CLEAN ENERGY OF TOMORROW

Opportunities in the Czech Republic

October 2023

www.cez.cz/en

Cleantech

CEZ is a leading Czech utility, we have ambitious plans and are looking for partnerships in the cleantech space

CEZ in Numbers

Top 10 EU Energy Utility Company

70%
state-owned
30% traded

70%
of total energy supplied in Czechia

3.2 m
total customers

6 GW
new renewables capacity target by 2030

~34,5 TWh
annual CO_2-neutral energy production (62%)

~1 000
charging points in Czechia by 2025

Li
majority shareholder in vast lithium mining project

Ambitions & Plans of CEZ

- CEZ is one of the largest companies in the Czech Republic, both from a financial and headcount perspective, and is in the top 10 EU energy companies:
  - 2.5 bn EUR EBITDA, with strong growth expected in the coming years
  - CEZ has significant ESG ambitions and targets building 1.5 GW of new renewables capacity by 2025 and 6 GW by 2030
- CEZ is accelerating development in key strategic areas
  - Transformation of the generation portfolio to low-carbon in line with the Paris Agreement
  - Providing cost-efficient energy solutions and best customer experience in the market
  - **Strong push into new strategic projects in the cleantech space,** such as green lithium mining and projects in the battery value chain

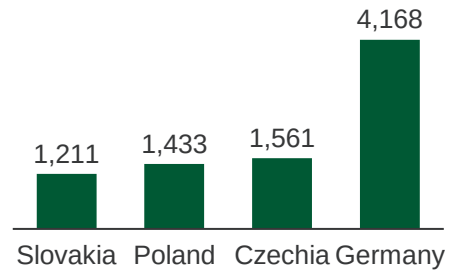
CEZ is looking for partners for innovative cleantech projects – high-quality brownfields and skilled labor are available

Cleantech Opportunity

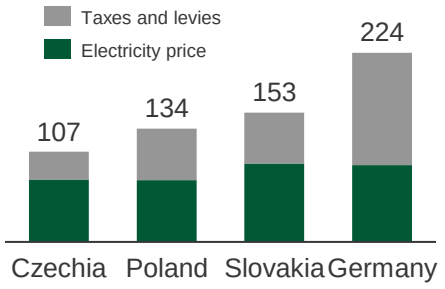
- CEZ is currently heavily focused on investments in the battery, lithium and PV space – **we are looking to further invest in other cleantech areas** such as heat pumps, wind, smart meters and others
- We offer a strong focus on sustainable technology solutions and green supply sourcing – potential synergy with CEZ's local lithium mining project and renewable energy activities
- Attractive national and European investment incentive schemes available to significantly reduce the required capital for the project
- Very flexible investment structure **from joint-venture to outright sale or rental of the industrial site**

Competitive Advantages of the Czech Republic

- Availability of **technically feasible brownfield land plots** with skilled workforce in regions with huge transformation potential
- **Highly competitive state aid** for coal-transitioning regions – all the preselected sites lie in these areas and are thus eligible for higher incentives
- The Czech Republic ranks as one of the **lowest** in **gross salaries** and **electricity costs** for industrial customers in Europe



Average gross monthly salaries*
[EUR/month]



Electricity costs**
[EUR/MWh]

* Statistical Offices of individual countries, Eurostat; ** Non-household consumers, H1 2021, Eurostat

CEZ brings added value during all phases of the project, from green energy and local knowledge to potential offtake

Development

Offtake, Permitting, Financing

- Securing a suitable site
- Broad experience with all relevant permitting and regulatory questions, deep local knowledge that help expedite the process
- Organization of subsidy financing – we expect significant public support to be available in the coming years
- Management of the development project
- Negotiation of favorable debt financing options
- Support in the negotiation of offtake contracts
- Capital in the form of equity investments

Construction

Construction | Equipment Installation & preparation for SoP

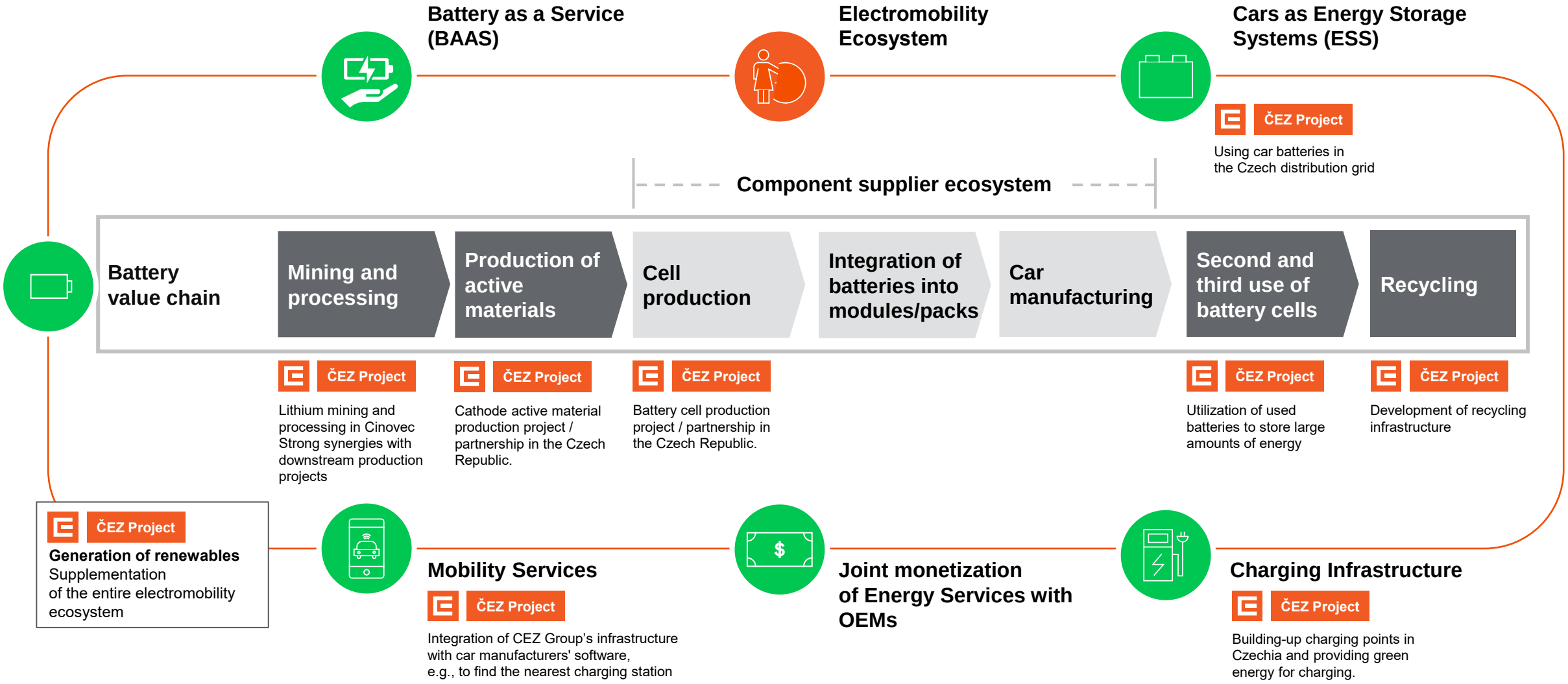
- Assistance in infrastructure construction
- Local HR and administration support
- Assistance with waste disposal
- Possible assistance in energy infrastructure & systems construction through internal capacities
- Supplying sufficient and skilled workforce
- Securing water and power supply
- Capital in the form of equity investments

Production

Production ramp-up

- Supply of green energy
- Complete energy management through internal capacities
- Assistance in supply chain logistics and contracts with Czech companies
- Supplying sufficient and skilled workforce
- Securing water and power supply

CEZ has already started developing the battery value chain in the Czech Republic

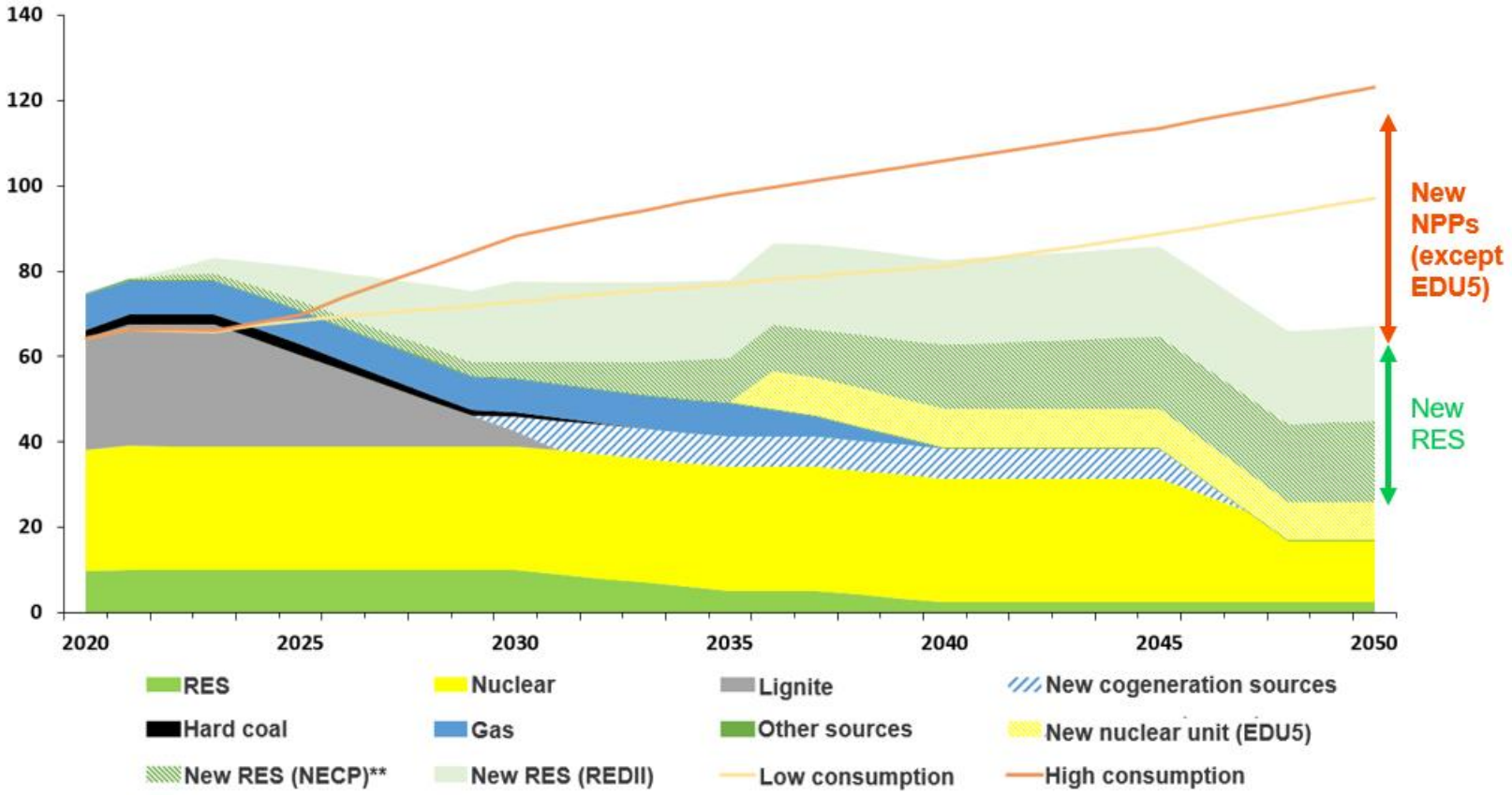


SMR

CZECH GENERATION ADEQUACY – ACHIEVING LONG-TERM GENERATION THROUGH RES & NUCLEAR NEW BUILDS INCL. SMR

Electricity generation and consumption outlook

TWh (net generation; consumption*)



- Electricity demand will increase significantly due to the transport and heating sector electrification and also due to the hydrogen generation (lower consumption scenario assumes low transport and heating sector electrification and no hydrogen production)
- In 2050 only NPP Temelin and hydrogen sources remain in operation
- To fulfill the EU goals (Fit-for-55 and REPowerEU) by 2030 RES capacity will grow rapidly, mainly photovoltaics
- **Deficit 30–55 TWh arises**

- EDU 5 alone will not be sufficient to cover future demand even when taking into account the growth of RES
- Need for resources:
  - RES, incl. wind turbines
  - **NPPs, incl. SMR**

* Final consumption incl. losses in the grid and hydrogen production
** NECP scenario by 2040, then growth rate of 2035–2040

Note: Generation – consumption balance does not take into account the power-load balance hour by hour.

SMR PROGRAM WITHIN ČEZ GROUP

"Opportunity study of SMR development in the Czech Republic" was approved by ČEZ board of directors in April 2022 (incl. the acceleration of SMR Temelin project)

Operation of SMR ETE from 2032

Operation of SMR units on other sites from 2035

Compliance with the given deadlines is only possible under following conditions:

- New NPP construction program (large units and SMRs) must become a **priority of the state and all relevant state authorities – coordinated approach and willingness to seek solutions**
- An urgent **change in legislation is necessary** to speed up the preparation of new NPP projects (Climate Act, Construction Act, Atomic Act,...)
- To accelerate the preparation of permit and license documentation, it is necessary to **choose a technology partner by the Q2/2024** (close cooperation of the state is necessary)
- The state must declare the new NPP construction program as a security interest of the state
- Long-term stable financing of the SMR projects must be ensured
- Immediate start of the **staffing program** for all relevant stakeholders (investor team, operations, state administration bodies, suppliers, ...)

AIMS AND AMBITIONS OF THE CEZ IN THE FIELD OF SMR

- ČEZ has ambitious goals in SMR deployment in the CZ (3000 MWe) in installed capacity by 2045.
- We are therefore looking for a robust and strategic technology partner that has similar vision and is aligned with our plans and expectations.
- We aim not only for the domestic market but also for possible close cooperation abroad.
- We have identified 7 potential technology partners, we are engaged in close discussions with 4 of them.
- We are offering an ambitious Action Plan to finalise the selection of the technology partner by the **Q2/2024**, but preferably sooner.
- We are ready to set up 5 Working Groups governed by the Joint Steering Committee, providing the framework and steering the activities, approving individual steps and monitoring the objectives aimed at the successful conclusion of the partnership between the stakeholders.

CONSIDERED SMR PROJECTS FOR THE CZECH REPUBLIC

in an alphabetical order

BWRX-300 (USA, 300/870 MWe/MWt), BWR
GE Hitachi

NuScale (USA, 77/250 MWe/MWt per module), PWR
NuScale

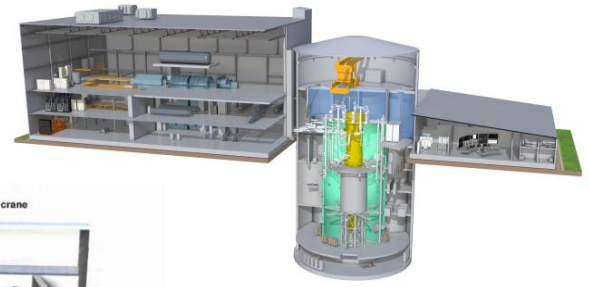
Nuward (2x 170/540 MWe/MWt), PWR
EdF

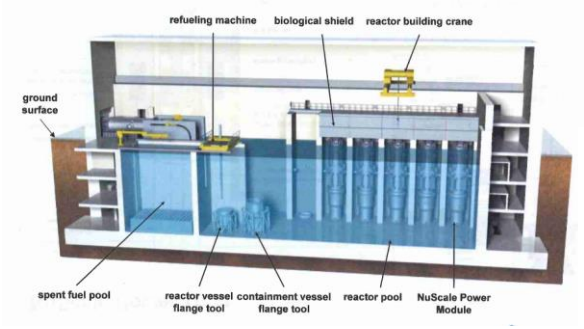
iSMR (Korea, 4x 170/540 MWe/MWt), PWR
KHNP

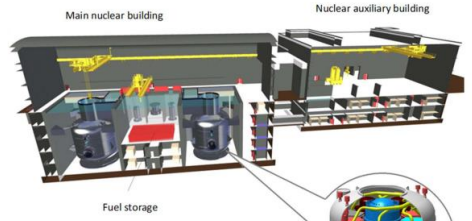
SMR-160 (USA, 160/525 MWe/MWt), PWR
Holtec

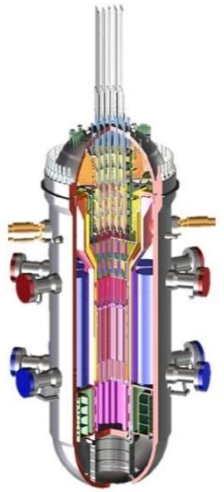
UK SMR (UK, 470/1276 MWe/MWt), PWR
Rolls Royce

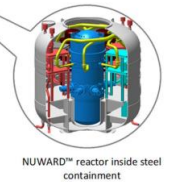
AP 300 (USA, 300/900 MWe/MWt), PWR
Westinghouse

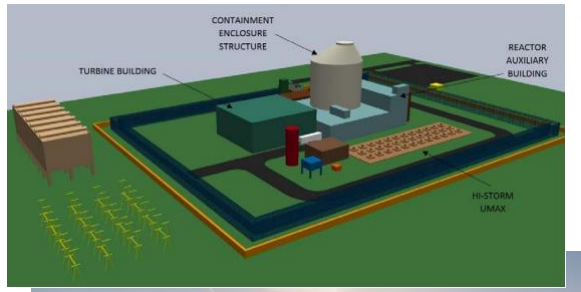










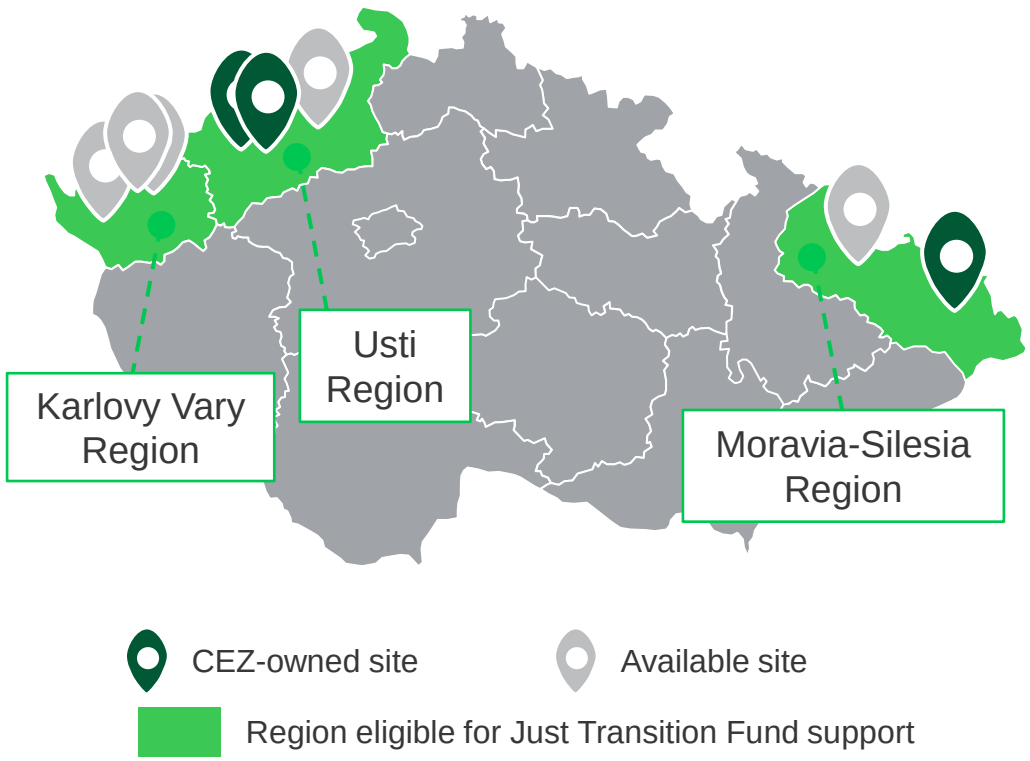


Backup

CEZ owns several suitable project sites with industrial zoning in the Czech Republic

SITE

Overview of Industrial Zones



Site Specifications

- Sites with **appropriate size** and **industrial zoning**
- Appropriate **energy supply** and reliable power grid, stable electricity price environment
- Existing **authorizations in place** to start the investment
- Sufficient utility availability (gas, water, heat)
- **Sites availability 2023+**
- Ongoing transition of economy and organized coal mines closures leading towards skilled labor availability in the selected areas
- These regions have low GDP compared to the European average, which qualifies them for **higher investment support**
- Sites located in transitional regions – availability of further EU incentives from the **Just Transition Fund**

The Czech Republic can offer one of the highest possible incentives in the EU, CEZ owns sites in the most supported regions

SUBSIDIES

Regional State Aid

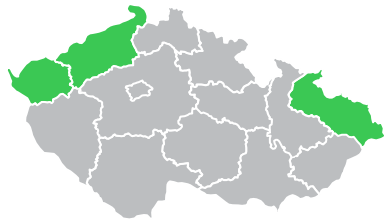
- Revised European state aid guidelines (in effect since 1/1/2022) allow member states to provide much **higher incentives** to investment projects then before
- The incentive level is dependent on the GDP of the given region

Regional GDP	Maximum support
GDP <= 55% of EU27 average	50%
GDP <= 65% of EU27 average	40%
GDP > 65% of EU27 average	30%

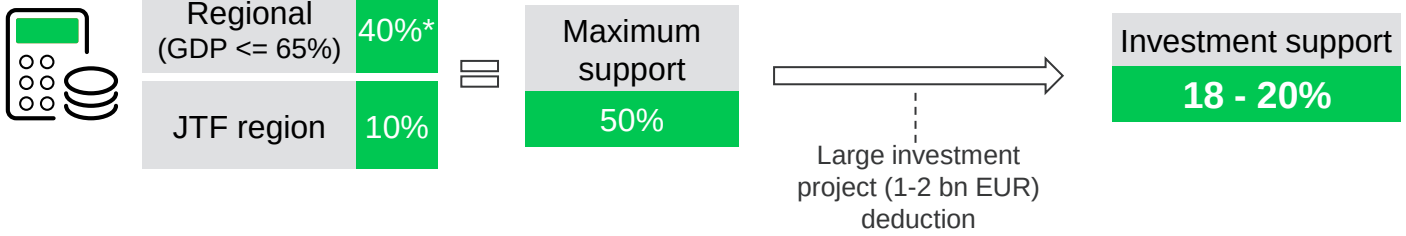
- No limitations on the structure of the support structure
- Large investment projects above 50 mil. EUR are limited by a reduced support, which is calculated from the maximum support level

Just Transition Fund

- A key instrument for implementing the European Green Deal, providing grant support to coal-dependent regions
- Selected regions in the Czech Republic will benefit from the fund, which results in a **+ 10% increase** to the maximum allowed support level**



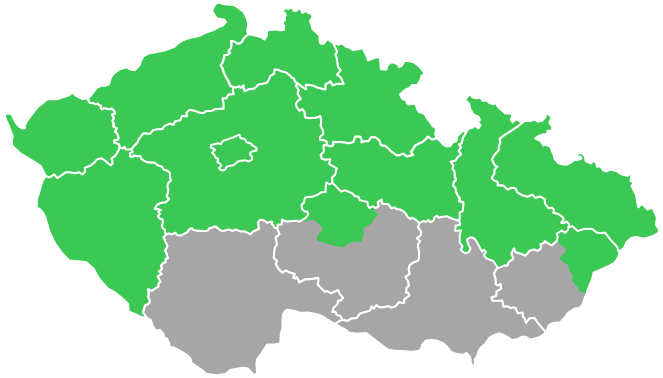
JTF regions



CEZ has experience and extensive channels to attract and recruit sufficient labor

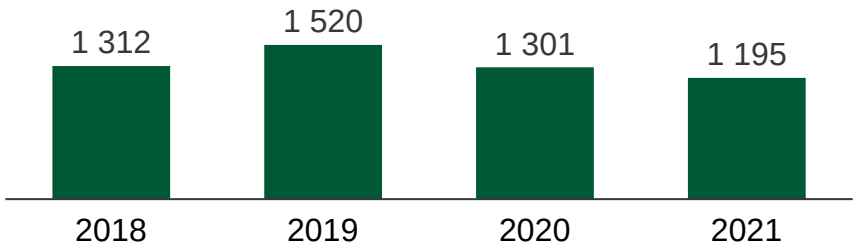
HR

CEZ Presence in Czechia



Strong CEZ Presence – CEZ Distribution / main generation areas

Number of New Employees per Year



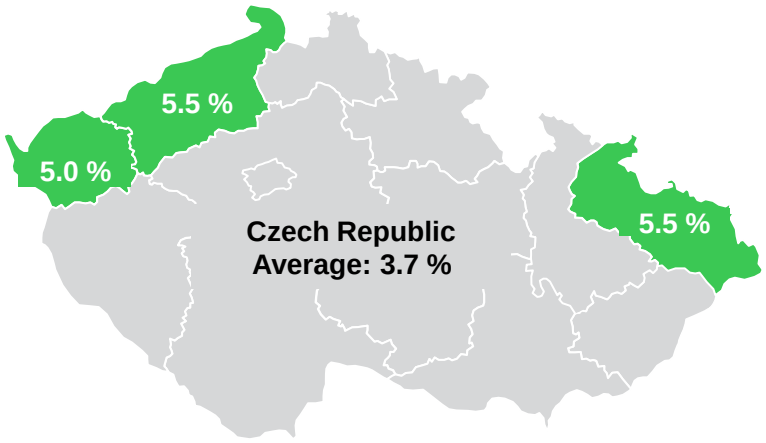
CEZ Human Resources Highlights

- CEZ ranks among **the most desired workplaces** with strong credibility in the region
- Ability to attract an extensive number of various employees (engineers or laborers)
- Ability to create a stimulating and supportive work environment
- Ability to **retain and develop talented individuals**
- Real commitment to the welfare of CEZ employees, resulting in **high staff satisfaction** levels and a well-motivated, ambitious and integrated workforce
- Received the **Employer of the Year award** for numerous years
- CEZ employees are 99.18% of Czech citizens, 0.66% of Slovaks and 0.16% other nationalities totaling **33 000 employees**
- CEZ **cooperates** with High schools and Universities
  - Strategic recruitment team
  - Partnership with High schools and Universities –Summer university, two-weeks internship, CEZ Experience
  - Core activities for students, Trainee program
  - Overall 40 high schools, 1000 students, 281 candidates

The selected regions have the most favorable HR conditions in the Czech Republic for the establishment of a large industrial project

HR

Czech Regions and Unemployment Levels



JTF regions

X.X % Unemployment Rate

Regional HR Conditions

- Regions with above average unemployment rates and **below average gross salaries**
- **Sufficient available workforce** and social infrastructure to cover the project's demands
- Upcoming transition to renewable energy and e-mobility will add tens of thousands to available workforce
- The regions traditionally **orientated towards the manufacturing** sector providing the technically skilled labor
- Transitioning coal-regions eligible for **higher investment support** and with reskilling plans in place
- Many technical high schools and universities in the area – possible cooperation/opening of new study programs

CEZ can provide various options for green energy sourcing

GREEN ENERGY

CEZ Carbon-Free Portfolio & Plans

Renewables

- Currently **2.2 GW** of renewables in operation
- CEZ will add **1.5 GW** of renewables by **2025** and **6 GW** renewables by **2030**
- Plan to install capacity of **energy storage** to at least **300 MWe** by **2030**

Nuclear

- Operational nuclear generation volume of **30 TWh**
- The production in existing plants **above 32 TWh** on average with 60-year operating life
- New nuclear plant in Dukovany in preparation

Hydrogen

- Engagement in the whole hydrogen value chain
- Ambitions to become a key player
- Strong focus on green hydrogen production

Green Energy Sourcing Options

On-site Generation

- Install a renewable energy system on or near the factory site with a direct power connection line
- Typically rooftop solar solutions or on neighboring premises
- Achievement of savings on the distribution fees

Power Purchase Agreements

- Long-term contracts (typically 10+ years) from a specific off-site renewable energy project pre/post-development
- Extensive options and flexibility available (real-time matching, geographical/technology options etc.)

Guarantees of Origin

- Procure and redeem Guarantees of Origin bundled with or unbundled from power supply contract
- Offset non-renewable energy supply through the redemption of Guarantees of Origin

POSSIBLE SMR SITES IN THE CZECH REPUBLIC

SMRs are not competitors with large units but can be significant contributors to the energy mix as a substitution for coal-fired power plants.

Current nuclear sites

- Temelín (ETE)
- Dukovany (after EDU1-4 is out of operation)

Brownfield sites (Currently being developed)

- Tušimice (ETU)
- Dětmarovice (EDE)

Brownfield sites (Serving as a back-up)

- Mělník (EME)
- Prunéřov (EPR)
- Ledvice (ELE)