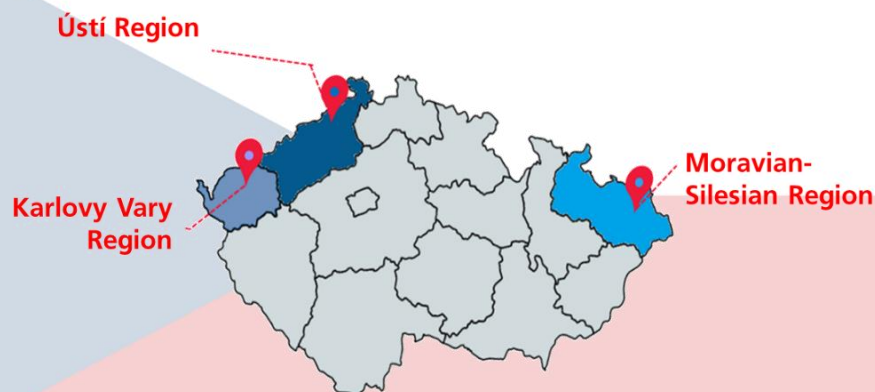


Framework ID: SRSS/2018/FWC/002

SPECIFIC CONTRACT: REFORM/SC2020/111

Support to the preparation of a Territorial Just Transition Plan in the Czech Republic



D5. Final Report (FINAL) For Publication

26.10.2021

Disclaimer

This Report was prepared with funding by the European Union via the Structural Reform Support Programme and in cooperation with the Directorate General for Structural Reform Support (DG REFORM). The views expressed in this report are those of the consultants and do not necessarily reflect those of the European Union.



This project is implemented by Frankfurt School of Finance & Management (as part of the AARC Consortium) in cooperation with Trinomics, Czech Technical University and Cambridge Econometrics

ABBREVIATIONS

AI	Artificial Intelligence
CINEA	European Climate, Infrastructure and Environment Executive Agency
CMZRB	Czech-Moravian Guarantee and Development Bank, now National Development Bank (Národní rozvojová banka)
CO ₂	Carbon Dioxide
CZ	Czech Republic
D	Deliverable
DG	Directorate General
E3ME	Dynamic, computer-based, global macroeconomic model
EIB	European Investment Bank
ESCUR	Economic and Social Council of Ústí region
ESIF	European structural and investment funds
ETS	Emissions Trading System
EU	European Union
GHG	Greenhouse Gas
GDP	Gross Domestic Product
GVA	Gross Value Added
JTF	Just Transition Fund
JTM	Just Transition Mechanism
JTP	Just Transition Plan
ML	Machine Learning
MoE	Ministry of Environment
MoRD	Ministry of Regional Development
NECP	National Energy and Climate Plans
NGO	Non-Governmental Organisation
OP	Operational Programme
OPJT	Operational Programme Just Transition
RE:START	Strategies of economic restructuring of the Ústí, Moravian-Silesian and Karlovy Vary Regions
RIS	Regional Innovation Strategy
RPC	Regional Permanent Conference (the Czech abbreviation is RSK – Regionální stálá konference)
RRP	Resilience Recovery Plan
RTP	Regional Transformation Plans
SC	Steering Committee
SEF	State Environmental Fund
SME	Small and Medium Enterprises
TA	Technical Assistance
TJTP	Territorial Just Transition Plan

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EXECUTIVE SUMMARY

To reach its climate targets, the Czech Republic needs to reduce mining, close, or replace coal-based power plants, and modernise or close carbon-intensive industries. The transition process to climate neutrality is expected to particularly affect communities with carbon-intensive industries and low-productivity, as well as communities with a high risk of increasing unemployment, poverty and those with high regional disparities, such as those in **the Ústí, Karlovy Vary and Moravian-Silesian regions**. These are the eligible territories in the Czech Republic that will benefit from the measures of the European Commission's Just Transition Mechanism (JTM).

To boost access for EU Member States to the Just Transition Fund (JTF), The European Commission, represented by DG REFORM is providing Technical Support for the preparation of a Territorial Just Transition Plan (TJTP) to the Czech Republic for the three coal regions (Ústí, Karlovy Vary and Moravia Silesia). The Project has been implemented by Frankfurt School of Finance & Management (as part of the AARC Consortium) in cooperation with Trinomics, Czech Technical University and Cambridge Econometrics (Technical Assistance team, TA team). The TA started on 5 October 2020 and lasted nine months.

The objective of this final report is to summarise the main implemented project activities, analyse the project monitoring indicators and provide lessons learnt, recommendations and possible follow-on activities. In addition, we will provide some further inputs concerning the dashboard and its indicators.

Chapter 1 provides a project overview:

- The project consists of five Deliverables (D), structured into D1: Inception report, D2: Report on governance mechanisms and stakeholder engagement, D3: Report on the transition process towards climate neutrality, D4: Report on the challenges, needs and action plans for the most affected territories and the present document D5: Final report.
- It is important to mention that the policy environment at the EU level concerning the JTM changed from being “under development” at the start of the project to a more consolidated situation. EU legislation has already been approved and published for Pillar 1 and approved for Pillar 2 (InvestEU) and the European Council/European Parliament also adopted the Public Sector Loan Facility (Pillar 3) on 14 July, 2021.
- The Ministry of Regional Development (MoRD) is preparing the final version of the TJTP in cooperation with relevant partners (The Technical Assistance team has received several versions of the TJTP - from v.1.3 to version v.1.7 - at the time of writing this final report).
- At request of the project stakeholders, in Deliverable 4, the Technical Assistance team has assessed the regional transformation plans (RTP) of the coal regions that feed into the TJTP prepared by MoRD. The latest versions examined are as follows: Karlovy Vary (v.4/06.06.21), Ústí (v.7 03. 05. 2021 and Moravia-Silesia (2021/June). However, the plans still need to reflect the latest inputs provided by D4. This Final Report includes the Action Plans (Section 2.4) that were developed based on the outcomes of D4 and the latest plans from the regions: Karlovy Vary (v.5.1/08.09.21), Ústí (v.8 30.06. 2021 and Moravia-Silesia (2021/August).

Chapter 2 provides a summary of the undertaken activities (including all meetings and consultations organised by the TA team with project stakeholders at each project phase). The milestones of the activities include:

- The final inception report (D1) was officially accepted and approved on 15 December 2020. Subsequently, the report has been edited for publication on the www.dotaceeu.cz webpage and has been authorised by the European Commission for publication, including a summary in Czech and English languages. To access the report, use this [link](#).

Key findings from the D1 inception report:

- The Czech Republic can build on the experience of the RE:START strategy for the strategic planning of the transition process. However, the RE:START strategy is more complex than the JTF; it runs in parallel and its structure is used to share information about the JTPs.
- The decision on the shared institutional structure of implementation (MoRD for the TJTP and MoE for the JTF) was taken by the government. Both MoRD and MoE are involved in programming activities.

- The strategic documents at the regional level correspond with the programming periods of the EU as financing from the European Structural and Investment Funds is a key source of funding for Czech regional policy.
- The Transformation Platform was established to encourage discussion and consultation for the preparation of the TJTP of the Czech Republic. It covers a range of important institutional members, which represent stakeholders on the national, regional and local levels.
- The final D2 report was officially accepted and approved on 6 April 2021. This report has also been edited for publication on the www.dotaceeu.cz webpage and has been authorised by the European Commission for publication, including a summary in Czech and English languages. To access the report, use this [link](#).

Key findings from the D2 Report on governance mechanisms and stakeholder engagement:

- The governance mechanism is largely in place for Pillar 1 of the Just Transition Mechanism (JTM) related to the Just Transition Fund (JTF). The Ministry of Environment (MoE) is the Managing Authority for the Operational Programme Just Transition (OPJT) and the State Environmental Fund is the intermediary body.
- For Pillars 2 and 3 of the JTM, the situation is less advanced. This applies to the EU and national levels. The TA team compiled and expanded possible governance options for both pillars in this report. For the long-term, the governance structure of Pillars 2 and 3 of the JTM need to be decided upon.
- It is necessary to develop a monitoring and evaluation system, which should monitor the social impacts of the transition and establish an analytically strong interim and ex-post evaluation scheme that focuses on the factors and effects of the transition in the three coal regions.
- The stakeholder engagement process for the Just Transition Agenda in the Czech Republic is at an advanced stage and has been embedded in the information flow related to the cohesion policy since early 2019.
- The prevailing stakeholder engagement model of the JTM in the Czech Republic is based on the umbrella principle (membership of institutions with multilevel structures). The predominant stakeholder engagement format is participation in meetings and webinars, and information is most often shared via email or on websites in the form of presentation slides, video recordings and meeting minutes.
- Further identification and inclusion of other important stakeholders (e.g., representatives of youth organisations, NGOs, academia, innovative SMEs) is needed to ensure a balanced representation of institutions and interests.
- The final D3 report was officially accepted and approved on 22 July 2021. This report has been edited for publication and has been authorised by the European Commission for publication on the www.dotaceeu.cz webpage. To access the report, use this [link](#).

Key findings from the D3 Report on the transition process towards climate neutrality:

- The key strategic documents have not yet fully reflected the transition to climate neutrality.
- The National Energy and Climate Plan (NECP) was prepared in 2018 and finalised in 2019, i.e., when the climate neutrality target was not yet established. The current State Energy Policy was adopted in 2015 and has been linked to 2020 energy efficiency targets, but it does not incorporate greenhouse gas (GHG) emission reduction targets.
- Investment needs for the climate neutrality transition are yet to be fully assessed and tracked.
- The transition steps towards climate neutrality are still to be defined. In December 2020, the Czech Coal Commission recommended the phase-out of coal by 2038. However, the Government has delayed its final decision.
- If the national climate transition is carried out in line with the NECP and coal-phase out expectations, it will have a positive impact on employment, the environment, and the economy. Within this context, much of the renewable energy deployment is expected to happen by 2026 and a significant reduction of final energy consumption will take place by 2030.
- The transition will have different impacts on the three transition regions. The regional development strategies reflect the coal phase-out commitment and climate transition in the energy sector. They also predominantly focus on technical aspects. Less attention is paid to the diversification of regional economies. The lack of qualified employees has been mentioned as one of the key hindering factors to climate neutrality and the Just Transition.

Table 1: Impact on Climate transition by 2030 (compared to the baseline scenario)

Indicators	Czech Republic	Moravian-Silesian Region	Ústí Region	Karlovy Vary Region
CO₂ reduction	-17%	-27%	-28%	-28%
GDP/GVA (for regions)	2.9%	2.2%	0.3%	0.8%
Employment (jobs)	50,000	4,700	2,400	700
Employment in Energy and Utilities sector	-3,000	-900	-1,300	-400
<i>Employment, jobs (baseline vs. 2018)</i>	0	-3,700	-12,800	-13,200

Source: Cambridge Econometrics E3ME modelling (2021)

- The key updates from the final version of D4 were presented during the micro-board meeting organised on 28 June 2021 to facilitate an informed discussion during the official Steering Committee meeting. The updated final draft of the D4 report were submitted to the European Commission and MoRD for feedback on 5 July 2021, while a 4th Steering Committee took place on 7 July 2021 to present and discuss the main updates. The final D4 report was approved on 25 October 2021. Key findings from the D4 Report on the challenges, needs and action plans for the most affected territories:
 - Related to the assessment of the political-administrative, economic, employment/labour market, environmental, socio-cultural, and digital/technological related challenges and opportunities for the transition, the Moravian-Silesian Region has started its economic transformation towards an innovation-based economy with developed infrastructure for science and research, the Ústí and Karlovy Vary regions have not yet started such a positive development path, and for many indicators, they are increasingly lagging behind other regions.
 - The analysis of the potential of Artificial Intelligence (AI) suggests that it can have a positive impact on GHG, GDP and Employment in all three regions, particularly in the Moravian Silesian Region. For its size and economic development, the Moravian Silesian Region has more potential to benefit from selected AI use cases. The other two regions, in their digitalisation plan, identified domains where AI use cases are relevant such as autonomous vehicles, smart monitoring and management of energy consumption. The regional transformation plans developed by each of the three regions still need to include the intervention logic, the strategic focus, prioritisation of goals and clarification of overlapping funding with other schemes.
 - Clean energy development is present as a priority in all three transformation plans. The relevant instrument for the funding will be the Modernisation Fund.
 - At the end of May 2021, the Government of the Czech Republic approved the division of the JTF into individual coal regions (Moravian-Silesian Region 46%, Ústí Region 39%, Karlovy Vary Region 15%). Technical assistance is not defined in the TJTP (version 1.7, June 2021). However, its financial scope can be estimated at CZK 1.7 billion, approximately 4% of the total OPJT allocation.
 - Related to synergy/complementarity/consistency with other programmes, many topics important for the transformation process of coal regions can be financed from programmes other than the OPJT. In terms of consistency and synergy, strong links exist with programmes that are outside the Multiannual Financial Framework (i.e., Recovery and Resilience Facility, Modernisation Fund, Innovation Fund). Other suitable programmes to finance the transition include the Multiannual Financial Framework (i.e., Connecting Europe Facility - CEF, Horizon Europe, LIFE, and Digital Europe - DEP).
 - The key actors in the capital raising strategy to finance to Just Transition will be private (key economic operators, SMEs, NGOs, individuals) and public investors (municipalities, regional authorities, universities). Nevertheless, public (EIB, the National Development Bank¹ (formerly Czech-Moravian Guarantee and Development Bank), SEF) and private financial intermediaries

¹ The Czech-Moravian Guarantee and Development Bank (CMZRB) changed its name to The National Development Bank <https://www.mpo.cz/cz/rozcestnik/pro-media/tiskove-zpravy/cmzrb-se-meni-na-narodni-rozvojovou-banku--krome-podpory-podnikatelu-sehraje-klicovou-rolu-v-rozvoji-infrastruktury--263148/>

(commercial banks and other financial institutions) are expected to play a significant role in financing the Just Transition.

- Below is a summary of the detailed recommended action plans.

Table 2: Overview on recommended action plans for the three coal regions

	Moravia-Silesian Region	Ústí Region	Karlovy Vary Region
Documents	RTP and List of Strategic Projects	RTP and List of Strategic Projects	RTP and List of Strategic Projects
Implementation time (min/max)	2021-2027	2021-2029	2021-2028
Instruments	Thematic calls, grant schemes, network projects, strategic projects	Thematic calls, grant schemes, network projects, strategic projects	Thematic calls, grant schemes, network projects, strategic projects
Overall allocation (for JTF)	CZK 18,900 million EUR 741.18 million	CZK 15,800 million EUR 619.61 million	CZK 6,300 million EUR 247.06 million
Investment Priorities Art. 8 of JTF / Annex D	a., b., c., d., e., h., i., j., k., l., n.	a., b., c., d., e., h., i., j., k., l., m., n.	a., b., c., d., e., h., i., j., k., l., m., n.,

- During the project, the TA team organised numerous stakeholder interviews and several workshops with participants from most diverse stakeholder groups. Moreover, the TA team participated in bi-weekly calls with the Czech government as well as with the European Commission. Particularly in the Czech Republic, the Czech TA team participated in various meetings for information and consultation of the different umbrella organisations to facilitate stakeholder engagement (Transformation Platform, regional standing conference and MoE working groups).
- We have revised the additional indicators presented by MoRD and MoE to address the transformation. The initial mapping of 75 additional indicators identified 20 indicators (connected results/output indicators) that were already included in a similar form in TJTP v.1.7. However, 18 indicators (potentially connected results/output indicators) were considered relevant to the priority investment needs of TJTP v.1.7 but were not reflected the form of an indicator in TJTP v.1.7. The indicators provided by MoRD come from the RE:START strategy focusing on economic restructuring of coal regions. The MoRD in this context requested TA Team for doing their appraisal with respect to their potential and suitability for tracking and measuring the transition process. Our conclusion is that more than half (33 of 62) of these indicators do not have any connection with the priority areas identified in TJTP v.1.7. As a result, the focus of these indicators was broader than the Just Transition objectives. For the MoE indicators, the proportion is lower (4 of 13 indicators). From the 75 additional indicators, 19 are already included, 16 should be integrated and 4 should be reviewed.
- We have developed a concept dashboard with a link to a developed example for circular economy, including information on waste categories, recycling rates, disposal and recovery facilities and different trend analyses. This concept dashboard can be transferrable to other purposes.
- Concerning the analysis of the project monitoring indicators presented in the Inception Report (D1), we have mapped the status quo (refer to Section 2.5). To ensure a smooth project flow and coordination, the Project Manager has maintained a close relationship and regularly coordinated with the Czech Government, the European Commission, and the TA team.

Chapter 3 reports lessons learnt and recommendations.

During the project implementation, we have gathered **several lessons learnt**:

- **Importance of fluid and smooth information flow between the main stakeholders** of MoRD, European Commission (DG REFORM and DG REGIO) and the Technical Assistance team. In addition to the communication by email and on a one-on-one basis, the creation of regular bi-weekly meetings have been crucial. These regular touchpoints ensured timely reactions in a highly volatile

project environment (Final JTF regulation was published on 30 June 2021, ongoing work on the Czech side on the regional transformation plans and the national TJTP, etc.).

- **Flexibility in expanding the expert pool.** We welcomed the flexibility of the Contracting Authority (DG REFORM) to provide a swift approval of the addition of experts to the expert pool, especially since the work on governance, financial instruments, stakeholder engagement and the regional assessment required additional resources to complement the available expertise and capacity.
- **Enhanced project governance.** We believe that the creation of a micro-board has been a valuable measure. It provided an opportunity for the main stakeholders and representatives of the coal regions to thoroughly prepare the project steering committees. This has been particularly needed given the complexity of the project and the need to ensure a focused steering committee for the project deliverables.
- **Online meetings are feasible and can be conducive to reach project objectives.** Due to the ongoing COVID-19 pandemic, it was of high importance that meetings and workshops took place online. In terms of quality, we have observed that there has not been an adverse impact on the outcomes of the meetings and workshops. This implementation modality also ensured a more intense dialogue between project stakeholders compared to a traditional face-to-face setting.
- **Visibility.** We appreciated the opportunity to develop a project flyer that immediately provided project visibility for the Technical Assistance and eased the contacting of new project stakeholders and interview partners. The D2 report includes recommendations towards the communication (and visibility of the project).

Recommendations for actions or measures contributing to the Just Transition Agenda:

- **For the government of the Czech Republic:** During the project, the TA team issued several recommendations contained within the various deliverables. Based on the implementation status of these recommendations provided by MoRD as of 30 June 2021, we can state that MoRD has a good grasp on all aspects and several recommendations are already in place whereas others are ongoing. All important issues are addressed for contributing to the overall success of the Just Transition Agenda with the following final inputs and recommendations:
 - Following the finalisation of the intervention logic of the individual thematic objectives and the transformation stories of the coal regions, it will be necessary to verify the selection criteria for the forthcoming calls for project proposals. The discussed and evaluated projects are not "entitled" to funding from OPJT; those projects have simply provided a preliminary mapping of potential possible absorption capacity. However, it is likely that after the finalisation of the intervention logics, partial specifics will emerge for the individual thematic objectives and will need to be reflected in the preparation of specific calls for projects in the OPJT. The MoRD and MoE are aware of this necessity and aim to follow this recommendation.
 - For the Just Transition Plan of the Czech Republic, it will be important to further identify and specify the overlapping of activities proposed in strategic projects with the programming documents and activities envisaged in the ESIF programmes 2021- 2027.
 - The main economic operators are currently facing turbulent market changes (increasing prices of emission allowances, soaring prices of electricity and gas, value chain disruptions and shortages). The price of coal is increasing. All these factors may change the strategic plans of firms. The government of the Czech Republic should observe the development of the business sector and account for it in the process of strategic project selection and implementation, and in the specification of calls within JTF implementation.
 - Public consultations must continue during the JTF implementation, focusing on feedback from regions and diverse communities (small business, NGOs).
- **Due to the complexity of the transformation project,** we do not see any quick wins, neither from the Czech Government nor from the European Commission. **However, the most effective approach towards the successful transformation of the coal regions** - in addition to the necessary investments for the climate transition - will be to combine strong stakeholder engagement activities with efforts to set the business ecosystem and funding to incentivise all types of businesses to increase or to establish operations in the coal regions to diversify the economy in the affected areas during the coal phase-out. Moreover, projects (including the strengthening of education and improving living conditions) ensuring that a skilled workforce is available for those businesses will be a crucial factor to effectively manage the transition towards climate neutrality.

- **Recommendations for follow-on work:**

- Support to enhance the functioning of Pillar 1 (cross-ministerial work) and to establish the governance of Pillar 2 and Pillar 3;
- Design and implement an online survey to monitor the gaps and identify the actions needed to support and engage community in the coal regions;
- Strengthen stakeholder engagement for youth and small actors like NGOs and SMEs in the Just Transition; Innovative formats of stakeholder engagement for the implementation of the JTF should be tested (as proposed in D2);
- Support to enhance the project development capacities of small players (municipalities, SMEs, and NGOs);
- Develop a smart dashboard (inspired by the concept dashboard) for TJTP monitoring and impact measurement;
- Once the TJTP and RTPs are finished, look for support to develop a scorecard or unique index to measure the Just Transition; and
- Study tours to visit good practice projects in Germany, Hungary, and Slovakia.

Please note that most information contained in reflect the state of affairs as of July 7th, 2021 unless otherwise indicated.

1 BACKGROUND

1.1 Project overview

Specific Contract no.	REFORM/SC2020/111
Overall objective	Support the preparation of a Territorial Just Transition Plan in Czech Republic for the Ústí, the Karlovy Vary and the Moravian-Silesian regions.
Specific objective	<ul style="list-style-type: none"> • Support national authority initiatives to design reforms according to their priorities, taking into account initial conditions and expected socioeconomic impacts; • Support national authorities to enhance their capacity to formulate, develop and implement reform policies and strategies and pursue an integrated approach that ensures consistency between goals and means across sectors; and, • Support the efforts of national authorities to define and implement appropriate processes and methodologies, taking into account best practices and lessons learned by other countries in addressing similar situations.
Requested services	<p>Deliverable 1: Inception report</p> <ul style="list-style-type: none"> • Organise a kick-off meeting between the contractor, DG REFORM and the Ministry of Regional Development (MoRD) • Support the establishment of a steering committee for the contract • Prepare an Inception Report <p>Deliverable 2: Report on governance mechanisms and stakeholder engagement</p> <ul style="list-style-type: none"> • Prepare a proposal for the governance mechanisms • Prepare a proposal for the stakeholder engagement strategy • Prepare draft report and present it to the steering committee • Revise draft report based on comments from the steering committee <p>Deliverable 3: Report on the transition process towards climate neutrality</p> <ul style="list-style-type: none"> • Conduct desk research and field visits at the national and regional level • Conduct stakeholder interviews (based on Deliverable 2) • Assess existing plans and strategies, including the transformation strategy of some economic operators • Prepare draft report, present it to the steering committee, and revise it based on comments from the steering committee • Prepare and hold stakeholder workshops to present the revised draft report • Prepare and present the final report, including stakeholder feedback to the steering committee, and finalise it based on comments <p>Deliverable 4: Report on the challenges, needs and action plans for the most affected territories</p> <ul style="list-style-type: none"> • Conduct desk research and field visits at the national and regional level • Conduct stakeholder interviews, based on Deliverable 2; • Prepare an outline of the draft report for feedback from the steering committee • Prepare the draft report, present it to the steering committee, and revise it based on comments from the steering committee • Prepare and hold stakeholder workshops to present the revised draft report • Prepare and present final report including stakeholder feedback to the steering committee, and finalise it based on comments <p>Deliverable 5: Final report (present document)</p> <ul style="list-style-type: none"> • Document project activities, monitoring indicators and useful lessons learnt along with recommendations for further implementation of project results • Final reporting
Project starting date	05.10.2020
Project duration	9 Months
Implemented by contractor	Frankfurt School of Finance & Management (as part of the AARC Consortium) in cooperation with Trinomics, Czech Technical University and Cambridge Econometrics

1.2 Purpose of the report

The Final Report's objective is to summarise the main activities, analyse the project monitoring indicators and provide lessons learnt, recommendations and suggestions for possible follow-on work. In addition, we will provide some further inputs to selected themes as related to the dashboard and indicators.

1.3 Project context and status of transition planning.

The policy environment concerning the JTM at the EU level changed from being “under development” at the start of the project to a more consolidated situation. The discussions are most advanced for Pillar 1 with respective legislation already approved and published. Legislation is also approved for Pillar 2 (InvestEU). The preparation of a specific implementation will follow in the coming months. The European Council/European Parliament also adopted the Public Sector Loan Facility (Pillar 3) that will effectively complete all proposals under the JTM on 14 July 2021.

MoRD is preparing the final version of the TJTP in cooperation with relevant partners (especially the Steering Committee, Transformation Platform, working groups, representatives of coal regions and their RSK – Regional Standing Conference/Regional Permanent Conference). The TJTP preparatory team, led by MoRD, includes representatives from the regions, ministries, and the Government of the Czech Republic and builds on the previous experience of the RE:START team. The TA team has received the several versions of the TJTP, from v.1.3 at the start of the project to v.1.7 at the moment of writing this Final Report.

At the request of project stakeholders, in D4, the TA team has assessed the regional transformation plans (RTPs) of the coal regions that feed into the TJTP prepared by MoRD. This is an important difference compared to other Member States. In many other Member States, the affected regions had less capacity to develop their own plans. The latest versions examined include: Karlovy Vary (v.4/06.06.21), Ústí (v.7 03. 05. 2021 and Moravia-Silesia (2021/June). However, the plans still need to reflect the latest inputs provided by D4.

2 SUMMARY OF THE ACTIVITIES IMPLEMENTED

This section provides a summary of the activities undertaken during the project (refer to Section 1.1. for the overview), as well as of the meetings and consultation activities organised by the Technical Assistance team with project stakeholders during each project phase.

2.1 Deliverable 1: Inception report

The project kick-off meeting was prepared and organised on 19 October 2020 through an MS Teams video call, in coordination with the European Commission (DG REFORM). The following materials were circulated amongst participants for feedback: agenda, a Power Point presentation and the meeting minutes summarising the main points discussed.

To understand the project context and prepare the Inception Report, desk research and several follow-up meetings with the European Commission and Government of the Czech Republic representatives have been conducted throughout October and November 2020. Among the meetings were:

- Meeting with DG REFORM, DG REGIO and DG EMPL on relevant ongoing processes, programmes regarding CZ and the Just Transition Fund, preparation of the Resilience Recovery Programmes (RRP) and state of play.
- Meeting with MoRD on governance mechanism, stakeholder mapping and required support.
- Online working meeting of the Team Leader with Mr. Soukup (MoRD – CZ beneficiary) discussing preliminary feedback to the Inception Report.
- Two online working meetings with Ms Nekolová and Mr Tichý of Economic and Social Council of Ústí Region - ESCUR <http://www.hsr-uk.cz> – discussing procedures, outcomes and open issues.

Further data and information were collected by the Technical Assistance team and the Inception Report was prepared. The report was submitted for feedback in its draft version to the European Commission and MoRD on 5 November 2020.

Several activities have been undertaken to update the final Inception Report based on the received feedback. These activities, amongst others, included:

- Follow-up meetings:
 - Online meeting with DG REFORM and DG REGIO, conducted on 23 November 2020; after this meeting, the European Commission and the TA team established regular bi-weekly calls until mid-June 2021 to exchange information;
 - Online meeting dedicated to the potential of artificial intelligence and machine learning, conducted on 26 November 2020;
 - First trilateral status call (between European Commission, MoRD and the TA team) on progress and the Inception Report; meeting took place on 9 December 2020.
- Update of project database review.
- Streamlining of stakeholder list.

Following the initial analysis from the inception report, a survey on relevant project evaluation criteria was developed in both Czech and English languages, and subsequently approved by MoRD and the European Commission to gather feedback on project evaluation criteria. The survey was sent out to 20 stakeholders from Czech Ministries, the European Commission, and other international experts. The report was shared with MoRD, and they have handed it over to the Ministry of Environment (MoE).

The final inception report was submitted to DG REFORM and MoRD for approval on 14 December 2020 and was officially accepted and approved on 15 December 2020. Subsequently, the report has been edited for publication on the www.dotaceeu.cz webpage and has been authorised by the European Commission for publication, including a summary in Czech and English languages. To access the report, refer to this [link](#).

Key findings:

- Czech Republic can build on the experience of the RE:START strategy for the strategic planning of the transition process. However, the RE:START strategy is more complex than JTF; it runs in parallel, and its structure is used to share information about the JTPs.

- The decision about the shared institutional structure of implementation (MoRD for the TJTP and MoE for the JTF) was taken by the government. Both MoRD and MoE are involved in programming activities.
- The strategic documents at the regional level correspond with the programming periods of the EU as financing from the European Structural and Investment Funds is a key source of funding for Czech regional policy.
- The Transformation Platform was established to encourage discussion and consultation for the preparation of the TJTP of the Czech Republic. It covers a range of important institutional members, which represent stakeholders on the national, regional and local levels.

2.2 Deliverable 2: Report on governance mechanisms and stakeholder engagement

Activities related to the preparation of Deliverable 2 started in parallel to the preparation of the Inception Report and continued after the feedback on the draft version of the Inception Report was received. Before starting the write-up, an outline for Deliverable 2 was shared with the European Commission on 8 December 2020 and feedback was provided on 10 December 2020.

Based on the information gathered during the project inception phase, a different approach for Deliverable 2 was proposed than originally submitted in Technical Proposal. Namely, the report was to be clearly structured into two parts, as follows:

- A** Refinement of the governance mechanism
- B** Development of stakeholder engagement strategy

In relation to part A, a simple governance structure was already in place for the preparation of the TJTPs that required further refinement and development for the implementation phase, i.e., for implementing the investments under the Just Transition Fund (JTF).

In relation to part B, an initial communication and information flow concerning the TJTPs and the JTF facilitating outreach to all types of stakeholders required urgent attention. The TA team supported by identifying the most important project stakeholders (by providing a stakeholder list).

From November to December 2020, 15 stakeholder introductory meetings and interviews took place involving the Team Leader and various stakeholder from the Ministries, Czech Invest, companies and regional authorities. The findings of those meetings are reflected in the draft version of the D2 report.

The first draft of the Report on Governance Mechanism and Stakeholder Engagement (Deliverable 2) was submitted for feedback to the European Commission (DG REFORM, DG REGIO, DG ENER, and DG EMPL) and MoRD on 8 January 2021.

A first Steering Committee meeting to present and discuss Deliverable 2 was organised on 21 January 2021 via MS Teams. 36 participants attended the meeting with representatives of the Czech Government from different Ministries, representatives from the Karlovy Vary, Moravian-Silesian and Ústí regions, European Commission staff and members of the Technical Assistance Team.

In addition, the Steering Committee agreed on a mini-governance mechanism - a micro-board incorporated for the preparation and guidance on subjects to be discussed at the Steering Committee. After the meeting, full meeting minutes and annexes (participant list and presentation materials) were shared with participants.

Based on the detailed comments received on the first draft of the report (including the Steering Committee feedback) several follow-up activities were conducted, as follows:

- Held interviews with representatives from SEF and the National Development Bank²;
- Held follow-up interviews with regional representatives to collect more information on their stakeholder engagement activities conducted in 2020 and planned for 2021;

² The Czech-Moravian Guarantee and Development Bank (CMZRB) changed its name to The National Development Bank <https://www.mpo.cz/cz/rozcestnik/pro-media/tiskove-zpravy/cmzrb-se-meni-na-narodni-rozvojovou-banku--krome-podpory-podnikatelu-sehraje-klicovou-rolu-v-rozvoji-infrastruktury--263148/>

- Held an interview with representatives from EIB's Head Office to collect information on Pillars 2 and 3; and,
- Attended six online workshops organised by MoRD, targeting representatives from cities and municipalities on the Just Transition Fund and preparations for the Territorial Just Transition Plan.

The final draft of the Report on governance mechanism and stakeholder engagement was submitted to DG REFORM and MoRD for approval on 15 March 2021.

The key updates of Deliverable 2 and the agenda for the second Steering Committee meeting were presented during the micro-board meeting organised on 23 March 2021 to facilitate an informed discussion during the official meeting.

Subsequently, the final draft of the report was presented for approval during the second Steering Committee meeting organised on 30 March 2021 via MS Teams. The final Deliverable 2 report was officially accepted and approved on 6 April 2021. The report has likewise been edited for publication on the www.dotaceeu.cz webpage and has been authorised by the European Commission for publication, including a summary in Czech and English languages. To access the report, use this [link](#).

Other activities

A 1-page project overview flyer was developed in both Czech and English languages to enhance communication and information about the project. The flyer was presented for approval to DG REFORM and MoRD on 10 November 2020 and was approved on 3 December 2020. The flyer has subsequently been used for project information purposes (for example it has been attached to invitations for stakeholder interviews and meetings).

Key findings:

- The governance mechanism is to a large extent already in place for Pillar 1 of the Just Transition Mechanism related to the Just Transition Fund. The Ministry of Environment is the Managing Authority for the Operational Programme Just Transition and the State Environmental Fund is the intermediary body.
- For Pillars 2 and 3 of the JTM, the situation is less advanced. This applies to the EU and the national level. The TA team compiled and expanded potential governance options for both pillars in this report. The long-term governance structures of Pillars 2 and 3 of the JTM need to be decided upon.
- It is necessary to develop a monitoring and evaluation system, which should monitor the social impacts of the transition and establish an analytically strong interim and ex-post evaluation scheme that focuses on the factors and effects of the transition in the three coal regions.
- The stakeholder engagement process for the Just Transition Agenda in the Czech Republic is at an advanced stage and has been embedded in the information flow related to the cohesion policy since early 2019.
- The prevailing stakeholder engagement model of the JTM in the Czech Republic is based on the umbrella principle (membership of institutions with multilevel structures). The predominant stakeholder engagement format is participation in meetings and webinars, and information is most often shared via email or on websites in the form of presentation slides, video recordings and meeting minutes.
- Further identification and inclusion of other important stakeholders (e.g., representatives of youth organisations, NGOs, academia, innovative SMEs) is needed to ensure a balanced representation of institutions and interests.

2.3 Deliverable 3: Report on the transition process towards climate neutrality

The desk research, including data gathering on national and regional levels, has been initiated in preparation for Deliverable 3 report in parallel to activities for Deliverables 1 and 2. This included:

- Updating the structure of the report to reflect both the technical proposal and terms of reference;
- Analysing the main strategic documents (NECP, Climate policy, etc.) and regional strategic documents (energy concepts, RIS3, etc.) for climate neutrality and impacts with some preliminary inputs;
- Regional analyses of main socio-economic indicators and indices;
- Assessment of investment needs; and,
- Impact analysis with national level transition inputs (e.g., targets for emission, energy policy and consumption targets for households, transport systems and financing) updated by the expert team for the scenario design template for the E3ME Model.

Methodology/design, structure and target group composition for the interviews was also prepared in relation to stakeholder engagement activities based on the initial stakeholder mapping and strategy in Deliverable 2.

The planning, structure and scheduling of the climate neutrality interviews was done in cooperation with the CZ ministry (MoRD). The questionnaire was adapted to the different stakeholders – ETS and non-ETS companies, municipalities, local and regional stakeholders, chambers of commerce and other working unions, NGOs, etc. with a focus on the impact of the transition. The outcomes of this activity were included as an Annex to the Deliverable 2 report. A meeting to cooperate on the selection of the interviewees in the regions was organised with CzechInvest. Subsequently, several interviews have been conducted in cooperation with MoRD.

The first draft of the D3 Report was submitted for feedback to the European Commission (DG REFORM, DG REGIO, DG ENER, and DG EMPL) and MoRD on 19 February 2021.

A second Steering Committee to present and discuss Deliverable 3 was organised on 30 March 2021. Participants from the Czech Government from different Ministries, representatives from the Karlovy Vary, Moravian-Silesian and Ústí regions, European Commission staff and members of the TA team attended the meeting. The comments and recommendations collected from all stakeholders via email and during the second Steering Committee meeting were considered and incorporated into the updated version of the Deliverable 3 report.

In relation to Deliverable 3, the TA team also delivered a national workshop to present and discuss the modelling assumptions included in the D3 report organised on 22 April 2021 and a series of regional workshops with SMEs, local municipalities, and NGOs representatives, organised between April and May 2021. Results were presented during the third Steering Committee.

A third Steering Committee to present and discuss the main updates (e.g., workshops conclusions, updated modelling results, including disaggregation of the results to regional impacts) took place on 20 May 2021, with a micro-board meeting taking place earlier to prepare the Steering Committee. Participants from different Ministries of the Czech Government, representatives from the Karlovy Vary, Moravian-Silesian and Ústí regions, European Commission staff and members of the TA team attended the meeting.

The final D3 report was officially accepted and approved on July 22nd, 2021. This report has been edited for publication and has been authorised by the European Commission for publication on the www.dotaceeu.cz webpage. To access the report, use this [link](#).

Key findings:

- The key strategic documents have not yet fully reflected the transition to climate neutrality.
- The National Energy and Climate Plan was prepared in 2018 and finalised in 2019, i.e., when the climate neutrality target was not yet established. The current State Energy Policy was adopted in 2015 and has been linked to 2020 energy efficiency targets, but it does not incorporate GHG emission reduction targets.

- Investment needs for the climate neutrality transition are yet to be fully assessed and tracked.
- The transition steps towards climate neutrality are still to be defined. In December 2020, the Czech Coal Commission recommended the phase-out of coal by 2038. However, the Government has delayed its final decision.
- If the national climate transition is carried out in line with the NECP and coal-phase out expectations, it will have a positive impact on employment, the environment, and the economy. Within this context, much of the renewable energy deployment is expected to happen by 2026 and a significant reduction of final energy consumption will take place by 2030.
- The transition will have different impacts on the three transition regions. The regional development strategies reflect the coal phase-out commitment and climate transition in the energy sector. They also predominantly focus on technical aspects. Less attention is paid to the diversification of regional economies- The lack of qualified employees has been mentioned as one of the key hindering factors to climate neutrality and the Just Transition.

Table 3: Impact on Climate transition by 2030 (compared to the baseline scenario)

Indicators	Czech Republic	Moravian-Silesian region	Ústi region	Karlovy Vary region
CO₂ reduction	-17%	-27%	-28%	-28%
GDP/GVA (for regions)	2.9%	2.2%	0.3%	0.8%
Employment (jobs)	50,000	4,700	2,400	700
Employment in Energy and Utilities sector	-3,000	-900	-1,300	-400
<i>Employment, jobs (baseline vs. 2018)</i>	0	-3,700	-12,800	-13,200

Source: Cambridge Econometrics E3ME modelling (2021)

2.4 Deliverable 4: Report on the challenges, needs and action plans for the most affected territories

2.4.1 Overview

Preparation of the Deliverable 4 report started in parallel with the previously presented tasks and included:

- In-depth research on existing initiatives in the three regions (e.g., the START project in Karlovy Vary Region) and transformation plans;
- Coordination call between the Team Leader and Ecorys team representatives implementing the START project in Karlovy Vary; and,
- Meeting with Karlovy Vary Administration representatives.

A national workshop on criteria for strategic project selection was organised on 28 April 2021 with a large participation from different stakeholders. The evaluation of the projects was presented and discussed in an expert panel featuring national senior experts as well as the representatives of the ministries (MoRD, MoE). The topics discussed and questions from the audience covered issues such as harmonising the understanding of (sub)criteria, indicators to monitor the projects, the evaluation timeline, cross-comparison of the strategic projects, total allocation of the programme and allocation of its parts, etc. After the national workshop, workshop minutes and a presentation from MoRD on the methodology for the selection of strategic projects were shared with participants. In addition, other workshops have been subsequently carried out by MoRD using the above concept with the participation of one of the TA team Senior Experts. The TA team provided comments to the methodology of the selection of strategic projects.

The first draft of the Report on the challenges, needs and action plans was submitted for feedback to the European Commission and MoRD on 30 April 2021.

At the third Steering Committee on 20 May 2021, the draft Deliverable 4 was also discussed. The comments and recommendations were collected from all stakeholders via email and have been

considered during the third Steering Committee. The comments have been incorporated into the updated version of the D4 report, including contextual updates, key operators, regional analysis and good practice examples.

The key updates from the final version of D4 and the agenda for the fourth Steering Committee meeting were presented during the micro-board meeting organised on 28 June 2021 to facilitate an informed discussion during the official meeting.

The updated final draft of the Deliverable 4 report was submitted for feedback to the European Commission and MoRD on 5 July 2021, while a fourth Steering Committee to present and discuss the main updates took place on 7 July 2021. The final D4 report was approved on 25 October 2021. After official approval, the report has been edited for publication and has been authorised by the European Commission for publication on the www.dotaceeu.cz webpage.

Key findings:

- Related to the assessment of the political-administrative, economic, employment/labour market, environmental, socio-cultural, and digital/technological related challenges and opportunities for the transition, the Moravian-Silesian Region has started its economic transformation towards an innovation-based economy with developed infrastructure for science and research. The Ústí and Karlovy Vary regions have not yet started such a positive development path, and for many indicators, they are increasingly lagging behind other regions.
- The analysis of the potential of artificial intelligence (AI) states that it can have a positive impact on GHG, GDP and Employment in all three regions, particularly in the Moravian Silesian Region. For its size and economic development, the Moravian Silesian Region has more potential to gain from selected AI use cases. The other two regions, in their digitalisation plan, identified domains where AI use cases are relevant such as autonomous vehicles, smart monitoring and management of energy consumption.
- The Regional Transformation Plans developed by each of the three regions still need to include the intervention logic, the strategic focus, prioritisation of goals and clarification of overlapping funding with other schemes.
- Clean energy development is a priority in all three transformation plans. The relevant instrument for the funding will be the Modernisation Fund.
- At the end of May 2021, the Government of the Czech Republic approved the division of the JTF into individual coal regions (Moravian-Silesian Region - 46%, Ústí Region - 39%, Karlovy Vary Region - 15%). Technical assistance is not defined in the TJTP (version 1.7, June 2021). However, its financial scope can be estimated at CZK 1.7 billion, approximately 4% of the total OPJT allocation.
- Related to synergy/complementarity/consistency with other programmes, many topics important for the transformation process of coal regions can be financed from programmes other than the OPJT. In terms of consistency and synergy, strong links exist with programmes that are outside the Multiannual Financial Framework (i.e., Recovery and Resilience Facility, Modernisation Fund, Innovation Fund). Other suitable programmes to finance the transition include the Multiannual Financial Framework (i.e., Connecting Europe Facility - CEF, Horizon Europe, LIFE, and Digital Europe - DEP).
- The key actors in the capital raising strategy to finance to Just Transition will be private (key economic operators, SMEs, NGOs, individuals) and public investors (municipalities, regional authorities, universities). Nevertheless, public (EIB, the National Development Bank, SEF) and private financial intermediaries (commercial banks and other financial institutions) are expected to play a significant role in financing the Just Transition.
- Several risks and mitigation factors were identified such as:
 - Low maturity of project pipeline;
 - Administrative costs related to project preparation and implementation;
 - Lack of data/unreliable data (e.g., no definitive plans for the restructuring of coal-fired power plants);

- Lack of clarity on eligibility of certain areas of investment;
- Missing participation/motivation of regional and local authorities as well as other regional stakeholders including companies, academia and NGOs to become active and experienced owners of project (despite of the effort of MoRD and open possibility to become a guest or member of Transformation Platform);
- Risk that projects for small players are considered less important than strategic projects for the regions; and,
- Lack of policy planning and monitoring capacity at the level of regional authorities

2.4.2 Feed-back on additional indicators

Based on the final list of additional indicators (from the JTF regulation), which were derived from the RE:START strategic framework and other indicators from the MoE provided by the Czech Government on 30 June 2021, we have started to map the indicators as follows.

- I. In relation to the priority areas of support for each of the three coal regions (refer to Table 44) provided by the TJTP v.1.7

Table 4: Priority areas of support of the coal regions according to TJTP v.1.7

Ústí Region - Priority areas of support
<ol style="list-style-type: none"> 1. Business, Research, Innovation 2. Competent people and SMART Region 3. New energy and efficiently used resources 4. Revitalized areas of the 21st century
Karlovy Vary Region - Priority areas of support
<ol style="list-style-type: none"> 1. Economic transformation 2. Innovation 3. Social transformation 4. Environmental and climate transformation
Moravian-Silesian Region - Priority areas of support
<ol style="list-style-type: none"> 1. New energy 2. New land use 3. Green industry 4. New business 5. Competent people 6. Innovation ecosystem 7. Digital and creative region 8. Circular economy

- II. As second step, we have established whether the indicators are already connected or included in the TJTP v.1.7
- III. Based on this data, we have started to provide a preliminary assessment on the degree of relevance of those indicators concerning the objectives of the priority areas of support
- IV. In a last step, we have identified those indicators that could enter the OPJT indicators.

Related to the **availability of data sources**, MoRD has informed us that they have data for all indicators that are being discussed and that MoE is going to track the environment indicators. Thus, we are not providing any further suggestions.

Table 55 and Table 66 include an overview of the preliminary results.

Table 5: Mapping of additional indicators

Type of relation of additional indicators to the TJTP v.1.7	MoRD (RE:START framework)	MoE	Total
Connected results / output indicators	16	4	20
Potentially connected results / output indicators	13	5	18
No connection	33	4	37
Total number of indicators	62	13	75

The initial mapping indicated that 20 indicators (connected results/output indicators) are already included in a very similar form in TJTP v.1.7. However, there are 18 relevant indicators (potentially connected results/output indicators) because the rationale of the priority investment needs in the TJTP v.1.7 declares the fields of activities but does not reflect it in a form of an indicator.

The indicators provided by MoRD come from the RE:START strategy focusing on economic restructuring of coal regions. The MoRD in this context requested TA Team for doing their appraisal with respect to their potential and suitability for tracking and measuring the transition process. Our conclusion is that more than half (33 of 62) of these indicators do not have any connection with the priority areas identified in TJTP v.1.7. As a result, the focus of these indicators was broader than the Just Transition objectives. For the MoE indicators, the proportion is lower (4 of 13 indicators). From the 75 additional indicators, 19 are already included, 16 should be integrated and 4 should be reviewed.

Table 6: Degree of relevance and recommendation of additional indicators

Degree of relevance	MoRD (RE:START framework)	MoE	Total	Recommendation	MoRD (RE:START framework)	MoE	Total
Very High	15	4	19	Included	15	4	19
High	9	5	14	Yes	11	5	16
Medium	5	1	6	To be reviewed	3	1	4
Low	33	3	36	No	33	3	36
Total number of indicators	62	13	75	Total number of indicators	62	13	75

Based on the initial mapping, Table 66 shows the degree of relevance of the additional indicators, from Very High, High, Medium to Low. The extreme clusters are either included in the TJTP (*Very High*) while *Low* indicators bring no value added to the TJTP. *High* expresses linkages between the additional indicators and the ones in the TJTP and should be integrated. The category *Medium* is a mix with some indicators directly entering (yes) into the TJTP and others subject to review.

To measure the success of the transformation process, it is important to monitor and track indicators. As each region has different priorities and characteristics, it would be difficult to develop a single indicator. However, in case this is still intended, some inspiration could be derived from the “Transitions

Performance Index”³ that measures countries in their development of a fair and prosperous sustainability or the SDG Index and dashboard.⁴

2.4.3 Proposal for a concept dashboard

In Just Transition projects, a smart dashboard will be a key tool to effectively monitor the transition and its impact in the regions.

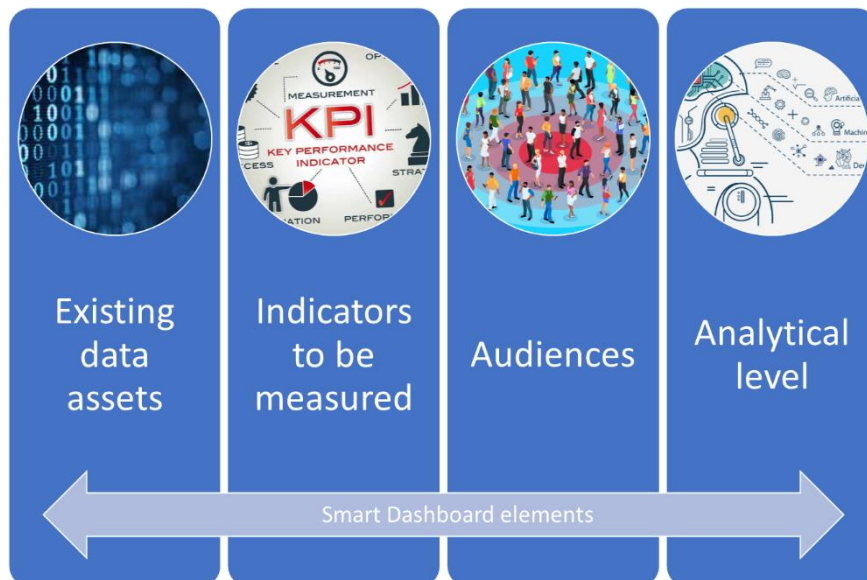
By tracking data from specific impact indicators⁵ related to their progression and consolidation, it may be possible to highlight critical situation, predict programme results, and understand the relative estimated impact of selected projects for the Just Transition.

A Smart Dashboard could include three types of information:

- **Descriptive:** what happened in the past or is currently happening. This could be done in a variety of ways to transform data, into information that could become actionable.
- **Predictive:** predicting what is most likely to happen in the future by using machine learning or statistical tools applied to existing data.
- **Prescriptive:** Recommending actions to take to affect the outcomes by highlighting the impact, based on the data, that each action could have.

Figure 1 highlights the main elements of designing a dashboard.

Figure 1: Key elements to consider in a smart dashboard design



Consideration of all foundational elements will help to design an effective dashboard that will allow effective monitoring of the programme, leading to a **Data-driven decision** approach.

Dashboard Concept

Given the limited access to data sources, we’ve produced a dashboard concept using data from **Eurostat**, related to the Czech Republic, which is fully accessible on the Eurostat public website⁶. With a richer data set it will be easy to add new dimensions and more accurate predictions.

The concept dashboard is available at the following web address:

<https://app.powerbi.com/view?r=eyJrIjoizGUzMzYzYjYtNGFiYi00MmJlLWJhNzQtMjM5ZmE1NjI2liwidCI6IjJmYjU1YmI3LTZkZDktNDM2Ni1iMGNmLTlxY2RjNjdiZWRhMmIsImMiOjN9>

³ https://ec.europa.eu/info/research-and-innovation/strategy/support-policy-making/support-national-research-and-innovation-policy-making/transitions-performance-index-tpi_en

⁴ <https://www.sdgindex.org/>

⁵ Impact Indicators, which are based on Annex III of the JTF Regulation.

⁶ [Database - Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/web/main/data/database) - <https://ec.europa.eu/eurostat/web/main/data/database>

We produced six pages with several examples of circular economy, including information on waste categories, recycling rates, disposal and recovery facilities and different trend analysis. This concept dashboard can be transferrable for other purposes.

2.4.4 Recommendations of action plans, containing actions or measures contributing to the Just Transition Agenda

To set up the recommendations for actions or measures contributing to the Just Transition Agenda, the TA team used the analytical output from the assessment of the regional transformation plans in Deliverable 4. However, to provide the latest information possible, we used the most recent versions of the plans:

- The Regional Transformation Plan of Ústí Region – version 8 from 30 June 2021
- The Regional Transformation Plan of Karlovy Vary Region – version 5.1 from 8 September 2021
- The Regional Transformation Plan of Moravian-Silesian Region – version from August 2021
- The working versions of the strategic project lists for the three regions – versions provided by MoRD on 19 July 2021.

The recommended regional action plans focusing on the actions/projects related to the Just Transition as per Annex D of the European Semester Country Report for Czech Republic, published in 2020.

In summary, the following general findings were identified for all Czech coal regions:

- The scope of some priorities exceeds the potential JTF financing and it is assumed that these activities will primarily be financed from other national sources (e.g., improving the usability of areas with discontinued coal mining for new activities or stabilisation and development of key sectors for economic transformation).
- Some specific goals exceed one programming period (e.g., improving the usability of areas with discontinued coal mining for new activities) and usually only preparatory investments can be done in the actual programming period.
- Implementation of strategic projects is usually designed for the entire programming period, and thus their impacts can be expected in a long-term.

The TA team identified significant differences in the approach of the three Czech coal regions in relation to allocations and strategic projects.

- Whereas the Moravian-Silesian Region has already developed financial allocations to particular priorities and assigned relevant strategic projects, the other two regions do not provide such detailed information.
- The Regional Transformation Plan for the Karlovy Vary Region only provides schematic allocations of the resources among priorities (specific goals) and a list of strategic projects⁷ without allocations to relevant priorities. Since the allocation of funds was provided for main themes/programmes in the Regional Transformation Plan rather than at the level of individual specific goals, the TA team provided an estimation of the funds allocation to specific goals based on the identified priorities based on the assessment in Deliverable 4 and their importance (medium, high, very high).
- The TA team estimated that 50% of the total allocation of the JTF for the Karlovy Vary Region will be used for thematic calls and grant schemes (currently umbrella projects⁸). Moreover, strategic projects were assigned to particular specific goals based on the short descriptions available as their distribution to the specific goals was not provided.
- The Regional Transformation Plan for the Ústí Region does not provide information about resource allocations and strategic projects. However, this information is available in a List of Strategic Projects⁹. As the financial allocation to specific goals was not provided in the Regional Transformation Plan, the TA team provided an estimation of the allocation based on the identified priorities based on the assessment in Deliverable 4 and their importance (medium, high, very high). The TA team calculated total allocations for thematic calls and grant schemes from the total

⁷ Selected strategic project in total represents investments of 7,032.2 mil. CZK (275, 77 mil. EUR) with contribution from JTF about 4,291.8 mil. CZK (168.31 mil. EUR). It is not expected that total estimated amount will be financed from JTF as total sum exceeds 50% of the total allocation of JTF to the Karlovy Vary Region

⁸ Grant schemes have been recently renamed as umbrella projects by MoE after consultation with the Ministry of Finance.

⁹ In total selected strategic projects represents investments in total some of 69.74 bln. CZK (2.7 bln. EUR) with expected contribution from the JTF about 8.34 bln. CZK (327 mil. EUR) and with one more strategic project in a project stack

allocation of the JTF for the Ústí Region, which was reduced by expected contributions to strategic projects.

Table 7 provides a summary of the recommended action plans.

Table 7: Overview on recommended action plans for the three coal regions

	Moravia-Silesian Region	Ústí Region	Karlovy Vary Region
Documents	RTP and List of Strategic Projects	RTP and List of Strategic Projects	RTP and List of Strategic Projects
Implementation time (min/max)	2021-2027	2021-2029	2021-2028
Thematic priorities (very high priority)	<ul style="list-style-type: none"> Entrepreneurial ecosystem; Research and development (public and private); Brownfields (industrial heritage utilisation/exploitation); Green economy (e.g., land recycling, materials); Upgrading/Diversification of traditional industries/firm structure (SMEs); Re- and up-skilling for future oriented economic activities; Support of universities (all roles); Investments into quality of life of inhabitants 	<ul style="list-style-type: none"> Entrepreneurial ecosystem; Primary and secondary education Re- and up-skilling for future oriented economic activities; Investments into quality of life of inhabitants; Modern energy systems - decentralised, diversified, environmentally friendly; Landscape reclamation, new development zones 	<ul style="list-style-type: none"> Entrepreneurial ecosystem; Investments into quality of life of inhabitants; Primary and secondary education; Re- and up-skilling for future oriented economic activities; Landscape reclamation, new development zones
Thematic priorities (high priority)	<ul style="list-style-type: none"> Modern energy systems - decentralised, diversified, environmentally friendly; Primary and secondary education; IT technologies/digital economy/artificial intelligence 	<ul style="list-style-type: none"> Research and development (public and private); Brownfields (industrial heritage utilisation/exploitation); Regional capacity building; Green economy (e.g., land recycling, materials) 	<ul style="list-style-type: none"> Upgrading/Diversification of traditional industries/firm structure (SMEs); Regional capacity building; Support of youth and disadvantaged groups; Brownfields (industrial heritage utilisation/exploitation); Modern energy systems - decentralised, diversified, environmentally friendly; Green economy (e.g., land recycling, materials); Circular economy
Thematic priorities (medium priority)	<ul style="list-style-type: none"> Landscape reclamation, new development zones; Circular economy 	<ul style="list-style-type: none"> Upgrading/Diversification of traditional industries/firm structure (SMEs); IT technologies/digital economy/artificial intelligence; 	<ul style="list-style-type: none"> Research and development (public and private); IT technologies/digital economy/artificial intelligence

	Moravia-Silesian Region	Ústí Region	Karlovy Vary Region
		Circular economy	
Instruments	Thematic calls, umbrella projects, network projects, strategic projects	Thematic calls, umbrella projects, network projects, strategic projects	Thematic calls, umbrella projects, network projects, strategic projects
Overall allocation (for JTF)	CZK 18,900 million EUR 741.18 million	CZK 15,800 million EUR 619.61 million	CZK 6,300 million EUR 247.06 million
Investment Priorities Art. 8 of JTF / Annex D	a., b., c., d., e., h., i., j., k., l., n.	a., b., c., d., e., h., i., j., k., l., m., n.	a., b., c., d., e., h., i., j., k., l., m., n.,

3 LESSONS LEARNT AND RECOMMENDATIONS

3.1 Lessons learnt

During the project implementation, we have gathered several lessons learnt, including:

- **Importance of a smooth information flow between the main stakeholders** MoRD, European Commission (DG REFORM and DG REGIO) and the Technical Assistance team. In addition to the communication by email and on a one-on-one basis, the creation of regular bi-weekly meetings has been crucial. These have taken place between the Technical Assistance team and the European Commission (December 2020–June 2021) as well as between the Czech Technical Assistance team and MoRD (January–June 2021) and ensured timely reactions in a highly volatile project environment (Final JTF regulation was published on 30 June 2021, ongoing work of the Czech side on the regional transformation plans and the national TJTP, etc.).
- **Enhanced project governance.** We believe that the creation of a micro-board has been a valuable measure. It provided an opportunity to the main stakeholders and the representatives of the coal regions to thoroughly prepare the project steering committees. This has been particularly needed given the project complexity and the need to ensure a focussed steering committee presentation of the project deliverables.
- **Online meetings are feasible and can be conducive to reach project objectives.** Due to the ongoing COVID-19 pandemic, it was of high importance that meetings and workshops took place online. In terms of quality, we have observed that there has not been an adverse impact on the outcomes of the meetings and workshops. This implementation modality also ensured a more intense dialogue between project stakeholders compared to a traditional face-to-face setting.
- **Visibility.** We appreciated the opportunity to develop a project flyer that immediately provided the project visibility for the Technical Assistance and eased the contacting of new project stakeholders and interview partners. The D2 report includes recommendations towards the communication (and visibility of the project).

The following provides key lessons in the context of Just Transition or for further projects in the Czech Republic.

- **Sharing international experience and learning from other countries.** Given that the process of forming and setting up the JTM was continuous and parallel to the TA project (i.e., in particular unfinished legislation during the TA project and unclear implementation details from the perspective of the European Commission), the exchange of experience between the participating countries regarding the design of the governance and implementation system was very important. The TA team also appreciated the sharing of international experiences with different stakeholders, experts and public sector representatives.
- **Governance: decisive/dominant role of regional governments.** In the Czech Republic, experience from the RE:START strategy was used. Within the framework of this strategy, the activities of particular coal regions were significantly profiled. The regions were able to communicate their development and transition agenda more strategically with the central government. This aspect of previous experience has been reflected in the formation of JTM settings. In particular, it was the dominant role of coal regions in the preparation of specific regional transition strategies. However, during the implementation of the JTM, it will be necessary to apply a coherent approach for both the implementation and the strategic evaluation of the achieved results and the overall plans of the set transformation stories.
- **Data availability.** The data available at Eurostat and the Czech Statistical Office provide a good basis for the description of the current situation. However specific data about jobs and firm employment are collected by various institutions (Ministry of Labour and Social Affairs, Labour offices in the regions). Most data are only partly available for the analytical community, which limits a more detailed analysis into the current situation and predictions structured by NACE categories and regions, related to the upskilling and reskilling needs.

3.2 Recommendations contributing to the Just Transition Agenda

3.2.1 Recommendations for the Government of the Czech Republic

During the project, the TA team issued several recommendations in the various Deliverables. Based on the implementation status of these recommendations provided by MoRD as of 30 June 2021, we can state that MoRD has a good grasp on all aspects and several recommendations are already in place whereas others are ongoing. An overview of the recommendations is provided below.

Deliverable 2: Report on Governance Mechanism and Stakeholder Engagement

Governance Mechanism

To strengthen the governance mechanism for **Pillar 1** (Just Transition Fund), in the short-term extended membership of the transition platform needs to include the missing sectors (e.g., non-profit, academia). Still the recommendation to carry out the pilot verification on selected types of projects in all coal regions; including the collection of ideas and suggestions in coal regions in connection with the completion of the TJTP. In the long-term, ensuring shared responsibility for implementation at the national and regional levels, with an interim and final assessment that includes the involvement of small actors, remains an important consideration.

Specific recommendations to finalise the governance mechanism for **Pillar 2** (InvestEU) have partly been lifted (pillar assessment, agreement with European Investment Advisory Hub) due to the ongoing legislative dealing between the EU and EIB, as well as for the National Development Bank. However, the National Development Bank must prepare for the product specifications in the planned InvestEU call; other recommendations relate to the role of National Development Bank, which commenced to prepare for the start of the option concerning the direct provision of guarantees from InvestEU. Finally, the use of EIB technical assistance in the preparation of Pillar 2 projects should be intensified.

Related to the involvement of SEF and the National Development Bank in the implementation structure of **Pillar 3** (Public Sector Loan Facility), it has been clarified that Pillar 3 is exclusively in the hands of EIB. For the grant component CINEA from the EC, there is still uncertainty because of ongoing dealing between EIB and European Commission. Here, the National Development Bank could be the only intermediary for smaller projects where commercial banks are also expected to be involved.

An additional recommended strategic action relevant for all pillars includes the development of a monitoring and evaluation system, which should monitor the social impacts of the transition and establish an analytically strong interim and ex-post evaluation scheme that focuses on the factors and effects of the transition in the three coal regions.

Stakeholder Engagement

A well-structured stakeholder engagement process based on the formal umbrella structures of the Transformation Platform, MoE working groups and RPCs (Regional Permanent Conferences) is already at an advanced stage and should be further expanded. Recommendations focus on expanding the Transformation Platform to include more members, particularly the inclusion of academia, the skilled population, innovative small and medium enterprises outside the coal regions who could establish operations within the coal regions. It is also recommended to improve outreach to underrepresented and disengaged groups, e.g., young people. Moreover, the national discussion should be open to stakeholders who are not formal members of the Transformation Platform, but who may bring valuable feedback and consultation. In this context, the MoRD following our recommendations is stating that the representatives of all groups of stakeholders have had a chance to become member of Transformation Platform directly or via umbrella institutions or have been invited as guests to express their opinion and to comment the process. Our recommendations also include that both mainstream and social media should be utilised to ensure a broad and open flow of information related to the Just Transition Agenda and the JTF. Media should also be used to disseminate knowledge, information and decisions made in umbrella structures to keep the general public informed. This can help mobilise SMEs and NGOs inside and outside the coal regions to promote activities towards the migration of active innovation players into the coal regions. Providing targeted assistance to SMEs and other small players will help create a level playing field and compensate lack of capacities regarding information and project design.

Deliverable 3: Report on the transition process towards Climate Neutrality

The D3 Report contains seven recommendations to implement the transition process towards climate neutrality. These recommendations cover different aspects. First, the TJTP needs to be regularly updated to ensure that it always reflects the latest developments and changes of the NECP and highlights potential discrepancies that need additional work. Furthermore, the recommendations give attention towards assessing the investment needs associated with climate transition by designing annual surveys for both the public and private sectors. It is also recommended to define concrete milestones that will make it possible to track the progress of the coal phase-out and reduce the administrative burden for accessing public funds. SMEs planning energy transition projects would especially benefit from increased flexibility and lower entry barriers. Another aspect covered in the recommendations is the requalification of workers who will be made redundant by the coal phase-out. To ensure that they can acquire relevant skill sets for newly created jobs in the energy sector or elsewhere will be a key factor in a successful transition. Another recommendation deals with the price development on the energy markets and the potential need to subsidise energy to prevent energy poverty in adjacent regions. Finally, it is highlighted that the regional development strategies will have to reflect the dynamic development of the energy market and take into account the changing strategies of business in the respective regions.

The responsible government bodies are fully aware and agree with these recommendations and are committed to implementing them in the future.

Deliverable 4: Report on the challenges, needs and action plans of the most affected territories

The D4 recommendations are concerned with the action plans of the territories most affected by the coal phase-out as well as their challenges and needs.

The first of eight recommendations deals with observed shortcomings of the regional transformation plans. It states that the plans should follow a more coherent approach that is consistent with intervention logic. The MoRD team has already instructed the regions on how to enhance their transformation plans and incorporate intervention logic. It has been highlighted that there has to be some discretion in elaborating the plans to account for the differences between Czech coal regions. The TA team has observed significant improvement regarding the intervention logic.

The second recommendation emphasises the regions should reduce the scope of supported activities in their transformation plans and focus on the needs of climate transition. The MoRD team partially disagrees with this opinion and stresses that while prioritisation is necessary, suggested projects can be expected to have a broader scope whenever different sources of financing with different criteria are available. The team of the ministry therefore suggests addressing prioritisation issues within the individual calls. The TA team is aware of the regions' efforts to improve intervention logic and prioritisation of measures. Related, regions should be careful about combining different funding sources in their programming. The government is aware of this issue and provides the regions with guidance in an ongoing process.

The fourth recommendation suggests identifying "win-win" projects, where climate transformation and social issues are both boosted in the context of energy poverty. The MoRD team and the representatives of regional governments are aware of the need to incorporate this into the strategic planning but consider it difficult to achieve with a few exceptions. The next recommendation emphasises the need to focus on the transformation story of the coal regions and the transition to climate neutrality to build an inventory of strategic projects. There is awareness for this need and the implementation is ongoing.

The final three recommendations are closely related and call attention to the facts that the regional transformation plans are still lacking precise time frames, focus too often on existing productive structures rather than conversion and, lastly, are not always based on robust empirical evidence. A better analysis of regional needs is required to help avoid investing in unsustainable projects. The government representatives are fully aware of these issues and are working continuously with the regions to improve these aspects.

The following final recommendations are also important to mention:

- Following the finalisation of the intervention logic of the individual thematic objectives and the transformation stories of the coal regions, it will be necessary to verify the selection criteria for the forthcoming calls for project proposals. The discussed and evaluated projects are not "entitled" to

funding from OPJT; those projects simply provided a preliminary mapping of potential possible absorption capacity. However, it is likely that after the finalisation of the intervention logics, specifics will emerge on the individual thematic objectives and will need to be newly reflected in the preparation of specific calls for projects in the OPJT. MoRD and MoE are aware of this necessity and aim to follow this recommendation.

- For the Just Transition Plan of the Czech Republic, it will be important to further identify and specify the overlapping of activities proposed in strategic projects with the programming documents and activities envisaged in the ESIF programmes 2021- 2027.
- The main economic operators are currently facing turbulent changes in the market (increasing prices of emission allowances, soaring prices of electricity and gas, value chain disruptions and shortages). The price of coal is increasing. All of these factors may change the strategic plans of firms. The Czech government should observe and account for developments in the business sector during the process of strategic project selection and implementation, and in the specification of calls within JTF implementation.
- Public consultations must continue during the JTF implementation, focusing on feedback from regions and diverse communities (e.g., small business, NGOs).
- Consider the implementation of smart dashboards as example of “actions or measures that could improve the quality of the Just Transition plan.”

Due to the complexity of the transformation project, we do not see any quick wins, neither from the Czech Government nor from the European Commission. **However, the most effective approach towards the successful transformation of the coal regions** - in addition to the necessary investments for the climate transition - will be to combine strong stakeholder engagement activities with efforts to set the business ecosystem and funding to incentivise all types of businesses to increase or to establish operations in the coal regions to diversify the economy in the affected areas during the coal phase-out. Moreover, projects (also including the strengthening of education and improving living conditions) ensuring that a skilled workforce is available to those businesses will be a crucial factor in managing the transition toward climate neutrality effectively.

3.3 Recommendations for follow-on work

- **Recommendations for follow-on work:**

We have the following recommendations for follow-on work:

- Support to enhance the functioning of Pillar 1 (cross-ministerial work) and establish the governance of Pillar 2 and Pillar 3;
- Support to enhance the project development capacities of small players (municipalities, SMEs, and NGOs);
- Strengthen stakeholder engagement for youth and small actors like NGOs and SMEs in the Just Transition; Innovative formats of stakeholder engagement for the implementation of the JTF should be tested (as proposed in D2);
- Design and implement online survey to monitor the gaps and identify actions needed to support and engage communities in the coal regions;
- Develop a smart dashboard, inspired by the concept dashboard for the TJTP, to monitor and measure impact by increasing the quality of the TJTP;
- Once the TJTP and RTPs are finished, look for support to develop a scorecard¹⁰ or unique index to measure the Just Transition;
- Study tours to visit good practice projects in Germany, Hungary, and Slovakia.

¹⁰ Kaplan and Norton, 1992 Example of strategic planning with the support of balanced scorecards in the Czech Republic: https://www.researchgate.net/profile/Ticiano-Jordao/publication/261481232_The_use_of_Balanced_Scorecard_in_the_Strategic_Planning_of_Renewable_energy_Supply_in_the_Regional_Level/links/5496a6ab0cf29b9448245bac/The-use-of-Balanced-Scorecard-in-the-Strategic-Planning-of-Renewable-energy-Supply-in-the-Regional-Level.pdf