



## Overcoming barriers to unlock potential for a Just Transition in Czechia

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#### 1. An energy transition that is also a just transition

The energy transition focuses on the swift and full decarbonization of our economies by moving away from fossil fuels such as coal, natural gas and oil towards carbon-free and preferably renewable energy sources such as wind, solar, geothermal, bioenergy and hydropower. The global community agreed to limiting the global average temperature to 1.5C to prevent worsening of potentially irreversible effects of climate change.<sup>1</sup>

The impacts of the climate change have become increasingly apparent in the past years, as the extensive greenhouse gas emissions, particularly carbon dioxide and methane, released by burning fossil fuels are warming our atmosphere more than necessary. This warming is taking a catastrophic toll on our planet and our daily lives and is getting worse every year. The European Environmental Agency warns of extreme drought, flooding, heatwaves and forest fires across Europe.2 These events are increasing in frequency and intensity because of climate change and are causing significant damage and loss. In the summer of 2022, over 60 000 people died from heatwaves3, an area more than twice the size of Luxembourg burned in forest fires4, the bed of the river Loire dried up completely forcing nuclear power plants in France to close down and Czechia experienced flash flooding over summer which destroyed people's property, infrastructure, human health and food costing billions in damages. These are just a few examples showing how Europe and Czechia are ill-prepared for the consequences of climate change.

According to the scientists, rapid decrease in fossil fuels consumption can slow down global warming. But it is a complex process and requires all parts of the society to shift their business-as-usual lifestyles, which currently evolves around fossil fuels in different forms – energy whether it is to turn our lights on, heat our homes, drive our cars or as a feedstock to produce chemicals, which are in things we use daily from clothing, cosmetics, pharmaceutical products to food.

The energy transition not only aims to avert catastrophic impacts of the climate change it also offers tremendous opportunities, but only if it is done right. It needs to happen in a fair and inclusive way. And that is how the 'just transition' principle has been gaining traction (Box 1). The European Union (EU) and other countries and regions around the world are using the term more and more often in their official communication.

#### Box 1: The concept of the Just Transition

The concept of the 'Just Transition' dates back to 1980s when it was linked to the US trade unions and labour and environmental activists and their fights for a creation of a 'just transition' funding scheme for workers exposed to toxic pollution at their jobs to receive minimum income and education benefits to enable them to transition to different careers. 5 The concept then evolved

<sup>&</sup>lt;sup>1</sup> https://unfccc.int/sites/default/files/english\_paris\_agreement.pdf

<sup>&</sup>lt;sup>2</sup> https://www.eea.europa.eu/en/topics/in-depth/extreme-weather-floods-droughts-and-heatwaves

https://www.france24.com/en/europe/20230710-europe-s-summer-2022-heatwaves-killed-61-000-people

<sup>4</sup> https://ec.europa.eu/commission/presscorner/detail/en/IP\_22\_6465

<sup>&</sup>lt;sup>5</sup> https://www.gov.scot/publications/transitions-comparative-perspective/pages/3/





to other areas including climate change. In 2015 it was included in the preamble of the Paris Agreement6 and since then in many national and international policies and programmes, including those adopted by the EU.

The International Labour Organisation defines the just transition very narrowly as "greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind." However, the current energy transition requires a broader approach that seeks economic and social justice not just for workers but all vulnerable groups that suffer disproportionally as a consequence of decarbonization and automation.

#### 1.1 The European Union and the Just Transition Mechanism

In 2018, the EU introduced an ambitious European Green Deal as a main strategy to transition the EU economy to a sustainable economic model. The EU aims to become the first climate-neutral continent by 2050 that would result in a cleaner environment, more affordable energy, smarter transport, new jobs and overall better quality of life.8 However, the reality shows that vulnerable citizens are more likely to suffer without sufficient resources to move away from fossil fuels. To address these social aspects of the European Green Deal, particularly the equitable and just distribution of its costs and benefits, the European Commission (EC) introduced the Just Transition Mechanism in 2020.9

The Just Transition Mechanism (JTM) was set up to provide targeted support to alleviate the socio-economic impacts of the energy transition in the most affected regions in the EU by mobilizing circa EUR 55 billion over the period of 2021-2027. The financing of the JTM is structured around 3 pillars out of which 2 fall under the InvestEU scheme (Figure 1). There are other EU funding schemes available at the EU that complement the JTM such as instruments under Cohesion Policy, Social Climate Fund or Recovery and Resilience Facility.

<sup>&</sup>lt;sup>6</sup> https://unfccc.int/sites/default/files/english\_paris\_agreement.pdf

<sup>&</sup>lt;sup>7</sup> https://www.ilo.org/global/topics/green-jobs/WCMS\_824102/lang--en/index.htm

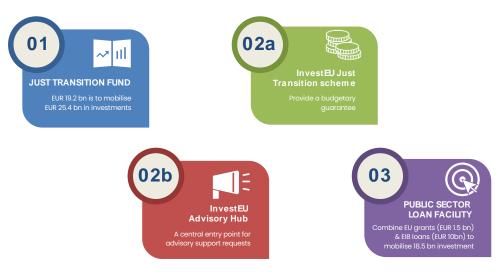
<sup>8</sup> https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal\_en

 $<sup>^9\,</sup>https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism\_en$ 





Figure 1: Pillars of Just Transition Mechanism



Source: European Commission

#### 1.1.1 Just Transition Fund

The Just Transition Fund (JTF) is the first and main pillar of the Just Transition Mechanism. It was created by the Regulation<sup>10</sup> and entered into the force in July 2021. It supports the regions and communities across the EU that are highly dependent on fossil fuels such as coal or shale oil and carbon-intensive industries, particularly steel, cement and chemicals. It addresses employment, economic, social and environmental aspects of this transition. However, the decommissioning or construction of nuclear power plants, investments related to fossil fuels or companies in difficulties are excluded from the financing.

The JTF operates within the framework of the EU Cohesion policy with an allocated budget of EUR 19,2 billion for the period of 2021-2027. As a co-fund mechanism, the funding from the EU is complemented by the funding from the Member State.

To access the JTM, Member States had to develop **territorial transition plans and submit them to the EC in Q1/2021.** In those plans, Member States identify affected regions and communities in their country, their respective challenges and development needs and objectives to be met by 2030 as well as types of projects and activities foreseen, e.g., infrastructure projects to improve connectivity between regions. These territorial transition plans had to be consistent with the National Energy and Climate Plans and the overall EU objective of climate neutrality by 2050. Once the territorial just transition plan are approved, Member States can receive financing from other two pillars of the JTM.

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<sup>10</sup> https://eur-lex.europa.eu/EN/legal-content/summary/the-just-transition-fund.html

<sup>&</sup>quot; https://ec.europa.eu/regional\_policy/funding/available-budget\_en





In **Czechia,** JTF is included under the Integrated Regional Operational Programmes and managed by the Ministry of Environment and implemented by the State Environmental Fund of the Czech Republic. Its budget is EUR 1.65 billion and it is dedicated to three regions as submitted under the territorial transition plans.<sup>12</sup>

In addition, the **InvestEU Portal**<sup>13</sup> is the EU's online helpdesk and a matchmaking tool. The Portal offers technical and advisory support and promotes the exchange of best practices among stakeholders through in-person and virtual meetings.

#### 1.1.2 InvestEU Just Transition Scheme and Advisory Hub

The InvestEU Just Transition Scheme and InvestEU Advisory Hub are the 2<sup>nd</sup> pillar of the JTM. Individual Member States do not have dedicated funds and InvestEU serves as a guarantee to scale up existing projects and investments by private and public sector. Here projects are implemented in cooperation with financial ('implementing') partners that offer various financial products. There are currently 14 implementing partners at the EU level and national banks and institutions, such as the European Investment Bank (EIB), the European Investment Fund (EIF), the Council of European Development Bank (CEB), the Nordic Investment Bank (NIB) or the European Bank for Reconstruction and Development (EBRD), among others. Each partner supports different focus areas and offers different financial products. For example, the EIF supports projects that foster entrepreneurship, growth, R&D and innovation, digital transitions and employment and offers mostly guarantee and equity products. The CEB has an exclusive social mandate and provides loans specifically to the wide range of projects in Central, Eastern and South-Eastern Europe.14

In case of **Czechia**, the European Investment Fund (EIF) guarantees will support debt financing of circa 6500 micro companies and SMEs in Czechia and Slovakia, including social enterprises. EIF will offer favourable lending to target sustainability, innovation, employment and creative sectors. Lending in Czechia will be enabled by the Komercni Banka.<sup>15</sup>

Project promoters and intermediaries can seek advisory support and technical assistance for the EU investment funds through the **InvestEU Advisory Hub (Hub)**. The Hub connects them with advisory partners who can help their projects reach the financing stage. The Hub builds on years of experience of the Jaspers (Joint EC-EIB Assistance to Support Projects in European Regions) programme.

6

<sup>12</sup> https://www.sfzp.cz/en/administered-programmes/operational-programme-just-transition/

<sup>&</sup>lt;sup>13</sup> https://ec.europa.eu/regional\_policy/funding/just-transition-fund/just-transition-platform\_en

<sup>14</sup> https://investeu.europa.eu/investeu-programme/investeu-fund\_en

<sup>15</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_3423





#### **Public Sector Loan Facility** 1.1.3

The Public Sector Loan Facility (PSLF) is the 3<sup>rd</sup> pillar of the JTM jointly implemented by the EC and EIB. It supports projects by mobilizing additional investments with EU grants totalling EUR 1.5 billion and the loans totalling of up to EUR 10 billion.<sup>17</sup> In practice, a beneficiary receives a grant from the EC which is managed by DG REGIO and implemented by CINEA and a loan from the EIB.

### 1.2 Just Transition and other fundings available to Czechia

In addition to the main 3 pillars of the JTM, several other EU funding and assistance programmes target just transition in a complementary way.

#### **Social Climate Fund** 1.2.1

The Social Climate Fund (SCF) will complement the JTM and JTF. It will be established over the period of 2026-2032. Once operationalized, the SCF will support access of vulnerable groups households, transport users and micro-enterprises - across the EU to essential energy and mobility services, particularly those that are affected by the next phase of the Emission Trading System (ETS), the so-called ETS II.<sup>18</sup> The ETS II will include building and transport sectors and process heat in small-scale industry. Currently over 34 million people in the EU are energy poor and the impact of the ETS II on poor households who spend larger share of their income on energy and transport bills may bring them into a deeper poverty.

The Fund is expected to raise over EUR 86 billion, a decrease from the proposed EUR 144.4 billion. In the first year, the SCF will be funded through the existing ETS (up to EUR 5 billion) and once ETS II enters into force in 2027, the SCF will be funded from the ETS II auctions up to the EUR 65 million and additional 25% of contributions coming from Member States. 19 These revenues will be used as investments into more efficient buildings and low-emission mobility and fund a direct income support to vulnerable citizens, transport users and micro-enterprises.

#### **Recovery and Resilience Facility**

Recovery and Resilience Facility (RRF) is a temporary instrument under the NextGenerationEU created in a response to the Covid-19 crisis, as well as the global energy market disruption caused by Russia's invasion of Ukraine and related socio-economic hardships of EU citizens.20 The RRF instruments have the form of loans or grants. The RRF runs from February 2020 until 31 December 2026 and finances reforms and projects across the EU. To access funds, Member States submitted national recovery and resilience plans (RRP) with identified reforms and projects they aim to implement by the end of 2026 and outlined investment needs.

<sup>&</sup>lt;sup>17</sup> https://cinea.ec.europa.eu/just-transition-mechanism/about-public-sector-loan-facility-just-transition-mechanism\_en\_

 $<sup>{}^{18} \ \</sup>underline{\text{https://www.europeansources.info/record/regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-and-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-regulation-eu-2023-955-establishing-a-social-climate-fund-amending-amendin$ 2021-1060/#:~:text=This%20Regulation%20establishes%20a%20Social,in%20their%20Social%20Climate%20Plans.

<sup>19</sup> https://fsr.eui.eu/emissions-trading-2-0-the-social-climate-fund-and-europes-just-transition/

<sup>20</sup> https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility\_en





In the case of **Czechia**, the RRP was submitted to the Commission in June 2021 and within 2 months endorsed by the European Commission and approved by the Council of the EU with a dedicated budget of EUR 7 billion over the period 2021-2027. To date, Czechia received over EUR 1.8 billion.<sup>21</sup>

#### 1.2.3 Modernisation Fund

Modernisation Fund (MF) covers the period of 2021-2030 and offers investments to develop renewable energy technologies, improve energy efficiency and modernise energy systems, such as grids. It primarily draws funds from the EU ETS in the amount of 2%.

In **Czechia**, the MF is implemented by the State Environmental Fund under by the Ministry of Environment. It has a budget of EUR 10.5 billion and will focus on energy savings, renewable energy sources, clean mobility, community energy, public lighting, and energy infrastructure.<sup>22</sup>

#### 1.2.4 Cohesion Policy Funds

Under Cohesion Policy with EUR 392 billion available for the period 2021-2027, in addition to the Just Transition Fund, EU Member States, their regions and cities can also access three other funds: the European Regional Development Fund (ERDF), European Social Fund Plus (ESF+) and Cohesion Fund (CF).

#### 1.2.5 European Regional Development Fund

The European Regional Development Fund (ERDF) invests in economic, social and territorial cohesion in the EU regions and cities with Member States and the EC both in charge of the programme.

#### 1.2.6 European Social Fund Plus

Building on the decades of experience of the European Social Fund, the European Social Fund Plus (ESF+) continues supporting job creation as well as people's job prospects through vocational training and reskilling. The ESF+ integrates the European Social Fund (ESF) together with the Youth Employment Initiative (YEI), the Fund for European Aid to the Most Deprived (FEAD) and the EU Programme for Employment and Social Inclusion (EaSI). It has a budget of EUR 99 billion for the period 2021-2027 and co-finances projects at the local, regional and national levels.<sup>23</sup>

#### 1.2.7 Cohesion Fund

Only EU Member States with a gross national income per capita below 90% of the EU-27 average are eligible to access the funding under the Cohesion Fund (CF). During a 2021-2027 period, 15 Member States are eligible which includes Czechia.<sup>24</sup> The CF aims to strengthen economic, social and territorial cohesion of the EU with 37% of overall financial allocation should go towards climate objectives.

<sup>&</sup>lt;sup>21</sup> https://ec.europa.eu/economy\_finance/recovery-and-resilience-scoreboard/timeline.html#timelineTable

<sup>22</sup> https://ec.europa.eu/economy\_finance/recovery-and-resilience-scoreboard/timeline.html#timelineTable

<sup>&</sup>lt;sup>23</sup>https://ec.europa.eu/esf/main.jsp?catId=62&langId=en

<sup>&</sup>lt;sup>24</sup> https://ec.europa.eu/regional\_policy/funding/cohesion-fund\_en





In **Czechia**, Cohesion Policy Funds are included under nine Integrated Regional Operational Programme (OP) and managed by respective ministries.<sup>25</sup> For example, deploying innovative low-carbon technologies falls under the OP Technologies and Application for Competitiveness and is managed by the Ministry of Industry and Trade.

JTF has its own Operational Programme 'OP Just Transition Fund' which is managed by the Ministry of Environment and focuses particularly on social, economic and environmental impacts of the energy transition.

#### 2. The Just Transition in Czechia

To reach its climate targets, Czechia needs to reduce its reliance on fossil fuels. Czechia made its first steps by committing to phase out coal mining and use by 2033 and oil and gas by 2050<sup>26</sup>, but it also needs to reduce imports of coal and other fossil fuels and help modernize carbon intensive industries.

Between 2000 and 2021, coal consumption (Figure 2) decreased from 75% to 40% and an overall consumption of fossil fuels decreased from 78% to 56%, but such a consumption is still nowhere close to Czechia's climate targets. This is particularly relevant with the Russian invasion of Ukraine and a decrease of imports of natural gas, which may make Czechia keep the coal mining and imports beyond 2033.

Altogether, Czechia negotiated EUR 42.6 billion for the period 2021-2027 through different financial mechanism, out of which almost 50% or EUR 21 billion will come from the Cohesion Policy funding – ERDF, CF, ESF+ and JTF (Figure 4). These can be in the form of non-refundable grants or favourable loans.

A quick snapshot into the uses of coal shows that the industry and the residential buildings (heating) are the major drivers of the coal consumption. Their share on overall coal consumption changed marginally from 88% in 2000 to 84% in 2021. While there are technologies to replace coal with electricity to heat residential buildings, the use of coal in the industry is much more complicated due to not commercially available technologies or their low-cost competitiveness. But even with coal or natural gas, the applicability of the ETS and ETS II to these industries, their cost competitiveness is at stake which will have a snowballing effect on economies of the regions. The Just Transition Mechanism and related funding aims to alleviate this.

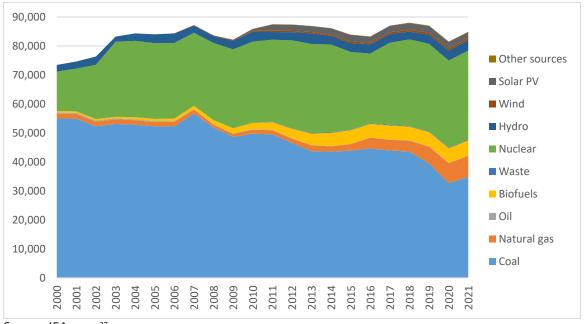
 $^{25} \ \underline{\text{https://www.dotaceeu.cz/getmedia/f6726173-bd7c-4b37-8a17-6172d1a0e331/EU-funds-in-CZK-21\_27.pdf.aspx}$ 

https://www.euractiv.com/section/politics/news/czech-government-plans-coal-phase-out-by-2033-and-oil-and-gas-by-2050/



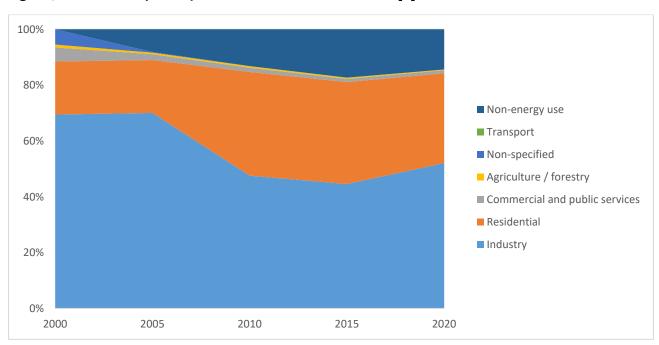


Figure 2: Energy consumption in Czechia between 2000-2021 [GWh]



Source: IEA, 2022<sup>27</sup>

Figure 3: Coal consumption by sectors between 2000 and 2021 [%]



Source: IEA, 2022<sup>28</sup>

<sup>&</sup>lt;sup>27</sup> https://www.iea.org/countries/czechia

<sup>28</sup> https://www.iea.org/countries/czechia



ERDF EUR 42.6 bn

ERF MF EAFRD EUFUNDS

EUR 42.6 bn

ERF EUR 8.6 bn

ERF EUR 8.6 bn

Figure 4: Funding for Czechia over 2021-2027 and the contribution of ESF+, CF, ERDF and JTF

Source: Dotace EU<sup>29</sup>

As outlined above, Cohesion Policy Funds in Czechia fall under nine Integrated Regional Operational Programme (OP) which are managed by respective ministries.

In addition, JTF has its own Operational Programme 'OP Just Transition Fund' which is managed by the Ministry of Environment and implemented by the State Environmental Fund. It has a budget of EUR 1.65 billion but only regions included under the Territorial Just Transition Plans are eligible for funding.<sup>30</sup>

#### 2.1 Czechia Just Transition regions

In its Territorial Just Transition Plans, Czechia identified three regions that would receive support to address various challenges linked to the energy transition. These regions are: Karlovarsky (Karlovy Vary), Ustecky (Usti and Labem) and Moravskoslezsky region. Together they will receive EUR 1.65 billion (CZK 42.7 billion) to implement their just transition plans and help their local economy.<sup>31</sup> All three regions are coal-mining regions with a high concentration of carbon-intensive industries. Phasing out coal and closing some of the operations in those industries endangers over 21 thousand jobs<sup>32</sup> and the local economy.

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<sup>&</sup>lt;sup>29</sup> https://www.dotaceeu.cz/getmedia/f6726173-bd7c-4b37-8a17-6172d1a0e331/EU-funds-in-CZK-21\_27.pdf.aspx

<sup>&</sup>lt;sup>30</sup> https://www.sfzp.cz/en/administered-programmes/operational-programme-just-transition/

<sup>31</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip\_22\_5702

<sup>32</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip\_22\_5702





Figure 5: Czech regions under Just Transition Mechanism [2021-2027]

Source: European Commission<sup>33</sup>

#### **Karlovy Vary region**

Karlovy Vary region is located in the westernmost part of Czechia bordering Germany. The region is the least economically developed region of the country. Its GDP per capita corresponds to 65% of the Czech average and 59% of the EU average. Its population is almost 300 000.

Its industry focuses on lignite mining and energy production, non-metallic mineral production (glass, porcelain, ceramics and building materials) and textiles. Lignite mine has reserves for the next 15-20 years but the coal plant has already committed to phase out its mining activities by 2030.

Coal plant as well as other industries in the region employ 16% of people. The region's lack of qualified employees outside of coal mining makes the transition of the region to other industries complicated, as there are limited reskill and upskill programmes. One of the opportunities could be region's high share of opportunities in tourism and spas.

The main drivers for a just transition and overall change are socio-economic and include aging population, outward migration of young people, concentration of majority of jobs in several enterprises, but also insufficient quality of the education system (from primary to tertiary level) and a lack of university-educated professionals.

Just Transition is a major opportunity to help start this process of change. For that, the region will receive circa CZK 6.3 billion which represents 15.3% of overall JTF EUR 1.65 billion assigned to Czechia. This is comparatively less than what is being allocated to the Moravskoslezsky region (46.1%) and Ustecky region (38.6%).

The region developed the Just Transition Plan (available only in Czech<sup>34</sup>) and had it opened for the public consultation. It outlined the main priorities on employment creation, education and

<sup>&</sup>lt;sup>33</sup>https://ec.europa.eu/regional\_policy/funding/just-transition-fund/just-transition-platform\_en

<sup>34</sup> https://www.rskkvk.cz/assets/uploads/1622794512-7170416232830507911024522135.pdf





reskilling programmes, including building R&D capacity, rehabilitation and reuse of land after mining including storage and deployment of renewables and modernization of enterprises.

Since then, a regional profile is published on the website of the European Commission<sup>35</sup> and a dedicated website<sup>36</sup> aims to keep the public and potential investors informed.

In October 2023, the region signed the 'Karlovy Vary Declaration of coal regions'<sup>37</sup> under the Just Transition Platform to encourage further support of coal regions beyond 2027 from the EU funding. In addition to Czechia, representatives from Germany, Poland, Ireland, Slovakia, Spain, Slovenia, Finland, Greece, Romania and Bulgaria joined the Declaration.

#### Ústí nad Labem region

Ústí nad Labem region is located the north-western part of Czechia bordering to Germany. It lies north of Karlovy Vary region. It has the 2<sup>nd</sup> weakest economy in Czechia. Its GDP per capita corresponds to 83% of the Czech average. The region's population is almost 820 000.

The region's economy is largely based off lignite mining and energy intensive industries such as chemical production<sup>38</sup>. These industries have supported the region economically, employing over 14 000 people, but have had negative impact on the environment including landscape and air pollution from coal-fired steam power plants.<sup>39</sup>

As is the case of the other regions, a lack of qualified employees and low education are limiting factors slowing down the just transition of the region.

As is the case of the other regions, the main drivers for a just transition and overall change are socio-economical, including aging population, young people emigration, concentration of majority of jobs in several enterprises, high unemployment, low education and lack of varied skills, lack of university-educated professionals but also household indebtedness.

Just Transition is a major opportunity to help start this process of change. For that, the region will receive circa CZK 15.8 billion which represents 38.6% of overall JTF EUR 1.65 billion assigned to Czechia.

The region developed the Just Transition Plan (available only in Czech<sup>40</sup>) and had it opened for the public consultation. It outlined the main priorities on employment creation, education and reskilling/retraining programmes, including building R&D capacity, strengthening social stability, rehabilitation and reuse of land after mining including storage and deployment of renewables (incl. hydrogen valley, value chain for lithium use and battery production, local electricity distribution system based on energy communities), and modernization of enterprises. In addition, a dedicated website<sup>41</sup> aims to keep the public and potential investors informed.

<sup>35</sup> https://energy.ec.europa.eu/system/files/2020-07/karlovy\_vary\_regional\_profile\_-\_start\_technical\_assistance\_o.pdf

<sup>36</sup> https://www.rskkvk.cz

<sup>&</sup>lt;sup>37</sup> https://www.rskkvk.cz/aktualita/karlovarsky-kraj-je-leaderem-v-transformaci-uhelnych-regionu/165

<sup>&</sup>lt;sup>38</sup> https://www.sfzp.cz/en/administered-programmes/operational-programme-just-transition/

<sup>39</sup> https://www.right-to-clean-

air.eu/en/press/pressemitteilungen/?tx\_news\_pi1%5Bnews%5D=52&cHash=c672ad1b8d1a1b536a6oe332eb48c9o9

 $<sup>^{40}\,\</sup>underline{https://rskuk.cz/files/RSK-Dokumenty/RSK-IV/WEB/Plan\_transformace\_Usteckeho\_kraje\_30\_6\_2021.pdf}$ 

<sup>41</sup> https://rskuk.cz





#### Moravian-Silesian region

Moravian-Silesian region is located in the north-eastern part of the Czechia and borders Slovakia and Poland. Its GDP per capita corresponds to 80% of the Czech average. Its population is circa 1.2 million.

Moravian-Silesian region has felt the negative effects from heavy industry and coal mining. Although the region is not weak in terms of economy it is at a disadvantage in cross border employment bordering less developed regions of Poland and Slovakia, in comparison to Ústí nad Labem region and Karlovy Vary region which border Germany.

The region is the biggest coal-mining region in Czechia and directly employes 5000 people. Compared to Karlovarsky and Ustecky region that mine lignite, the Moravian-Silesian region mostly mines black coal, which has been on decline for some time due to tough competition from China and other non-EU countries. Its major issue is not only socio-economical but also environmental particularly air pollution and groundwater contamination due to industrial activities.

The region has significantly developed in terms of education, transport, research and development, but as is the case of the other regions, socio-economical drivers are the same and include aging population, young people emigration, concentration of majority of jobs in several enterprises, high unemployment, low education, lack of varied skills, lack of university-educated professionals but also household indebtedness.

Just Transition is a major opportunity to help start this process of change. For that, the region will receive circa CZK 18.9 billion which represents 46.1% of overall JTF EUR 1.65 billion assigned to Czechia.

The region developed the Just Transition Plan (available only in Czech<sup>42</sup>) and had it opened for the public consultation. It outlined the main priorities on employment creation, education and reskilling/retraining programmes, including building R&D capacity, rehabilitation and reuse of land after mining including storage and deployment of renewables, and modernization of enterprises. In addition, a dedicated website<sup>43</sup> aims to keep the public and potential investors informed.

#### 2.2 Clean technologies and their role in the just transition

Just Transition is a key tool to ensure the transition towards a climate-neutral economy in a fair way. To reach net-zero means deploying renewable energy sources at scale. This includes cutting emissions from transport, electricity and heating/cooling generation in buildings and industry.

Decreasing levelized costs of electricity from wind and solar give a strong business case to deploy renewables and green the grid. Renewables are local which means jobs are also local, which also means cleaner local environment – from air to water to soil quality.

While the central Europe does not dispose the highest solar irradiation or strongest wind, the capacity factors of both solar PVs and onshore wind are average or above average. In all three regions, solar PV's capacity factors are 15%. Onshore wind capacity factors are average or beyond average between 23% (Karlovy Vary region), to above 25% (Ustecky region) to 30% (Moravia-

<sup>42</sup> https://opst.cz/files/documents/storage/2022/10/03/1664793612\_Programme%20Just%20Transition%202021-2027.pdf

<sup>43</sup> https://hrajemskrajem.msk.cz





Silesian region).<sup>44</sup> This means that the potential is there and deployment of renewables will quickly help reach climate targets. Lack of action in Czechia will only further endanger its economy as it will struggle to catch up with those countries which already embarked on the renewable energy pathway.

For example, in the transport industry the EU targets to cut 55% of emission from cars and 50% emission from vans by 2030 and the ban of sale of new petrol and diesel cars from 2035 which are a major challenge to the Czech automotive industry if it does not adapt to the new trends. 45 Czechia's automotive industry has a major impact on its economy, employing more than 180,000 people in all regions. 46 It is thus crucial for Prague and regional governments to attract investment that will cultivate EV production and EV battery production to ensure a just automotive transition.

The chemical industry along with automotive and steel production is another principal industry to Czechia's economy. Much like steel it needs to be decarbonization to avert the risks that come from carbon pricing that led to higher production costs and increase labor layoff. The main issue is the difficulty to directly electrify the sector by renewables. For that reason, it is essential for Czechia to enable the infrastructure that foster green hydrogen (storage, electrolyzes, renewable energy sources, and transport) to ensure Czechia chemical industry has a future.

#### 3. Barriers hindering a Just Transition in Czechia

When it comes to the energy and just transition, Czechia is a ground zero. It has not started the energy transition and faces barriers everywhere, from a lack of political will, skilled and trained blue- and white-collar jobs, lack of infrastructure, lack of enabling regulation, and thus lack of investments. For the energy transition, Czechia does not have a dedicated ministry which would be able to coordinate and guide the whole country towards the net-zero economy. The energy sector falls under the Industry and Trade Ministry, which must handle two different and equally important topics of economy and energy at the same time.

Czechia and all three most affected regions will have to work on many aspects in parallel. Table 1 below outlines all the aspects that will need to be addressed, from deploying renewables, introducing more targeted curricula at schools and programmes to reskill and retrain workers.

Table 1: Barriers hindering the Just Transition in Czechia

| Overarching themes | Barriers   |  |
|--------------------|--|--|
|                    | • Lack of political will at the national and regional levels to deploy renewables.   |  |
|                    | • Single focus on nuclear power creates jobs in a central location, that distract from the regional needs and business case that |  |

<sup>44</sup> https://www.renewables.ninja/

<sup>45</sup> https://www.europarl.europa.eu/news/en/headlines/economy/20221019STO44572/eu-ban-on-sale-of-new-petrol-and-diesel-cars-from-

<sup>46</sup> https://www.czechbusinessguide.com/content-of-book-top-sectors-for-investment-automotive-industry/





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|--|---|--|
| Lack of political will to deploy renewables              | <ul> <li>Resistance from regional and national government bodies to<br/>adopt enabling conditions and foster investment to speed up</li> </ul>  |  |
|  | deployment of renewables (e.g., permitting, auctions, infrastructure - grids, charging stations, etc.).   |  |
|  | Resistance from hard-to-abate industries (such as chemical) to explore the use of renewables as a feedstock.  |  |
|  | • Energy poverty due to carbon price from ETS shifted to consumers, high energy prices (Czechia has the top 3 highest energy prices in the EU) and poor insulation of buildings.            |  |
| Vulnerable subjects<br>(energy and transport<br>poverty) | Climate targets and overarching policy not always in correlation with people's incomes.   |  |
| porcisy  | High prices of electric vehicles, inability of low-income groups to adapt to the climate targets.   |  |
|  | <ul> <li>Disappearing regional public transport networks which leave<br/>people in villages and smaller towns dependent on cars.</li> </ul>   |  |
|  | Significant support provided for large projects and large companies, little support to small companies.   |  |
|  | • Lack of communication and cooperation between governmental bodies (regional and national), trade unions and the public about added value/local benefits vs. local challenges.             |  |
|  | <ul> <li>Lack of representation of civil society in the Transformation<br/>Platform (only Center for Transport and Energy).</li> </ul>  |  |
| Social dialogue and                                      | <ul> <li>Restricted longevity of initiatives (only being funded for a few<br/>years).</li> </ul>  |  |
| cooperation  | Lack of any national strategic initiatives.   |  |
|  | Lack of inspiring leaders.  |  |
|  | <ul> <li>Just Transition regions have better relationship with Germany than<br/>Prague (e.g., Karlovy Vary region).</li> </ul>  |  |
|  | Lack of collaboration with regions across Europe to share best practices and learn from others.   |  |
|  | Lack of transparency on how funds are being allocated and spent.  |  |
|  | <ul> <li>Information from meetings of Transformation Platform usually<br/>only in Czech, barrier to engage internationally.</li> </ul>  |  |
|  | Engagement of civil society insufficient.   |  |
| Lack of transparency                                     | <ul> <li>Projections of various socio-economic indicators (such as<br/>unemployment) not transparent, vary depending on source which<br/>then complicates Government strategies.</li> </ul> |  |





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|---|---|--|--|
| Technical aspects                         | • Use of closed coal mines for clean technologies (e.g., solar farms, energy storage) requires solving grid connection and accessibility to the site.                 |  |  |
|   | • Lack of enabling infrastructure (power lines, roads, railways, etc.).   |  |  |
|   | Competitiveness of carbon-intensive industry threatened by the ETS due to higher production costs.  |  |  |
|   | <ul> <li>Unpreparedness of large companies (auto, steel, coal, chemical)<br/>for the energy transition.</li> </ul>  |  |  |
|   | <ul> <li>Resistance of automotive industry to shift towards electromobility<br/>as it employs less workers.</li> </ul>  |  |  |
| Economic aspects                          | • Job losses.   |  |  |
|   | • Inability to use JTF due to delayed coal transition (EUR 1.7 bn).   |  |  |
|   | • The ownership of land in regions often in hands of energy companies that are uninterested to use it for the energy transition (e.g., Sokolov, Karlovy Vary region). |  |  |
|   | • Shortage of workers related to the green transition, incl. well-paid quality jobs.  |  |  |
| Education, reskilling and                 | Lack of secondary and tertiary education.   |  |  |
| retraining of workers                     | Lack of job creation programmes, incl. counseling.  |  |  |
|   | • Lack of programmes to reskill and retrain workers (e.g., solar and wind technician programmes), with several programmes being halted.                               |  |  |
|   | • Lack of publicly available evidence of horizontal labour market policy, identification of future skill needs.   |  |  |
|   | Lack of bankable projects.  |  |  |
|   | Banks' reluctance to lend money for the energy transition.  |  |  |
|   | • Financing not organized, lack of coordination between stakeholders.   |  |  |
| Financial instruments and business models | • Lack of coordination at the national and regional level to explore the use of public sector loan facility and EIB instruments and technical assistance.             |  |  |
|   | Lack of public-private blending.  |  |  |
|   | • Undercapacity at ministries and other public offices results in delays with payments of allowances.   |  |  |
|   | • Imbalance of funding towards micro, SME and large companies, funding often only goes to large companies.  |  |  |





#### 4. Policy actions

All three regions in collaboration with a national government and European and international players need to focus on both long-term strategies and low hanging fruits simultaneously. This would require speedy and targeted actions across the society and the economy.

# Political will and long term strategy with enabling instruments are needed to accelerate deployment of renewables.

Several studies point out that the political will is instrumental in a country's ability to transition to a low-emission energy system which is socially fair.<sup>47</sup> Strategies and other policy instruments are needed to create a sustainable ecosystem that offers stable incentives that instigate various stakeholders, from private sector, financial institutions and consumers, to participate in the energy transition and don't leave them worse off.

Czechia does not have a strategy that would encourage deployment of renewables. Such a strategy, which needs to be followed up by regulatory and policy framework is urgently needed and would need to focus on **where, who** and **how**.

- Where: what regions and areas are suitable for renewables (wind, solar and geothermal) and the polices and regulations needed to speed up permitting and encourage long term investment.
- Who is the main ministry to lead and who are other dedicated administrative bodies (regional and national level) to play the role in setting up renewable energy infrastructure?
- **How:** Renewable energy (incl. hydrogen and other derivates) plays an instrumental role in decarbonising hard-to-abate sectors in Czechia.

### Knowledge platforms established by government agencies and/or civil society are needed to increase awareness and encourage participation of vulnerable subjects.

Government efforts need full transparency, an analysis of opportunities and challenges and the involvement of third parties (civil society). Government agencies (regional, national and at the EU level) and civil society must assess employment impacts of the energy transition to enable protections for vulnerable subjects. Studies show there is a positive effect when implementing education and social policy (tailored to each region). To enhance regional cooperation between different stakeholders, different aspects need to be considered such as increased awareness of the energy transition's costs and opportunities, who bears the costs, what are the tradeoffs. It requires developing proper guidance and dissemination of existing best practices, implementing counsel on funding applications and enabling matchmaking (alignment in education programs/enhancing commutations between ministries).

#### Social dialogue and cooperation needed to develop more tailored initiatives.

There needs to be a call for new and more tailored initiatives to bring together trade unions, social partners with employers and experts engaged in the labour market. Only social dialogue

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<sup>&</sup>lt;sup>47</sup> https://www.ucl.ac.uk/news/2022/oct/transition-clean-energy-shaped-political-institutions https://www.businesstimes.com.sg/companies-markets/political-will-needed-accelerate-energy-transition





that is inclusive and tailored to different needs will bring coherent policy actions that are needed to create jobs and community and needs to address the following renewal for coal and oil communities, cities, industry and workers.<sup>48</sup>

It is important to not reinvent the wheel but take advantage of already established initiatives such as BluePrint Alliance, European Skill Alliance in Automotive and TRAUTOM Europe direct center<sup>49</sup>, potentially expand their area of engagement to enhance more tailored actions for social dialogue and cooperation.

#### > Call for more information to increase transparency.

Transparency underpins efforts to improve the governance of the energy transition not only regionally and nationally but also internationally. A lack of it has profound implications on accountability and how the dialogue, policies and incentives are shaped. Transparency diminishes the negative effects such as a lack of awareness and a lack of engagement which are important for the Just Transition in Czechia. To improve transparency, relevant stakeholders (policy makers, industry, civil society) should implement the following:

- Benefit from existing national contact points to increase awareness and educate all stakeholders on funding and other opportunities.
- Share information from meetings, stakeholder engagements also in English to encourage international engagement. This should include sharing best practices and lessons learned from other regions and countries.
- Increase engagement of civil society and their concrete roles that are tailored to each JT region should be publicly known.
- Align of socio-economic indicators with government strategies should be key.

#### Deployment of renewables needs to be significantly accelerated.

Wind and solar are the cheapest sources of energy. They however require high upfront investments – not only in generation technologies, but also in enabling, such as grids, storage and digitalization, but also enabling regulations including permitting, zoning, etc. This means different stakeholders have to work together and to encourage it, the strong political will and enabling instruments are key. There must be also innovative approaches to existing assets, such as coal mines which could be used for solar or wind deployment.

#### > The competitiveness of regional industry requires actions on multiple fronts.

Decarbonisation requires a shift in a mindset in how sectors and companies operate. It brings risks such as a loss of competitiveness due to increased operation costs due to higher costs of energy and feedstock, and job losses. To address that, governments need a clear roadmap how to address that, work with the private sector and financial institution nationally and internationally to prepare them for such a transition. This requires a truly integrated cooperation between mining regions and national as well as European and international partners to:

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 $<sup>{}^{48}\,\</sup>underline{\text{https://www.oecd.org/environment/cc/g20-climate/collapsecontents/Just-Transition-Centre-report-just-transition.pdf}$ 

<sup>49</sup> https://opst.cz/projekt/trautom/





- Scale up stakeholders' engagement in the international networks and initiatives with governments' assistance to identify such networks so that Czech stakeholders can learn from others on what works and what does not.
- Explore instruments, financial or technical assistance, to enable smoother transition of companies in given regions. Czech companies can benefit from workshops and trainings which would offer guidance in using such instruments.

#### > To include all workers, programmes to reskills and retrain them need to start today

There is an increased need to reskill and train workers as the energy transition depends on their availability, knowledge and skills. Substantial funding and instruments are in place at the EU level such as the Erasmus plus programme. Therefore, actions are needed from the government in the following areas:

- Address the new kind of skill sets and employment opportunities that are needed in the energy transition.
- Better social protection and unemployment schemes which include reskilling and training programmes as well as counseling.
- Secondary and tertiary education need more technical and engineering programmes and short-term courses to address employment needs.
- Policy supporting growing startups and renewable energy companies.

#### > Ensure bankable projects

A lack of bankable projects is linked to many barriers, from a bank's reluctance to lend, lack of coordination between stakeholders, a lack of public and private blending instruments, etc. To address that, government together with civil society can help increase awareness of existing instruments at the EU and national levels through various channels, for example:

- Website with summaries and links to important instruments in Czech and English, such as Innovation Fund, Modernisation Fund, Just Transition Platform and Fund, technical assistance offered by the EIB, etc.
- Organise workshops to increase awareness of such opportunities.
- Organise capacity building for various stakeholders to improve their application skills and understanding of the processes, incl. private sector and financial institutions.





#### **Annex I: Interviews**

For this project, 5 experts were interviewed from across government, think tanks, European Union institutions and intergovernmental organisations.

| Expert | Job title   | Organisation        |
|--------|---|---------------------|
| E1     | Senior Policy Advisor                                       | E <sub>3</sub> G    |
| E2     | МЕР   | European Parliament |
| E3     | Socio-Economic Analyst                                      | DG Employment       |
| E4     | Regional coordinator of information activities about the EU | , , ,               |
| E5     | Programme Officer Jobs and Skills                           | IRENA               |

Ahead of the interview, an overview of the barriers was shared. During the interview, the following questions were asked:

- Do you agree with identified barriers? Would you remove some or add some? Which one? Would you please tell me which barriers you think are the most critical?
- What are some of the barriers faced in the regions that you focus when it comes
  to reskilling and retraining workers?
   In your experience how is gender affecting a Just Transition? Could you also share
  any best practices you observed in your work that I could benefit looking into.
- Are public grants eligible to blend with private funding.
- Do you know about good practices of investors or banks working with public sector to help finance energy transition. Are banks eager to lend money for the energy transition.
- Where do you see the biggest barriers in availability and use of finance for the energy sector.





### **About EUROPEUM**

EUROPEUM Institute for European Policy is a non-profit, non-partisan, and independent think-tank focusing on European integration and cohesion. EUROPEUM contributes to democracy, security, stability, freedom, and solidarity across Europe as well as to active engagement of the Czech Republic in the European Union. EUROPEUM undertakes original research, organizes public events and educational activities, and formulates new ideas and recommendations to improve European and Czech policy making. We are the recipient of institutional funding from the European Commission under the Citizens, Equality, Rights and Values (CERV) programme.



