due to value adjustment of receivables for advance payments to ZD mines), and of water management fees (due to higher production in HPPs). Compared to 2020, costs and expenses are higher by BAM 61.92 million or 5.9%.

## Costs of materials for generation and coal transport

Costs of materials for electricity generation were BAM 304.35 million, and costs of coal transport were BAM 20.81 million. In total, they make up 29.3% of the total costs and expenses of the Company in 2021.

## Costs of electricity procurement and ancillary services

These total costs were BAM 200.70 million and they are at the level of the plan/review (higher by BAM 0.68 million or 0.3%). Compared to 2020, they are higher by BAM 54.0 million or 36.8 % and include:

- **Costs of electricity procurement on the market were BAM 102.38 million;**
- **Costs of electricity procurement from renewable sources (legal obligation to purchase at the regulated price) were BAM 46.1 million;**
- **Costs of electricity procurement under the agreement on business and technical cooperation (UPTS) were 14.92 million;**
- **Costs of procurement from independent producers (mostly industrial TPPs, legally required purchase) were BAM 1.01 million;**
- **Costs of ancillary services of BAM 36.31 million (including procurement of energy related to ancillary services of BAM 11.97 million, of which BAM 10.05 million were procurement costs related to imbalance).**

In 2021, the costs of ancillary services were BAM 36.31 million, and they referred to:

- **Costs of ancillary services - system services of BAM 23.87 million;**
- **Costs of electricity procurement related to ancillary services of BAM 11.97 million;**
- **Costs of ancillary services - other services of BAM 0.48 million.**

## Depreciation costs

Depreciation costs were BAM 156.20 million, which makes 14.1% of the total costs and expenses of the Company for 2021 and they are at the planned level. The highest depreciation expense refers to the depreciation of buildings of BAM 73.49 million and depreciation of plant and equipment of BAM 65.07 million. Compared to 2020, depreciation costs were 8.0% higher, which is understandable given the commissioning of WPP "Podveležje" (depreciation of BAM 6.1 million, where this does not refer to the entire 2021).

## Costs of grid fee and ISO charges

These costs were BAM 53.63 million, and they refer to:

- **Costs of electricity transmission (BAM 44.95 million), where BAM 39.79 million refers to deliveries to end customers in the distribution grid, and BAM 5.16 million KM to deliveries to customers in the transmission grid;**
- **Costs of fees for the operation of ISO BiH was BAM 4.27 million (of which BAM 0.37 million refers to the activity of production based on the price for G component);**
- **Costs of grid utilisation for end customers was BAM 4.41 million, where this is a grid fee for the purchase of energy from other power companies in BiH on the basis of deliveries in the MV/LV grid in accordance with UPTS.**

## Duty costs

They include the following cost items:

Water management fees of BAM 30.19 million refer to the costs of water contribution, water protection fees, contributions for the use of hydro-accumulation facilities, and costs of Cantonal fees of special importance for the HNC. These costs are higher than the planned by BAM 2.15 million or 7.7% given that the production in the HPPs on the Neretva river was 8.1% higher than the planned/considered production.

Various duties, fees, and membership fees include costs of fees (fees for the use of construction land and utility fees, membership fees to chambers of commerce, fees for air pollution, fees for ISO, FERK, RAK, etc.), where costs amounted to BAM 19.49 million, which is at the level of planned costs, while compared to 2020 they are lower (mostly due to lower volume of thermal production) by BAM 0.70 million or 3.5%. The highest cost within this plan item is the fee under the Law on Allocation and Direction of part of income generated by the operation of TPP of BAM 7.67 million, including costs of air pollution fee of BAM 4.42 million.

## Other expenses

Other expenses for the reporting period were BAM 78.38 million and they are significantly higher than the planned (by BAM 28.17 million or 56.1%) and those from 2020 (by 16.9%). These expenses refer to:

- **Expenses from write-offs and adjustments of receivables (on several grounds) BAM 70.89 million;**
- **Expenses from impairment and write-off of unusable stocks BAM 2.30 million;**
- **Additional costs from previous years BAM 2.53 million;**
- **Expenses from losses from impairment of fixed assets BAM 1.62 million;**
- **finances, penalties, damages, and other expenses of BAM 0.69 million;**
- **Other (total) BAM 0.35 million**





## *6. FINANCIAL PERFORMANCE INDICATORS*

INCOME STATEMENT INDICATORS	Realised 2021	Plan 2021	Realised 2020
Electricity generation (GWh)	6.677,1	6.654,6	6.237,9
<b>Operating income (thousand BAM)</b>	<b>1.098.436,2</b>	<b>1.076.299,9</b>	<b>1.037.324,0</b>
Income from sale of electricity and ancillary services	1.052.425,7	1.032.913,9	997.246,4
Income from sale of by-products, material and services	46.010,5	43.386,0	40.077,6
<b>Cash operating expenses (thousand BAM)</b>	<b>870.361,2</b>	<b>872.728,3</b>	<b>832.563,3</b>
- Expenses for mat. for el. generation and coal transportation	325.162,3	330.379,5	356.010,5
- Material and maintenance services	27.577,5	28.710,0	26.505,7
- Salaries and other employment expenses	173.380,6	174.798,1	173.847,8
- Dependent sales expenses *	254.334,7	253.181,4	198.434,3
- Duty expenses	49.678,6	47.676,7	39.226,3
- Other operating expenses	40.227,4	37.982,5	38.538,7
<b>EBITDA (thousand BAM)</b>	<b>228.075,1</b>	<b>203.571,6</b>	<b>204.760,7</b>
Income from donations (deprec. of donated assets)	6.442,6	6.671,9	6.433,4
Depreciation (thousand BAM)	156.201,9	156.341,4	144.649,6
<b>EBIT (thousand BAM)</b>	<b>78.315,8</b>	<b>53.902,1</b>	<b>66.544,6</b>
Operating ratio (op. expense. + deprec)/op. income)	0,929	0,950	0,936
Cost-effectiveness ratio (total income /total cost and expense)	1,013	1,012	1,010
Working ratio (operating expense /operating income)	0,792	0,811	0,803
Employee costs per worker	41,59	40,98	40,00
Production per worker	1,60	1,56	0,00
Share of costs and expenses in total income	98,75	98,81	99,00
Average number of employees (at the end of month / 12)	4.168	4.265	4.346
Material cost for production and coal transportation / operating income	29,6%	30,7%	34,3%
Cost of mat. and maintenance services/operating income	2,5%	2,7%	2,6%
Labour cost /operating income	15,8%	16,2%	16,8%
Dependent sales expenses/ operating income	23,2%	23,5%	19,1%
Duty expenses/ operating income	4,5%	4,4%	3,8%
Other expenses/ operating income	3,7%	3,5%	3,7%

\* Dependent sales expenses include electricity purchase costs, electricity transmission costs, ancillary service costs (system and other services) and fees for NOS.

## 7. IMPLEMENTATION OF PLAN OF HUMAN RESOURCES

*As at 31 December 2021, in EPBiH there were **4,113 employees**, of which **4,075 were employees for an indefinite term**, **8 were employees in off period or on an unpaid leave**, and **22 people with a trainee status**.*

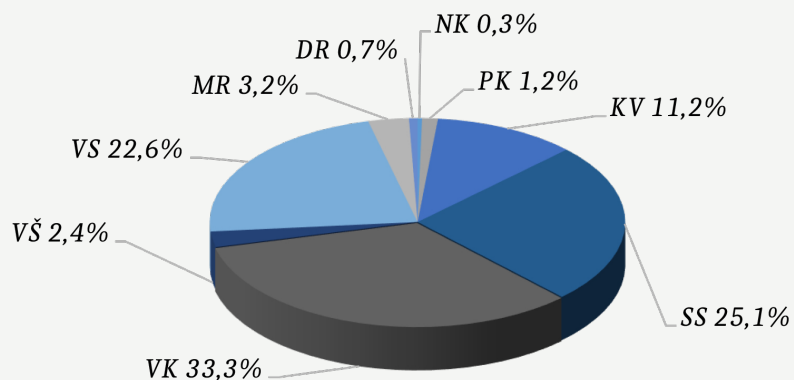
*New employees were hired in accordance with the Decision on the method for hiring new employees and trainees in the Public Enterprise Elektroprivreda Bosne i Hercegovine d.d. - Sarajevo, in line with the planned number.*





Unskilled NK	Semi- skilled PK	Skilled KV	Medium skilled SS	High skilled VK	College degree VŠ	University degree VS	Master MR	PhD DR
14	50	455	1021	1358	99	922	129	27

### Qualification structure of full-time employees



In 2021, it was planned to hire 60 trainees, and by 31 December 2021, the Company had 17 trainees, and 6 trainees under the procedure initiated in 2020.

In the reporting period, there were 255 terminations of employment contracts on all grounds (by force of law due to retirement, death of employees, consensual terminations, resignations of employees, dismissals by employer, and expiration of fixed-term employment contracts).

Due to the restriction of gatherings as the result of unfavourable epidemiological situation caused by the Covid-19 pandemic, a significant part of training activities was held online.

### EPBiH employees as at 31 December 2021

No	Organisational unit	31.12.2020.		31.12.2021				
		Full-time	Fixed-time	Other	Total	Replac./ Trainees	Total	
1	Management and OU within Management	117	113		113		113	
2	Sector for production	9	13		13		13	
3	Sector for distribution	13	12		12		12	
4	Sector for governance and trade	23	25		25	1	26	
5	Sector for supply	13	14		14	1	15	
6	Economic affairs	42	41		41		41	
7	Legal affairs and HR	37	37		37		37	
8	Capital investments	30	28		28		28	
9	Development in Company	23	23	1	24		24	
10	Subsidiaries and affiliates	14	13		13		13	
11	Office of company secretary	4	3		3		3	
12	Department of internal audit	7	8		8		8	
<b>DIRECTORATE TOTAL</b>		<b>332</b>	<b>330</b>	<b>0</b>	<b>1</b>	<b>331</b>	<b>2</b>	<b>333</b>
1	HPP on the Neretva	332	320		2	322	7	329
2	TPP "Kakanj"	575	552		1	553	8	561
3	TPP "Tuzla"	621	595			595	1	596
4	ED Bihać	371	356		1	357	6	363
5	ED Mostar	204	204			204		204
6	ED Sarajevo	557	540		1	541	3	544
7	ED Tuzla	566	538		1	539	3	542
8	ED Zenica	672	640		1	641		641
<b>EP BiH Total</b>		<b>4.230</b>	<b>4.075</b>	<b>0</b>	<b>8</b>	<b>4.083</b>	<b>30</b>	<b>4.113</b>

## 8. IMPLEMENTATION OF INVESTMENT PLAN

In EPBiH, the total investments in 2021 in activities and branches were **BAM 88.5 million**, which is **64%** less than planned (not including investments in recapitalisation and formation of subsidiaries), or **56.7%** compared to investments in 2020.

The main reasons that prevented the implementation of Investment Plan are:

- **Strict application of the Law on Public Procurement, repetition of tender procedures due to insufficient number of registered bidders;**
- **Long-term processes of obtaining the necessary permits and approvals for project implementation;**
- **Delays in the implementation of projects for the construction of new and replacement production facilities due to a wider impact of the Covid-19 pandemic.**



## IMPLEMENTATION OF INVESTMENT PLAN BY BRANCHES / ACTIVITIES IN 2021 (million BAM)

Investment level	Achieved 2020	Plan for 2021	Achieved 2021	Structure within activity	Compared to total investments
<b>Production activity</b>					
TPP "Tuzla"	1,5	23,0	16,8	58,7%	18,9%
TPP "Kakanj"	4,0	41,9	8,7	30,5%	9,8%
HPP on the Neretva	1,2	3,9	2,9	10,2%	3,3%
SHPP	0,1	0,8	0,0	0,1%	0,0%
ICT for Production activity	0,1	0,7	0,2	0,5%	0,2%
<b>Total production activity</b>	<b>7,0</b>	<b>70,4</b>	<b>28,5</b>	<b>100,0%</b>	<b>32,2%</b>
<b>Distribution activity</b>					
ED Bihać	10,7	10,1	8,9	18,9%	10,1%
ED Mostar	5,7	4,4	3,3	6,9%	3,7%
ED Sarajevo	9,9	15,8	12,0	25,4%	13,5%
ED Tuzla	10,0	14,5	11,6	24,5%	13,1%
ED Zenica	9,4	14,5	10,9	23,1%	12,3%
ICT for distribution activity		1,0	3,4	0,5	1,2%
<b>Total distribution activity</b>	<b>46,8</b>	<b>62,7</b>	<b>47,2</b>	<b>100,0%</b>	<b>53,4%</b>
<b>Supply and trade activity</b>					
All subsidiaries	0,00	0,9	0,01	100,0%	0,0%
ICT for supply and trade activity	0,00	1,8	0,00	0,0%	0,0%
<b>Total supply and trade activity</b>	<b>0,00</b>	<b>2,7</b>	<b>0,01</b>	<b>100,0%</b>	<b>0,0%</b>
<b>Investments from Company level</b>					
Investments in capital projects *	149,6*	106,5	12,2	96,4%	13,8%
Joint projects	0,0	1,0	0,1	0,7%	0,1%
ICT	0,9	2,8	0,4	2,8%	0,4%
<b>Total from Company level</b>	<b>150,6</b>	<b>110,3</b>	<b>12,7</b>	<b>100,0%</b>	<b>14,4%</b>
<b>Total EPBiH investment</b>	<b>204,4</b>	<b>246,1</b>	<b>88,5</b>	<b>-</b>	<b>100,0%</b>

\* without advance payment of EPC to the contractor for Unit 7 in TPP "Tuzla" (211.92 million BAM) and the contractor for SHPP Neretvica (0.9 million BAM)



When it comes to investments in subsidiaries in 2021, BAM 8.05 million was invested in coal mines, which is 68.9% less than the BAM 25.9 million planned. In 2021, EPBiH established a new limited liability subsidiary GEOLP d.o.o. Kakanj, with the share capital of BAM 4.1 million. The total investments in ZD mines and EPBiH were BAM 100.6 million.

## Implementation of investment plan in Production activity

In the Production activity for 2021, the total investment of BAM 70.4 million was envisaged, where own funds of EPBiH were BAM 26.9 million, with part of these funds of BAM 842 thousand planned for investments in the Production activity in ED Tuzla, ED Bihać, and ED Sarajevo, and part of the funds of BAM 733 thousand was planned for investment in systemic ICT projects. In 2021, loan funds of BAM 43,5 million were planned in the Production activity, to be used for the implementation of projects for the construction of flue gas desulphurisation plants in Unit 6 in TPP "Tuzla" and Unit 7 in TPP "Kakanj".

In 2021, the total of BAM 28.3 million was used, which is 40.5% of the planned investments. These investments also include funds paid for the implementation of project "Revitalisation of turbine in Unit 6" u TPP „Tuzla“ of BAM 10.8 million KM.

The most significant activities for projects whose implementation was planned in 2021, which have the nature of both investment and ongoing maintenance are:

- Contracted procurement of goods and services for capital overhaul of Unit 5 and regular annual overhaul of Units 3, 4, and 6 in TPP "Tuzla", and overhaul of Units 5, 6 and 7 in TPP "Kakanj" which were successfully completed in the planned year;
- Contracted procurement of goods and services for overhaul of Units A1 and A2 in HPP "Grabovica" and overhaul of Units A1, A2, and A3 in HPP "Salakovac" which were successfully completed in the planned year;
- Some projects were contracted, and procurement procedure was initiated for some projects, all with the aim of implementing the revitalisation project of Unit 6 in TPP "Tuzla", where, under the adopted EEB for 2022-2024, suspension of this unit was planned in the period of 1 March - 1 August 2022;
- Contract was signed and the project "Engagement of a consultant for the construction of flue gas

desulphurisation plant in Unit 6 in TPP "Tuzla" is underway;

- Procurement procedure initiated for the implementation of project "Construction of flue gas desulphurisation plant in Unit 6 in TPP "Tuzla";
- Procurement procedure initiated for the implementation of project "Construction of a flue gas desulphurisation plant in Unit 7 in TPP "Kakanj".

In addition, in 2021 the following investment projects were implemented:

### TPP "Tuzla"

- Procurement and installation of T-pieces T3L and T3P inlet steam pipelines of Unit 4-III phase;
- Repair of special machine tools;
- Procurement of a special forklift for dismantling mill rotors;
- Replacement of damaged parts of the medium pressure turbine of Unit 4;
- Procurement of submersible drainage pumps;
- Repair of three mill rotors and purchase of a new one;
- Replacement of part of control system for burner ignition of boiler 5;
- Procurement of cooling water pump rotor of Unit 6;
- Replacement of rubber pipelines and fittings on demineralisation columns 5 and 6 and columns for regeneration of contaminated condensate of Unit 6;
- Procurement and installation of regulating air compressors;
- Procurement and installation (replacement of the existing) diesel engine for Locomotive CZ Loko;
- Repair of AB chimney cloak no. 5;
- Procurement and replacement of conveyor belts for grids of Units 4 and 5;
- Purchase of bulldozers - 2 pcs.

### TPP "Kakanj"

- Revitalisation of circulating pumps of Unit 7 boiler;
- Procurement of mill shaft of Unit 7;
- Procurement and installation of boiler drum of Unit 7;
- Procurement of compressors for bag filter of Unit 7;
- Procurement of fans for cooling towers of Unit 7;
- Procurement and installation of HPV ventilation equipment;
- Procurement and installation of a measuring device for the flow of flue gases in a 300 m chimney;
- Procurement of reducers for cooling towers of Unit 7;
- Procurement and installation of a cooling unit in VDP and VSZ transformer room of Unit 6;
- Procurement of parts for inter-superheated steam pipeline (MPr) of boiler in Unit 7;
- Procurement of roto screens;
- Procurement of installation services and consulting services for supervision over the installation of inter-superheated steam pipeline (MPr) of boiler in Unit 7;
- Procurement of fans for cooling towers of Unit 7;
- Procurement of slag removal pumps;
- Procurement and installation of calorimeters of the hot water pipeline;
- Procurement and installation of 31.5 MVA, 121/36.75/6.3 kV transformers;
- Procurement and installation of 40 MVA, 121±8x1.25%/6.3 kV transformers;
- Procurement and installation of UPS for Unit 5;
- Procurement agreed and a study on the condition of boiler plant of Unit 6 and a proposal of measures to improve combustion is being prepared;
- Contracted procurement and completed delivery of hydrogen analysers of Unit 6 (installation during the overhaul of Unit 6 in 2022);
- Contracted procurement and completed delivery of VTZ 1 in Unit 7 (installation at the time of overhaul of Unit 7 in 2022),
- Contracted procurement, and execution of works in continuation of the extension of Slapnički potok collector is in progress (the plan is to complete the

works in the first quarter of 2022);

- Contracted procurement, and execution of works on protection of surfaces of neutralisation basins in demineralisation is in progress (pool 1 was completed, and the plan is to complete works in pool 2 during the second quarter of 2022);
- Contracted procurement, and execution of works in installation of water supply pipeline on the route HPV1/4 - Unit 7 is in progress (the plan is to complete the works in the first quarter of 2022);
- Contracted procurement, and the implementation of contract for the static calculation of external coal supply bridge due to the additional load of new hot water pipeline is in progress (the plan is to complete the works in the first quarter of 2022).

### HPP on the Neretva:

- Contracted works of remediation of concrete lining of the supply tunnel 2 in HPP "Jablanica"; execution of works is planned in the standstill of stage 2 (period June - September 2022 and period June - September 2024);
- Contracted procurement for replacement of the excitation system of Units 1, 2, and 3 in HPP "Salakovac". In 2021, the replacement of excitation system of unit 1 was completed, and replacement of excitation systems of Units 2 and 3 is planned for 2022;
- Repair of the dam concrete and reduction of water filtration through the dam body of HPP "Grabovica";
- Replacement of CO<sub>2</sub> plant and control equipment in HPP "Jablanica";
- Procurement of equipment, specialist works, and supervision over the installation of hydraulic and electrical equipment of the hydraulic drive and control system of entrance buildings 1 and 2 in HPP "Grabovica".

Also, in ED Bihać, Production activity, the production and installation of a fine truss in HPP "Una Kostela", Bihać was contracted. The implementation of this project is planned for 2022.

The reasons why the funds were not effected in full are as follows:

- In 2021, none of the planned loan funds were effected for the implementation of projects for the construction of flue gas desulphurisation plant in Unit 6 of TPP "Tuzla" and Unit 7 of TPP "Kakanj", whereby in 2021, according to the adopted Business plan for production activities 2021 - 2023, for the implementation of these projects the planned loan funds were BAM 11 million and BAM 32.5 million, respectively;
- In the considered planning period in the Production activity, some previously made investment decisions were reviewed in terms of the need for their implementation, all in order to provide additional funds for the construction of new production facilities, implementation of desulphurisation project in Unit 6 in TPP "Tuzla" and Unit 7 in TPP "Kakanj", and some investment decisions were abandoned;
- Investments in some of the existing production units that will operate, according to the valid planning documents (NERP), with a reduced number of hours in the upcoming period are minimal in order to ensure their safe and reliable operation;
- Monitoring the market of goods, works and services, comparison with the situation from previous years, and harmonisation of the estimated value of the planned procurement resulted in some projects being implemented in the planned scope for less than the value of investment approved in the investment decision;
- Declaring the Covid-19 pandemic, which resulted in issues with the implementation of contracts in terms of hiring workers needed for their implementation;
- Application of the Law on Public Procurement in terms of insufficient number of bidders and objections and complaints of bidders.

## Implementation of investment plan in Distribution activity

The business plan in the Distribution activity envisages the investment amount of BAM 62.7 million. Part of the funds of BAM 3.4 million refers to investment in ICT system projects. The remaining amount is planned to be used by the subsidiaries, with BAM 53.8 million of own funds, BAM 4.2 million KM of loan funds, and BAM 1.3 million of grant funds. Planned investments in 2021 are 8.3 % (BAM 5.6 million) lower than in 2020 (BAM 68.3 million). In 2021, the level of investments in Distribution projects were BAM 46.7 million, which is 75.4% of the plan and 1% more than the investments in 2020.

Reasons for incomplete implementation of the Investment Plan are as follows:

- Long and complex procurement procedure for goods/works/services;
- Long and complex procedure to obtain the necessary permits and approvals for the implementation of investment projects;
- Complex procedure to resolve property and legal relations due to outdated land registers that are not harmonised with the cadastre;
- Loan from the European Investment Bank to expand the AMM system has not become operational.

Overview of the most significant projects implemented in 2021:

- Completed construction of 67 TS 10(20)/0.4 kV and construction of distribution grid in the length of 548 km, of which 91 km of medium voltage and 457 km of low voltage distribution grid;
- Built 4 TS 20/0,4 kV;
- Completed reconstruction of the building part of 5 TS 35/10(20) kV and 7.3 km of lines of 35 kV nominal voltage;
- Completed reconstruction of 26 TS 10(20)/0,4 kV and reconstruction of distribution grid in the length of 122 km, of which 36 km of medium voltage and 86 km of low voltage distribution grid;
- Completed reconstruction of 62,385 metering

points for billing;

- Number of measuring points introduced in the AMM system increased by 2,979.

### Implementation of joint projects.

Works in the implementation of SCADA/DMS/OMS project and accompanying telecommunications at the distribution level have been completed. The project was implemented from loan and grant funds of the German Development Bank, and partly from EPBiH own funds. The project implementation began on 30 March 2016 and ended on 31 December 2021.

## Implementation of investment plan in Supply activities

The investment plan for the Supply activity for 2021 envisages total investments of BAM 2.7 million, of which BAM 1.8 million refers to projects in the Supply activity, and BAM 0.9 million for system ICT projects within this activity.

In 2021, there were no significant investments in projects in the Supply activity and the segment of systemic ICT projects.

## Implementation of investment plan at the Company level

### Capital investments

In the period of January - December 2021, there were capital investments of BAM 12.2 million KM, which is 11.5% compared to the plan of BAM 106.5 million. Activities of the organisational units for capital investments referred to the construction and preparation for the construction of thermal power plants, hydropower plants, and power plants based on renewable and alternative energy sources, and included: construction of WPP "Podveležje 1"; execution of preparatory works for Unit 7 in TPP "Tuzla"; investor supervision; development of investment-technical documentation;

testing and research; obtaining the necessary permits and consents; conducting property expropriation proceedings; closing the financial structure; preparation of tender documentation for the selection of equipment suppliers and contractors for services and works.

### Unit 7 - 450 MW in TPP "Tuzla"

Contract on engineering, procurement and construction (EPC Contract) between JP Elektroprivreda BiH d.d. - Sarajevo and the Chinese Consortium was signed at the end of August 2014.

After obtaining all permits and approvals required for the implementation of project for the construction of Unit 7 in TPP "Tuzla", EPBiH issued a Notice of Effectiveness of the EPC Contract in late 2019 and in mid-July 2020 a Notice of the start of EPC Contract implementation (NTP). As of this date, the deadlines for construction of Unit 7 (56 months) are running.

After the completion of preparatory works for the construction of Unit 7 (phase one), which according to the EPC Contract is the responsibility of EPBiH, the EPC contractor took over the construction site in mid-August 2021, of which the record of preliminary construction site hand-over to the IPC contractor was drafted.

In mid-August 2020, EPBiH was informed by a letter from the EPC Contractor, stating that the nominated subcontractor of key equipment (boiler, turbine, and generator) refuses to implement the supply contract because he is withdrawing from the activity of Production of new coal plants for electricity generation.

Following the official announcement that key equipment subcontractors are abandoning the activity of Production of new coal plants for electricity generation, in order to maintain the EPC Contract, in March 2021 the EPC contractor proposed to the investor alternative suppliers of key equipment (boiler, turbine, and generator).

In accordance with decisions of the Management and conclusions of the Supervisory Board, EPBiH informed

the EPC contractor in writing that EPBiH maintains the previously stated position that the project of construction of Unit 7 - 450 MW in TPP "Tuzla" should be implemented in accordance with the concluded EPC Contract for Unit 7 - 450 MW in TPP "Tuzla", the contract and the accompanying annexes 1 to 13 and subcontractors of key equipment appointed therein.

EPBiH informed the relevant ministry and the FBiH Government about the issues in contract implementation, as well as about the position of the Management and Supervisory Board regarding the proposed solution for subcontractors of key equipment.

The FBiH Government concluded that the FBiH Parliament needs to be informed as well.

On this matter, EPBiH prepared information for the Prime Minister of FBiH and the FBiH Minister of Energy, Mining and Industry on the current situation in the implementation of the EPC Contract for the construction of Unit 7 - 450 MW in TPP "Tuzla". The information was discussed and accepted by the Supervisory Board and submitted to the Prime Minister of the FBiH and the FBiH Minister of Energy, Mining and Industry at the end of May 2021.

At the beginning of July 2021, the FBiH Government adopted the Information to the Ministry of Energy, Mining and Industry and submitted it to the FBiH Parliament for information and possible provision of instructions regarding the situation in the implementation of EPC Contract. In mid-September 2021, the Collegium of the House of Representatives of the FBiH Parliament concluded that it had taken note of the Information on the current situation in the implementation of EPC Contract for the construction of Unit 7-450 MW in TPP Tuzla and asked the FBiH Government to submit proposals on which the House of Representatives should decide. Regarding the conclusion of the Collegium of the House of Representatives of the FBiH Parliament, the FBiH Ministry of Energy, Mining and Industry submitted the Conclusion of the Collegium of the House of Representatives of the FBiH Parliament and asked the Management and Supervisory Board of EPBiH to submit an agreed proposal in the context of current situation with the implementation of EPC Contracts and proposed wording of the conclusion about which the House of Representatives of the FBiH

Parliament should discuss.

After analysing possible solutions for the continuation of EPC Contract for the construction of Unit 7 in TPP “Tuzla”, EPBiH informed the Ministry of Energy, Mining and Industry, FBiH Government, and FBiH Parliament about the status of project for the construction of Unit 7 - TPP “Tuzla”.

At its 289th session, the FBiH Government passed the Conclusion V No. 1660/2021, which stated:

(2) JP Elektroprivreda BiH d.d. – Sarajevo is assigned to continue negotiations with the EPC Contractor with the aim of implementing the EPC Contract with new subcontractors of key equipment, while providing the best conditions for JP Elektroprivreda BiH d.d. Sarajevo and the Federation of Bosnia and Herzegovina, taking into account the circumstances that have occurred in the meantime.

(3) JP Elektroprivreda BiH d.d. Sarajevo is assigned to form an Expert Negotiation Team with the EPC Contractor, which will include an independent consultant.

(4) Deadline for concluding negotiations with the EPC Contractor is sixty (60) days from the appointment of expert team.

EPBiH conducted public procurement procedures for legal consulting services with reference to the implementation of Contract on Engineering, Procurement and Construction - EPC, for Unit 7 - 450 MW in TPP “Tuzla” and a technical consultant for consulting services to continue negotiations with the EPC Contractor with the aim of implementing the EPC Contract for the construction of Unit 7 - 450 MW in TPP “Tuzla” with new subcontractors of key equipment.

At the beginning of February 2022, the general manager of EPBiH issued a Decision on the establishment of the Expert Team for technical assessment of alternative subcontractors for key equipment from the EPC Contract for construction of Unit 7-450 MW in TPP “Tuzla” and the Expert Team for negotiations with the EPC Contractor.

On several occasions, the EPC Contractor submitted the required documentation and answers to questions of the Expert Team and technical consultant for alternative bidders. Review of the submitted documen-

tation by the technical consultant and the Expert Team of EPBiH is in progress.

In mid-March 2022, the technical consultant submitted a Preliminary Report for the technical assessment of alternative subcontractors of key equipment from the EPC Contract for the construction of Unit 7 - 450 MW in TPP “Tuzla”.

Harmonisation of the preliminary report for technical assessment of alternative subcontractors is underway and it is expected that the final report on technical assessment will be completed by 8 April 2022.

The final report of the Expert Team will be prepared on the results of technical assessment of alternative bidders and negotiations with the EPC Contractor, including the findings of independent expert consultants, which will be submitted to the Government of the Federation of Bosnia and Herzegovina after being adopted by the Company Management and Supervisory Board of EPBiH.

### Unit 8 - 350 MW in TPP “Kakanj”

In order to continue further activities in the implementation of project for the replacement Unit 8 in TPP “Kakanj”, and in accordance with the Conclusion of the FBiH Government of from May 2019, which instructed the FBiH Ministry of Energy, Mining and Industry and EPBiH to accelerate activities for the construction of replacement Unit 8 in TPP “Kakanj”, in 2020, EPBiH updated the Investment-Technical Documentation with the investment program in order to meet the requirements that new combustion plants must comply with the limit values from Annex V, Part 2 of Directive 2010/75/EU.

In February 2021, the Company Management and Supervisory Board of EPBiH reviewed the Information on the current status of project for the construction of replacement Unit 8 in TPP “Kakanj” and the proposed activities for the upcoming period and accepted it.

At the end of February 2021, EPBiH submitted to the FBiH Ministry of Energy, Mining and Industry the

Information on the current status of project for the construction of a replacement Unit 8 in TPP “Kakanj” and a proposal for activities for the upcoming period.

In the coming period, it is necessary to make analyses and assessments of key impacting factors on the definition of development plans and business strategies of FBiH and EPBiH, and make a decision for Unit 8 in TPP “Kakanj”.

### Hot water pipeline for heat supply from TPP “Kakanj” to the territory to/and Sarajevo

Based on the conceptual design for heat supply to the territory to/and Sarajevo from TPP “Kakanj”, with the expropriation study included, preconditions have been created for the next phases of preparatory activities for the implementation of this investment project.

EPBiH has submitted a request - initiative to the FBiH Ministry of Energy, Mining and Industry to determine the public interest in the implementation of this project.

The current spatial plans of the FBiH and the Spatial Plan of Zenica-Doboj Canton, Spatial Plan of the Kakanj Municipality, and Spatial Plan of the Visoko Municipality do not envisage the hot water pipeline route from TPP “Kakanj” to Sarajevo.

According to the available information, activities in the proclamation of public interest are in progress.

### HPP “Vranduk”

The FBiH Ministry of Spatial Planning issued a decision rejecting the request for issuing an urban permit for the construction of HPP “Vranduk”. The request was rejected as unfounded, taking into account provisions of the Decision on the proclamation of national monument of the Old Town of Vranduk in Vranduk, of the Commission for Preservation of National Monuments.

In accordance with the instruction on legal remedy, EPBiH initiated an administrative dispute with the

aim of annulling the Decision of the FBiH Ministry of Spatial Planning on rejecting the request for issuing an urban permit for HPP "Vranduk".

The application for extension of the environmental permit for HPP "Vranduk" was submitted on 26 April 2021 to the FBiH Ministry of Environment and Tourism, which was rejected on 29 December 2021, due to the expiration of previously issued building documents. After the contract with the contractor for construction of HPP "Vranduk" was terminated, the arbitration procedure was initiated.

These circumstances may jeopardise the planned dynamics of project implementation.

EPBiH submitted an initiative to the relevant ministry, based on the conclusions of the Government, to enable the FBiH Ministry of Spatial Planning to issue an urban permit for the construction of HPP "Vranduk", which would indicate to the investor the binding conditions of the Commission for Preservation of National Monuments.

### Continued reconstruction and expansion of HPP "Una Kostela"

Since on 25 June 2020, the FBiH Ministry of Spatial Planning rejected the request of EPBiH for the issuance of urban approval for the project to continue the reconstruction and expansion of HPP "Una Kostela" on the river Una in Bihać, from 23 May 2018 to 23 July 2020 an administrative dispute was conducted with the aim of refuting the FBiH Ministry of Spatial Planning Decision due to:

- Incomplete and incorrectly established factual situation, i.e. an incorrect conclusion was drawn from the established facts regarding the factual situation, and in this regard,
  - Incorrect application of substantive law.
- The dispute settlement, according to experience so far, can be expected in early 2022.

Given that the administrative procedure to obtain the urban approval from the relevant administration was settled unfavourably for the further project development, the planned activities have not been initiated: land expropriation and development of main design to obtain a building permit.

On 8 October 2020, councillors of the Bihać City Council adopted the Declaration on the protection of the Una river, which rejects any interventions in the Una River watercourse located in the territory of this city. Also, this declaration abolishes the possibility of building hydropower plants. The current status of preparation for the continuation of reconstruction and expansion does not promise to maintain the planned implementation dynamics and overall project effectiveness. Information on all aspects of this project was sent to the FBiH Government and FBiH Ministry of Energy, Mining and Industry.

### HPP "Janjići" on the river Bosna

Pursuant to the law, EPBiH conducted the procedure to acquire the title on property for which a public interest in expropriation had been determined with the aim of building HPP "Janjići". The received applications did not meet the requirements, and the expropriation procedure was transferred to the city services for implementation. Field work in expropriation is expected to continue in October.

The evaluation of the received applications to the announced public call for the selection of designer for the main project of HPP "Janjići" is in progress. Preparation of the tender documentation for the publication of public call for the selection of implementation consultant for HPP "Janjići" has been completed.

### HPP "Kovanići" on the river Bosna

Development of the conceptual design for HPP "Kovanići" has been completed. The application for preliminary environmental impact assessment for the construction project of HPP "Kovanići" on the river Bosna is being prepared, which will be submitted to the FBiH Ministry of Environment and Tourism with the aim to obtain a solution for the development of environmental impact study. The field research is planned to begin in March 2022.

### HPP "Ustikolina" on the river Drina

An administrative procedure is underway under the renewed application to issue an urban approval before the Ministry of Urbanism, Physical Planning and Environmental Protection of the BPC Goražde Government, for geological and geotechnical research – G1 mission for the preparation of construction of HPP "Ustikolina", which was submitted on 7 June 2021.

Tender documentation has been prepared for the selection of contractor in an open procedure. On 14 September 2021, a general approval of Elektroprenos was obtained for the connection of HPP "Ustikolina" to the transmission grid of 110 kV, 220 kV, and 400 kV.

### SHPP "Kakanj" on the river Bosna

Under Annex 4 to the Contract, concluded on 29 September 2021, the provider of service for the preparation of investment-technical documentation was able to fulfil their obligations.

In accordance with the concluded Contract, annexes to the main Contract, submitted bid, and Terms of Reference, the designer-provider of service completed the preliminary version of the conceptual design of SHPP "Kakanj" on the river Bosna, Kakanj Municipality, and submitted it for review to the EPBiH Expert Team.

### SHPPs in the Neretvica river basin

The following activities were undertaken in the implementation of sHPP Project in the Neretvica river basin: Completed preliminary designs for all 15 sHPPs;

- Completed and revised main designs for sHPP "Srijanski most" 3.03 MW, sHPP "Gorovnik ušće" 3.43 MW, sHPP "Crna rijeka" 2.11 MW, sHPP "Gorovnik" 0.86 MW;
- Obtained urban approvals for sHPP "Srijanski most", sHPP "Gorovnik ušće", sHPP "Crna rijeka", and sHPP "Gorovnik";
- Obtained final building permits for sHPP "Srijanski most" and sHPP "Gorovnik ušće";
- Completed expropriation and conversion into construction land of the area for sHPP "Srijanski most" and sHPP "Gorovnik ušće";



- According to the PPL, the implementation of the projects of sHPP “Srijanski most” and sHPP “Gorovnik Ušće” has been agreed with domestic companies;
- Completed registration of the start of works to the Konjic Municipality and the implementation began, which was suspended for more than a year (June 2020 July 2021) by unknown persons and various associations;
- EPBiH has invested financial resources in the project worth BAM 5.3 million for design activities, friendly environment, expropriation, municipal and other fees and advance payments to contractors, up to the time when the construction was blocked;
- Obtainment of energy permits is underway for sHPP “Srijanski most” and sHPP “Gorovnik ušće” from the FBiH Ministry of Energy, Mining and Industry for the purpose of renewing the procedure to issue building permits, in accordance with the Decision of the Ministry of Construction and Spatial Planning, which in accordance with the request from the “Zeleni Neretva” association, revoked the building permits for sHPP “Srijanski most” and sHPP “Gorovnik ušće”, and returned it for a repeated procedure to the Konjic Municipality, since the Konjic Municipality did not require energy permits when issuing the permits.

### SHPP “Modrac” - on the river Spreča

In accordance with the Letter of Intent dated 19 June 2017 from JP Spreča d.d. Tuzla, inviting EPBiH to jointly invest in the construction of SHPP “Modrac 2” on the river Spreča, with the aim of using the excess available water of the river Spreča, on the Modrac profile, for the production of electricity, the following acts were adopted:

- Agreement on cooperation in the project for preparation of construction of SHPP “Modrac 2”, signed on 11 March 2021, between EPBiH and JP Spreča.
- Issued Decision on 18 March 2021 on the appointment of Expert Team for the implementation of Agreement on Cooperation in the project for preparation of construction of SHPP “Modrac”.

The team members are employees from EPBiH and JP Spreča.

In accordance with the previously reviewed existing technical documentation, developed by JP Spreča, EP-BiH submitted the Terms of Reference for the update of the Main Design for SHPP “Modrac 2”. According to the obligations from the Agreement, the development of updated technical documentation (Main design) by JP Spreča is in progress, which will be the basis for the preparation of Feasibility Study for investment in the project (obligation of EPBiH).

### WPP “Podveležje 1”, city of Mostar

LOT 1 (15 wind turbines with foundations)  
A final exploitation permit has been obtained for the construction of 15 wind turbines of WPP “Podveležje 1”.

LOT 2 (Substation 110/30kV and 30kV cable and fibre optic network)  
Cabling activities (MV and OF cables) for 15 wind turbines with the Podveležje substation have been completed and a final exploitation permit has been obtained.

LOT 3 (Access roads, service roads and crane plateaus)  
For access roads, service roads and crane plateaus a final exploitation permit has been obtained.  
110kV connection to transmission grid  
Connecting line 110kV has been built, connected to TS “Podveležje” and has a final exploitation permit

### WPP “Vlašić”, Travnik municipality

The revised property expropriation study in the concession area of the future Wind Power Plant “Vlašić” (WPP “Vlašić”) was submitted.  
Several meetings were held with the relevant people in the Ministry of the CBC Government for the issuance of urban approval, and amendments were made to the technical part of the application for urban approval. The issuance of urban approval will follow the adoption of amended spatial plan.  
The consultant hired by KfW for processing and filtering all available measurement data of wind potential

from the site of WPP “Vlašić” submitted a report to which EPBiH provided comments.  
Preparation of tender documentation for the implementation consultant on the Project – activities led by KfW and EIB, in consultation with EPBiH.  
Preparation of tender documents for the consultant for the development of a study of critical habitats - the activity is led by the EIB in consultation with EPBiH.

### Preparations for construction of photovoltaic power plants (PVPP) PVPP „Divkovići 1“ and PVPP „Divkovići 2“, Tuzla Canton, City of Tuzla

Before starting the preparation of application for urban approval for PVPP “Divkovići 1” and PVPP “Divkovići 2” (location Plane, Divkovići 1 and Divkovići 2 - City of Tuzla), with the total estimated installed capacity of 56 MW, it is necessary to resolve two previous issues as follows:

- Closure of the industrial landfill of slag and ash “Plane, Divkovići I and Divkovići II” by EPBiH - TPP “Tuzla”, in an environmentally acceptable manner,
- Provide spatial-planning preconditions for the construction of PVPP “Divkovići 1” and PVPP “Divkovići 2”, which currently do not exist.

### PVPP “Gračanica”, Central Bosnia Canton, Bugojno Municipality

Conditions for submitting applications for urban approval have not yet been met due to the fact that amendments to the Spatial Plan of SBC 2005-2025 have not yet been adopted, which, among other things, take into account planned spatial interventions for the projects PVPP “Gračanica 1” and PVPP “Gračanica 2”.

On 27 January 2022, EPBiH sent to the CBC Ministry of Economy a self-initiated bid for the award of a concession for the construction of PVPP "Gračanica 1" and PVPP "Gračanica 2".

In accordance with the Decision of the CBC Government to initiate the procedure for granting a concession for construction, arrangement, equipment, use, and maintenance of the photovoltaic power plants PVPP "Gračanica 1" and PVPP "Gračanica 2", Bugojno municipality (total maximum power 50MW), number: 01-11.7- 596/22 of 3 February 2022, the CBC Ministry of Economy, on 9 March 2022 issued a PUBLIC INVITATION to collect bids for the award of concessions for the construction, arrangement, equipment, use and maintenance of PVPP "Gračanica 1" and PVPP "Gračanica 2"; Bugojno municipality (total maximum power 50MW) – under the self-initiated bid number S 2/22.

Preliminary designs for PVPP "Gračanica 1" and PVPP "Gračanica 2", with the total estimated installed capacity of approximately 44 MW, were completed.

### **PVPP "Kreka" - Šiški Brod, Tuzla Canton, Lukavac Municipality**

Prior the project is continued, EPBiH should settle with the representatives of the Autoceste Federacije BiH the issue of collision with the future Žepče - Tuzla motorway, which passes through the location of the PVPP "Kreka" - Šiški Brod.

### **PVPP "Podveležje", Herzegovina-Neretva Canton, City of Mostar**

At its 18th regular session, held on 17 February 2022, the Mostar City Council passed the Decision on adoption and implementation of amendments to the spatial plan of the Municipality of Mostar/City of Mostar, which was published on the City Council website on 11 March 2022 (Official Gazette of the City of Mostar, 2). The adopted amendments to the Spatial Plan include,

among other things, the areas envisaged by the Spatial Plan for the construction of wind power plants in such a way that solar panels can be installed at the same locations, which also applies to the concession area of WPP "Podveležje 1".

Conceptual designs for PVPP "Podveležje 1" and PVPP "Podveležje 2", from which the total output power for both PVPPs of approximately 43 MW was obtained, were completed.

Applications for environmental permit for PVPP "Podveležje 1" and PVPP "Podveležje 2" were submitted to the relevant ministry of the Herzegovina-Neretva Canton.

### **PVPP "Gornja Breza" and PVPP "Bijele Vode", Zenica-Doboj Canton, Breza Municipality and Kakanj Municipality**

The beginning of the PVPP "Bijele Vode" project will be postponed because, based on the information received from RMU "Kakanj", it will not be possible to suspend completely and permanently the mining works and to perform technical reclamation only on the site where the construction of PVPP "Bijele Vode" is planned (plateau 1, plateau 2, and plateau 3), as the disposal of barren material in the immediate vicinity of these three plateaus is not yet complete. It is necessary first to complete the disposal of excavated barren material on the complete planned area, and then file an application to the relevant ministry for permanent closure of mining works in accordance with the FBiH Law on Mining.

The legal service of RMU "Kakanj" initiated the procedure to transfer the right of possession from identified physical and legal persons at the location of the planned construction of PVPP "Bijele Vode" to RMU "Kakanj". At the time of finalizing this report, there were 18 plots left for which it is necessary to transfer the right of possession to RMU "Kakanj". After finalising the procedure, it is necessary to initiate the procedure for transfer of title to RMU "Kakanj" (about a hundred plots, which are mostly owned by physical

persons) before the competent court in Visoko. On 16 February 2022, an application for urban approval was submitted for PVPP "Gornja Breza" to the relevant Ministry of Physical Planning, Transport and Communications and Environmental Protection of the Zenica-Doboj Canton.

### **Activities with international/domestic financial institutions and selected consulting companies to finance and develop investment-technical documentation up to the level of tender surveys**

#### **Projects PVPP "Gračanica 1", PVPP "Gračanica 2" and PVPP "Gornja Breza"**

At the beginning of November 2021, the European Bank for Reconstruction and Development (hereinafter: EBRD) approved a grant in the amount of EUR 800,000.00 for the applied projects PVPP "Gračanica 1", PVPP "Gračanica 2", and PVPP "Gornja Breza", which would finance the development of feasibility studies in order to verify the technical and economic viability and sustainability of these projects, and the development of tender documents for the selection of contractors. At the same time, the planned grant funds are planned to finance due diligence of the company in case of a possible credit indebtedness for these projects.

#### **Project PVPP "Bijele Vode"**

The PVPP "Bijele Vode" project was applied for technical assistance and financing to the GGF investment fund (Green for Growth Fund), managed by the company "Finance in Motion". This company has confirmed that we can count on technical assistance for project preparation, development of tender documentation, and procurement, i.e. financing, if the project proves to be profitable.

## Information and communication technologies - ICT

In ICT in 2021, the Business Plan envisaged the total investment of BAM 8.733 million. In 2021, BAM 1,067 million was invested in the implementation of investment projects of ICT for joint projects and projects of activities. The planned and effected investments, by activities, are shown in the table below:

Investments by plan items - ICT	Plan for 2021	Effected 2021	Effected percentage
I.b ICT Production	0.733	0.083	11.32 %
II.b ICT Distribution	3.400	0.298	8.76 %
III.b ICT Supply and Trade	1.800	0.044	2.44 %
V.a ICT Joint	2.800	0.642	22.93 %
<b>ICT Total</b>	<b>8.733</b>	<b>1.067</b>	<b>12.22 %</b>

In 2021, the ICT Sector actively participated in the planning, implementation and provision of technical support for the SCADA/DMS/OMS project, new production EEO - WPP "Podveležje", "Electromobility and expansion of AMM system" project.

Areas in which ICT projects have been implemented with the most significant projects:

### Optical cabling system

- Connection of 13 facilities to the optical cable system of EPBiH;

### Telecommunication equipment

- Installed industrial switches in two buildings;

### Voice and digital radio system

- Completed delivery of equipment for the digital radio modem system for facilities in ED Bihać, ED Mostar, ED Tuzla and the Directorate (11 sets);
- Completed delivery of equipment for RR connections for facilities in ED Mostar, TPP "Kakanj" and the Directorate (18 sets);

### Uninterruptible power supply system

- Implementation of a rectifier system in one building;
- Implementation of software for monitoring the uninterruptible power supply system of ICT equipment;

### Radio system facilities

- Completed antenna system infrastructure for six facilities;
- Completed system for monitoring the TC infrastructure of radio systems and radio facilities;
- Upgrade of SCALAR application (monitoring atmospheric discharges);
- Rehabilitation of access road to the radio facilities Mahovski vis and Klopačke stijene;

### Remote monitoring and control systems

- Finishing of the existing SCADA/LFC system in DC EPBiH in accordance with the operational requirements for the procurement of telemetry equipment to introduce TS in SDNiU for the needs of EPBiH;
- Maintenance of ULR for the needs of ED subsidiaries;
- Maintenance of telemetry devices for the needs of ED subsidiaries;
- Maintenance of Triangle Microworks driver (SCADA DC EPBiH);

### IT equipment and services

- Procurement of IT equipment: computers, laptops, monitors;

### Information systems

- Blue Trader: modifications and changes according to the needs of the process;
- Hydras: replacement of worn-out data loggers, part of measurements for QH curves performed; continuous monitoring of system operation;
- AMM system in production (Advance): continuous monitoring of system operation;
- DEEO: implementation of specific FGU services within DEEO;
- QGIS: continued development of Web Map service for tracking topological errors within QGIS, Web and AutoCAD;
- AMR system in distribution: initiating the procurement of data concentrators for the needs of the AMM system;
- DMS (Document Management System):
  - Implementation of the integrated document management information system, DMS-Protocol module; implementation of the integrated document management information system (DMS) in progress (modules DMS- Protocol, DMS-KUF, and DMS- Archiving of registry materials);
- SAP system:
  - Implementation of electronic VAT return for import and export (electronic form the ledger of incoming and outgoing invoices - KUF and KIF);
- Adjustment of the salary calculation in maternity leave and changed working capacity according to the Instructions for the calculation of salary compensation;
- DISP/DISP business intelligence:
  - Activities in the migration of the DISP database to the new ODA X8-2-HA plat

form;

- Implementation of third party work norms from the framework agreement for the Sarajevo Canton and for ED Tuzla business units, implementation of new process flows and new editions of EES and PEES decision forms, letters, requests, minutes, and contracts;

- Dispute database:

- Design, development, testing, and commissioning of the application solution for recording legal disputes/proceedings in EPBiH;

- Data Warehouse/BI system in distribution:

- Expansion of interface of DWH systems to databases MDM, DEEO, SAP FMIS, SAP HR, CRM, SOEE, and ZASTOJI (adding new columns from source systems for advanced BI analyses);

- Creating BI reports and setting up mail notification (review of data on employees and contracts);

- Investment project management system (Project server)

- Implemented subsystem for capital investment project management and created BI reports with project overview;

- Implemented subsystem for investment project management in the production activity;

- Implemented subsystem for strategic development project management;

- Application "Shareholders' Meeting": adaptation of the application to support the work of the Meeting in 2021;

- Contact centre and CRM:

- Functional testing of integration with SCADA/DMS/OMS system;

- Integration with the customer's mobile application - commissioning;

- Integration with the new DMS-Protocol system - test environment;

- Procurement application: design and development of a new application solution for monitoring the public procurement process, from the time of plan adoption to contract implementation; Procurement application in 2021 started use in production in all parts of EPBiH;

- Implementation of PP plan:

- Customised module for entering the PP plan in accordance with the requirements of the owner;

- Interruptions: development of an application in new technology (SpringBoot + ReactJS) for the use in production in early 2022;

- SOEE/SONN/SODM:

- Redesigned forms of bills for electricity, grid fees, and unauthorised consumption charges were put into production; improved transfer of analytical and synthetic data on bills issued between the SOEE and SAP systems;

- Program improved algorithm for registering payments from the post office and banks, which allows automatic loading and registering payments by transaction accounts at different organisational levels (subsidiary, OOiN), provided separate treasuries to register bank transfers for each transaction account within the subsidiary;

- New infrastructure for Oracle database operation:

- Completed installation, configuration, and commissioning of a new hardware-software platform (Oracle Database Appliance) dedicated to the operation of Oracle databases in the Directorate;

- completed migration of Oracle databases to the new version (SOEE/SONN/SODM, MDM, DISP, DEEO, PROCES, etc.);

- New information system for billing and charging in supply (Billing system):

- Adopted investment decision for the implementation of a new information system for the billing and collection of electricity in the Supply activity;

- Completed technical part of the tender documentation for the implementation of a new information system for the billing and collection of electricity in the Supply activity;

- DWH for supply – system modification – creation of a new box Contracts by transforming data from the SBA software for market contracting and SOEE; creating new interface tables with SPP; corrections of OT-2 reports in accordance with the analysis of amendments to the 8R report from SOEE;

- New information system for billing and collection in ODS:

- Completed document 'Functional requirements and integrations of the information system for billing, invoicing and collection in the distribution of electricity - Billing ODS with other systems';

- MDM system

- Implementation of MDM system upgrade - new version of MDM system;

- Implementation of changes in the code due to the upgrade of MDM database to a new version;

- Changes to MDM system regarding integrations with the DEEO system, due to the termination of DEEO-SOEE connection;

- Changes to the MDM system due to the upgrade of SEP2W system and configuration for new meter types;

- Changes to the MDM system regarding integrations with the mobile application for readers;

- Changes to the rules of MM affiliation through the correction of DISP/SOEE validation;

- Change of codebook for the measuring point category in accordance with the provisions of the General requirements for customers category;

- Change to the MDM system for entering a configurable number of allowed estimates during one year;

- Implementation of changes in the process flow of consumption billing in the MDM system;

- Implementation of process related to virtual measuring points in the MDM system;

- Changes in data retrieval between MDM systems and Backend mobile applications;

- Changes in MDM-DEEO integration (adding new data);

- Mobile applications for customers and readers
  - Implemented mobile applications for customers and readers, completed trial operation, internal technical acceptance, and release into production for the application for readers;
  - Completed part of upgrade of mobile applications for readers and customers;

#### **SCADA/DMS/OMS (SDO) and accompanying TK for ED subsidiaries**

SCADA/DMS/OMS and integrations:

- Delivery of data export from existing databases and unstructured sources: existing SCADA systems, DEEO, drawings of dispatch schemes;
- Editing existing data in the DEEO database for the SDO system;
- Commissioning of the system, intensive monitoring of all functionalities;

TK part of the project:

- Completed installation and testing of switches in 11 facilities;
- Completed installation and testing of optical cable sections for the connection of six facilities; 7 RR links and 40 digital radio modems installed.

#### **Other investments**

In the segment of other investments in 2021, out of the planned BAM 975 thousand, there were no investments.

#### **Coal mines**

For the recapitalisation of seven subsidiaries of coal mines in accordance with the decisions on recapitalisation, in 2021 the plan envisaged an investment of BAM 25.9 million, and BAM 8.05 million or 31.1% of the plan was effected for this period. By mines, investments in 2021 amounted to:

- Coal mines "Kreka" d.o.o. Tuzla BAM 8.045 million,
- Brown coal mine "Đurđevik" d.o.o. Đurđevik BAM 3.5 thousand.

There were no investments in other mines. For the implementation in 2022, in accordance with the already signed investment contracts, there is BAM 5.97 million left.

The most significant investments in subsidiaries of coal mines in 2021 were:

Coal mines "Kreka" d.o.o. Tuzla

- Expropriation of land of PK Dubrava and PK Šikulje BAM 636 thousand;
- Revitalisation of BTO and BTK complex PK Dubrave and PK Šikulje BAM 6.6 million;
- Construction of drainage wells with accompanying equipment BAM 809 thousand;

Brown coal mine "Đurđevik" d.o.o. Đurđevik

- Servicing for self-propelled impact-rotary drilling set BAM 3.5 thousand.

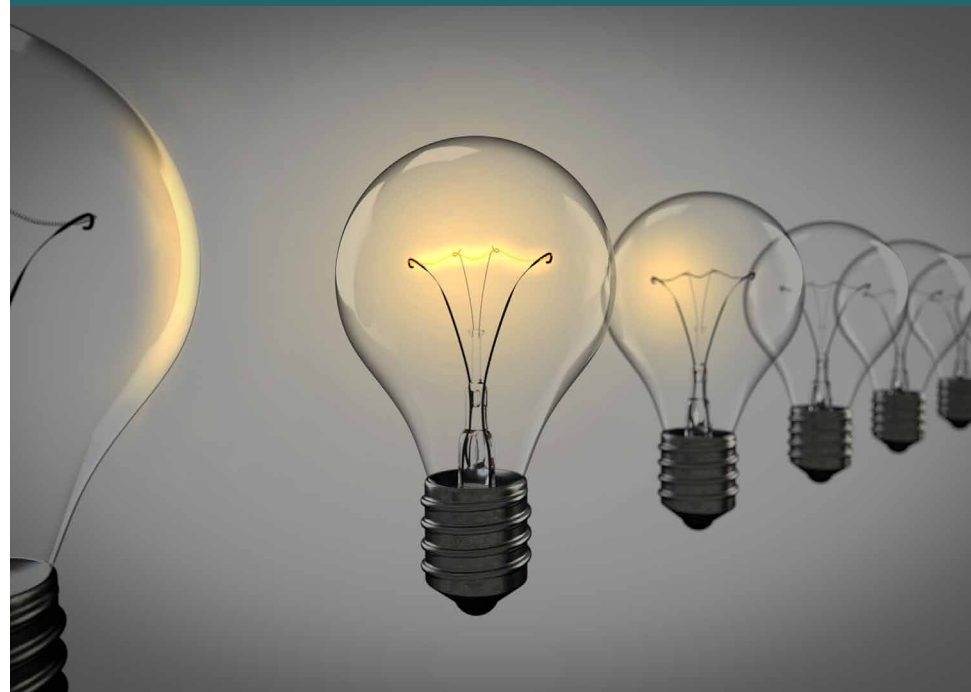
*lavni razlozi koji su onemogućili realizaciju plana ulaganja u ZD rudnike su:*

The main reasons that prevented the implementation of investment plan in ZD mines are:

- Strict application of the Law on Public Procurement, which prevents sufficiently efficient implementation of investments;
- Insufficient preparedness of mines to effect investments (lack of investment-technical documentation, organisational unpreparedness, lack of staff, etc.).

#### **New subsidiaries**

The business plan for 2021 (and Decision of the General Meeting of Company from July 2021) for the formation of new subsidiaries envisaged BAM 10 million. Pursuant to the Study of technical and economic justification for establishment, at the session of the General Meeting of Company held on 30 July 2021, a decision was made to establish a limited liability company GEOLP d.o.o. Kakanj, with the share capital of BAM 4.1 million. The founding capital was paid in and the new company was registered with the competent court in September 2021.





## 9. PROCUREMENT REPORT

*The total value of contracts concluded by EPBiH in 2021 is BAM 336,217,131, of which:*

- Concluded contracts for the needs of EPBiH, which were entered into the SAP system, in the amount of BAM 332,851,408;*
- For the needs of subsidiaries of the coal mines, under the decisions on the recapitalisation of mines, carried out procedures for which directors of the mines concluded contracts in the amount of BAM 3,365,723.*

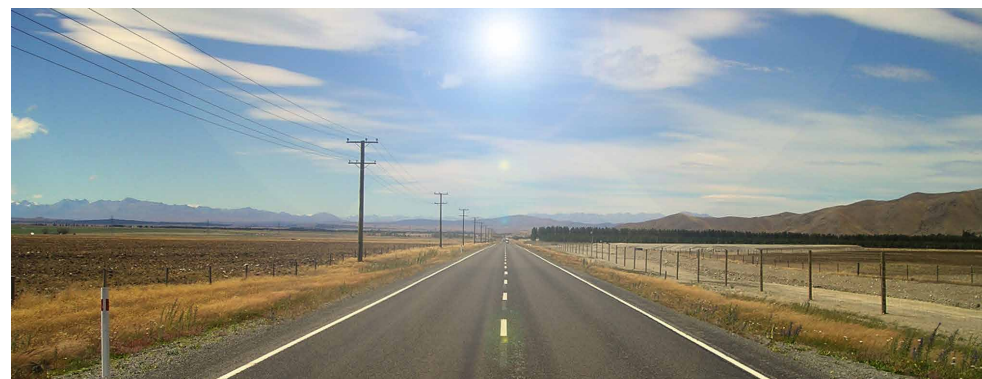
## I Overview of concluded procurement contracts in 2021 for the needs of EPBiH

Type of procedure	Number of procedures	Value in BAM	% of value
Direct agreement	1,171	1,470,627.32	0.44%
Competitive procedure with publication	242	2,194,660.25	0.66%
Negotiated procedure with publication	33	21,875,337.74	6.57%
Negotiated procedure without publication	24	120,905,853.21	36.32%
Open procedure	1,567	71,945,044.77	21.61%
Limited pre-qualification procedure	-	-	-
Contracts awarded under special scheme	29	1,599,196.15	0.48%
Procurement from subsidiaries	77	112,491,061.40	33.80%
Exemption from application of the LPP	300	369,627.57	0.11%
<b>TOTAL:</b>	<b>3,443</b>	<b>332,851,408.41</b>	<b>100.0%</b>

EPBiH concluded contracts in the amount of BAM 72.84 million through an open procedure (1,567 procedures), which is 45.51% of the total number of concluded contracts in 2021. The number of open procedures, as the most transparent, has increased compared to 2020 (30 procedures more compared to the previous year).

For Procurements from subsidiaries, 77 procedures were completed, which makes 33.8% of the total value of EPBiH procurement, with the majority of values referring to coal procurement contracts from six subsidiaries of mines within the EPBiH Concern. From BAM 112.49 million value of procurement from subsidiaries, approximately BAM 99 million refers to coal procurement, and with other subsidiaries we have concluded contracts for the delivery of goods/services/works in the following total amounts:

1. Iskraemeco d.o.o. Sarajevo – BAM 7.5 million
2. Eldis-tehnika d.o.o. Sarajevo – BAM 5.57 million
3. TTU Energetik d.o.o. Tuzla – BAM 0.4 million



procurement value, or 0.7% of the total number of concluded contracts in 2021. By analysing the value of concluded contracts, it can be determined that these are mostly procedures and contracts related to coal transport by the FBiH Railways in the value of approximately BAM 23.2 million; then, procurement of coal from RMU “Banovići” and RU “Gračanica” in the value of BAM 77.1 million. Also, it is important to note that for the delivery of coal we have concluded 2 contracts under this procedure with the company EFT-R Stanari in the amount of BAM 17 million. The remaining value under this procedure includes commercial procurement of specific goods/services/works, which were carried out in accordance with the Law on Public Procurement.

Exemption procedures from the LPP mainly refer to contracts concluded on the basis of legal monopolies, such as publication of notices in the Official Gazette, and other legal monopolies (use of the FBiH property cadastre database; ACC TAG supplementation services for the Directorate’s vehicles, etc.); video production services, etc., all in accordance with the exceptions defined by the Law on Public Procurement.

## II Overview of concluded contracts on procurement of goods/services/works for ZD mines

Type of procedure	Number of procedures	Value in BAM	% of value
Open procedure	6	3,365,722.60	100 %
<b>TOTAL:</b>	<b>6</b>	<b>3,365,722.60</b>	<b>100.0%</b>

The Sector for Commercial Affairs in EPBiH contracted procurement for the needs of ZD mines, in connection with the decisions on recapitalisation of ZD mines from the funds of EPBiH. The value of these procurements is BAM 3.36 million, of which the complete procurement was carried out through an open procedure, and all for the needs of RMU "Kreka".

We particularly emphasise the procedure for procurement of goods under the Qualification System (shown on the Portal as a negotiated procedure with the publication of notices), for the activity of Electricity generation, including fuel (crude oil, diesel fuel, fuel oil), where we achieved significantly lower prices compared to previous open public procurement procedures, which we carried out on the principle of 'variable price'.

Also, under to the qualification system in 2021, the procurement of goods for the needs of the Distribution activities was completed successfully, as follows:

- Concrete accessories (columns and concrete pipes);
- Cables (self-supporting cable bundles and power cables);
- Connecting and suspension material (various clamps, connectors, bushings, etc.).

In 2021, we had a large number of complaints, most of which were irregular complaints of individual bidders who constantly complained about the tender documentation, changes in the tender documentation, selection decisions, etc., without making payments to initiate appeal procedures. This means that such bidders did not have serious intentions to correct the documentation, but the sole goal was to delay the procurement procedures. All this significantly hindered the implementation of the Procurement Plan in 2021, especially in the activity of Electricity Distribution.

An example is the Company's Directorate, where out of 128 resolved complaints, there were as many as 74

irregular complaints, and in 29 complaints the bidders did not appeal to the second instance authority, which shows that the bidders did not have serious intentions to resolve their complaints. The Complaints Review Office upheld 14 complaints and declared 11 appeals unfounded..

In the Company's Directorate for procurement, under the Decision on recapitalisation of the mines, of nine resolved appeals, two were irregular; five appeals were upheld by the Appeals Review Office, and one appeal was rejected as unfounded, while in one case the bidder withdrew its appeal.

When it comes to public procurement (centralised and decentralised) for the needs of EPBiH in 2021, the total of 361 appeals were filed by bidders, of which:

- In the Company's Directorate for centralized procurement - 140 complaints;
- In the Company's Directorate for procurement under the Decision on recapitalisation of mines - 9 complaints;
- In the Company's subsidiaries, on decentralised procurements in the Production activity - 86 complaints;
- In the Company's subsidiaries, on decentralised procurements in the Distribution activity - 126 complaints.







## 10. ENVIRONMENTAL PROTECTION

*EPBiH and its subsidiaries are determined to act responsibly in all their business activities, taking into account environmental impacts and compliance for the principles of sustainable development. We strive for continuous progress in the application of environmental protection standards and, in parallel with the development of business operations, we strive to reduce the negative impact on the environment and, therefore, meet the defined business objectives. In 2021, the implementation of plans for the protection of environment and natural resources continued within the competent services in the Company's Directorate and its subsidiaries, as well as expert teams that are formed in accordance with the current issues.*

## Monitoring of international and domestic legislation

EPBiH continuously follows international and domestic legislation and reports in a timely manner on the resulting obligations. Its activities of the Energy Community in the legal acquis for environmental protection issues, through membership in the working group for the environment of EnC.

## Environmental and water permits

In 2021, the implementation of activities ordered in valid environmental and water permits in the production and distribution subsidiaries of the Company continued.

## Capital projects

### HPP "Kovanići"

Continuous monitoring of groundwater levels on installed piezometers continued in 2021.

### Unit 8 in TPP "Kakanj"

Updating investment-technical and environmental documentation for the replacement Unit 8 of TPP "Kakanj".

### Unit 7 in TPP "Tuzla", HPP "Janjići" and HPP "Vranduk"

Development of an application for the issuance of environmental permit - renewal

## Preparation of planning and study documents

In the segment of study and planning documents in 2021, the following projects/studies were completed:

### Development projects:

- Feasibility study for the construction of photovoltaic power plants in the free mine areas of the EPBiH Concern and slag and ash dumps of TPP EPBiH - PVPP "Gračanica" + revision
- Feasibility study for the construction of photovoltaic power plants in the free mine areas of the EPBiH Concern and slag and ash dumps of TPP EPBiH - PVPP "Kreka" + revision
- Feasibility study for the construction of photovoltaic power plants in the free mine areas of the EPBiH Concern and slag and ash dumps of TPP EPBiH - PVPP "Divkovići" + revision

- Feasibility study of investment in a photovoltaic power plant for own needs for the Lukavac Cement Factory
- Analysis of CO2 emission fee schemes with a proposal of optimal sustainable scenario for EPBiH - Study
- Analysis and projections of coal needs in EPBiH until 2050 with a projection of the mine closure dynamics - Study
- Establishment of energy management system in all activities/parts of EPBiH in accordance with ISO EN 50001
- Establishment of the Institute for Energy, Climate and Environment - Study
- Feasibility study for the construction of photovoltaic power plants in the free mine areas of the EPBiH Concern and slag and ash dumps of TPP EPBiH - PVPP "Kakanj" Bijele Vode + revision
- Feasibility study for the construction of photovoltaic power plants in the free mine areas of the EPBiH Concern and slag and ash dumps of TPP EPBiH - PVPP "Gornja Breza" + revision
- Possibilities for energy crops/biomass plantations on the mine land of the EPBiH Concern - Preliminary study with the master plan of activities
- Development programme for the use of SRF/RDF alternative fuels in EPBiH: Possibility of using SRF/RDF alternative fuels in EPBiH thermal power plants within the framework of sustainable economic and technological parameters and environmental regulatory requirements
- Development of a logistic study on procurement, transport, quality, and long-term supply of SRF/RDF
- Implementation plan for the introduction of biofuels/alternative fuels EPBiH (I. SRF/RDF, II. Waste wood biomass, III. Fast-growing biomass).
- Baseline study of the application of hydrogen in energy

### WPP "Podveležje"

Final activities in the construction of WPP "Podveležje", functional tests, commissioning, test of compliance with the Grid Code, power curve test.

## Environmental management system

### TPP "Tuzla"

IMS internal audits were conducted in January, February, and March 2021. The result of internal audits showed the need for corrective actions and improvements in some processes.

On 7, 8 and 9 September 2021, ICS d.o.o. Sarajevo conducted a control audit of the Integrated Business Quality and Environmental Management System in TPP "Tuzla", in accordance with the requirements of ISO 9001:2015 and ISO 14001:2015 standards.

All activities in the Sector for Management Systems were carried out with the application of preventive measures to prevent the spread of coronavirus (COVID-19). ICS d.o.o. Sarajevo issued a Certificate for an integrated business quality and environmental management system, valid until 26 September 2024.

### TPP “Kakanj”

TPP “Kakanj” is certified in accordance with the requirements of BAS EN ISO 14001:2017 standard.

Compliance of the environmental management system with the requirements of this standard implied the introduction of the following principles:

- Employees are continuously informed about the importance of meeting legal environmental requirements;
- Define and make public the environmental policy;
- Define environmental objectives.

### HPPs on the Neretva

The Integrated Management System (ISU) Improvement Programme for 2021 was developed, in accordance with which the following activities were carried out:

- Management review of ISU documents was carried out by the management in December 2021;
- Internal audit was conducted in all plants/sectors in May and June 2021;
- Analysis of environmental aspects related to the process of electricity generation in plants/sectors was performed in January 2021;
- Evaluation of compliance with legal and other environmental requirements was performed in October 2021;
- Quality targets and environmental targets for 2021 were developed in April 2021.

ICS submitted the report on the conducted supervisory audit of the Integrated Management System (IMS) in the subsidiary “Hydro Power Plants on the Neretva” Jablanica - Institute for system certification under the requirements of ISO 9001:2015 and ISO 14001:2015, which took place from 15 December 2021 to 16 December 2021.

### ED Tuzla

The first supervisory audit of the Environmental Management System BAS EN ISO 14001 was performed in June 2021, with the System audit under ISO 9001, which together make up the Integrated Management System – IMS. The subsidiary works continuously to improve the relationship with the environment, through a systematic approach to waste management, control of environmental aspects, identification and application of legislation, fulfilment of defined environmental goals, and corrective measures.

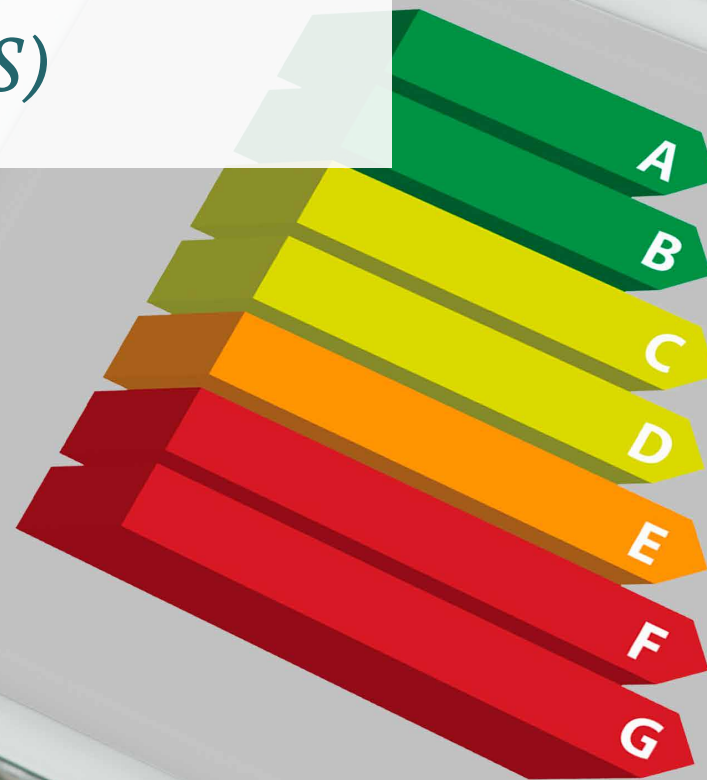


Environmental management, which was recognized as a separate process, was evaluated in terms of determining the context of the organisation and potential risks, and measures for identified risks and opportunities were considered.

### ED Sarajevo

The quality management system certificate, obtained in accordance with the requirements of ISO 9001:2015, from the company Institut za certificiranje sistema d.o.o. Sarajevo is valid until 9 July 2022. In 2021, the second supervisory audit was conducted. In environmental management, the subsidiary works continuously to improve the relationship with the environment through a systematic approach to waste management and the application of legislation. The goal is to build an integrated management system - IMS.

# 11. REPORT ON INTRODUCTION OF ENERGY MANAGEMENT SYSTEM (ENMS)



EPBiH is implementing the energy efficiency management process in its organisational units in accordance with previous decisions on the establishment of an energy efficiency management structure. Due to the growing need to increase energy efficiency and energy savings in generation (with a focus on own consumption and specific heat consumption as key energy indicators), distribution (reduction of grid distribution losses), and consumption (particularly in households, but also in industry), in order to achieve direct financial effects and reduce negative impact on the environment, as well as to reduce CO<sub>2</sub> emissions and related financial obligations, it is necessary to improve the energy management system throughout the organization of EPBiH and comply it with the requirements of the Energy Management System ISO 50001. In this regard, in 2021, we worked on conducting energy audits in all activities and parts of the EPBiH Consortium and establishing key energy indicators in parts where they have not been established (EPBiH PTZ Directorate, Supply, Mines), and defining measures to improve monitoring and improvements in energy indicators. The energy management system now needs to be continuously and strictly implemented in short and long term frameworks in all activities/parts, with documentation of the whole process, through goal setting instruments, and planning and implementation of improvement measures, with clear quantified and ambitious goals for energy efficiency and energy savings.



Regarding the key energy indicators of Production and Distribution in 2021, some improvements have been achieved compared to 2020. The total **specific heat consumption in TPP EPBiH in 2021 was 11,737 kJ/kWh (net efficiency 30.67%)** and it is **180 kJ/kWh or 1.50% better** compared to 2020. **Grid losses in Elektrodistribucija EPBiH in 2021 were 7.78%** with reference to gross energy, which is fully in line with the electricity balance for 2021, and they are slightly improved than in 2020 when they were **8.0%**. Finally, it should be emphasised that **sales to end customers (total supply) in 2021 were 5,004.3 GWh and 149.0 GWh, or 3.1%, higher than the planned, and 179.7 GWh or 3.7% higher than in 2020.**

With the aim of continuing the management of energy performance and successfully completing the process of construction and implementation of the Energy Management System in all organizational parts of the EP-BiH Consortium, i.e. in the activities of Production, Distribution, and Supply, as well as in mines and other subsidiaries in 2022, the following is proposed:

- 1. Continue monitoring energy indicators in all activities/parts of EPBiH, with further monitoring and improvement of energy performance;**  
.....
- 2. Complete the audit (certification of EPBiH according to the EN ISO 50001: 2018 standard by the accredited company) of PTZ Directorate of EPBiH;**  
.....
- 3. Complete, under the existing master plan the construction and implementation of energy efficiency management systems in accordance with the requirements of ISO 50001 and integration with the existing management systems in Production, Distribution, Supply and Mines, in line with the organisational conditions and applicable standards. Make preparations (hire accredited companies) for pre-audit and audit (certification under EN ISO 50001:2018 by an accredited company) in Production, Distribution, Supply, and Mines.**

# Summary

***In 2021, EPBiH generated total income of BAM 1 billion and 123.47 million, profit before tax of BAM 14.0 million, which is a better financial performance than the planned and achieved in 2020.***

The main determinants of EPBiH operations in 2021 are:

- Electricity generation of 6,677 GWh, which is an increase compared to 2020 and the electricity balance;
- Regular supply of end customers, as well as contracted long-term deliveries in the trade activity;
- Completion of construction of WPP "Podveležje" and significant investments in distribution and generation;
- Investment of more than BAM 100 million in own activities and ZD mines;
- Liquid operations and provision of support to maintain the liquidity of ZD mines;
- Active participation in the regional electricity market and the market of ancillary services in BiH, with enviable effects based on the purchase and sale of electricity and provision of ancillary services.

*In 2021, the total electricity generation was 1.9% higher than projected by the EEB, and 7.0% higher compared to 2020. Generation in hydropower plants was higher than planned and EEB, and the share of hydropower in total electricity generation was 25.9%. Total electricity consumption was 2.8% higher than balanced.*

*The total income from electricity sales was higher than planned, in the supply of end customers and market sales, mainly due to higher generation in hydropower plants, which resulted in higher short-term sales and higher sales prices for short-term sales.*


*EPBiH has remained one of the largest investors in BiH, with investments exceeding BAM 100 million, although the investments were significantly lower than planned due to objective and subjective reasons. In addition to significant investments in capital investments and distribution and generation activities, BAM 8 million was invested in subsidiaries of mines through recapitalisation. In the process of restructuring the mines, a new subsidiary GEOLP d.o.o. Kakanj was formed.*

*At the beginning of the year, the construction of the first wind power plant owned by EPBiH, WPP "Podveležje", was completed, and in March 2021, commercial generation began in the wind power plant, which, observed through the market value of generated energy, resulted in better effects than expected.*

*Preparatory works in the construction site of Unit 7 of TPP "Tuzla" have been completed. For the implementation of project for the construction of Unit 7, EPBiH has fulfilled all the necessary preconditions and obligations under the dynamic plan.*

*Within the activities to change the organisation, a new Rulebook on the organization of the Company was adopted in January 2021, where the activities of Production and Supply were separated from the ED subsidiaries. This is an additional step to separate the distribution activity from other electricity activities, which is an obligation under the Law on Electricity in the FBiH and European directives.*

*In 2021, EPBiH remained one of the largest taxpayers in Bosnia and Herzegovina and the Federation of BiH - for VAT on monthly VAT returns, it reported and paid a record BAM 92.0 million of VAT liabilities (as the difference between output and input VAT). About BAM 42 million of various duties was paid for generation in hydropower plants and thermal power plants.*



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