

CONTACT

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Disclaimer

The document does not represent the views of the European Commission, nor can the Commission be held responsible for any use which may be made of the information contained herein.

Section 1: Context, strategy and support

Introduction: Positive steps along the Just Transition pathway

This document identifies recent steps undertaken by development actors in the Jiu Valley and indicates future steps that they should take to make the area a successful example of Just Transition. A positive outcome cannot be achieved only by local effort. A Just Transition in the Jiu Valley is dependent on external investment and sustained co-operation between organisations (public, private, civil society) at the local, regional, national and EU levels.

Much has already been achieved and notable milestones have been attained on the Jiu Valley's path towards a successful transition. These include:

- the Memorandum of Understanding to promote collective action, agreed by the six local authorities in the Berlaymont (the headquarters of the European Commission) in Brussels (2019)
- the development of the Strategy for the Transition of Coal in Jiu Valley and Related Action Plan based on local consultation (2020-21)
- the identification of a portfolio of twenty projects aligned with the strategy's ambitions (2021)
- the creation of a local development association, Association for Integrated Territorial Development Valea Jiului, comprised of local organisations (2021)

Simultaneously, other strategies and related funding instruments which will have a direct and significant bearing on the Jiu Valley's transition prospects, such as Hunedoara's Territorial Just Transition Plan and the Regional Operational Programmes, have been developed.

The Jiu Valley is poised to reinvent itself. For this opportunity to be seized and for the benefits of a Just Transition to be felt amongst the Jiu Valley's residents, the time for significant investment and co-ordinated action has come.

BOX 1

What do we mean by a Just Transition?

Just transition encapsulates the principle that the transition to a climate neutral economy should happen in a fair way, whereby the benefits and costs of transition are distributed equitably, and where those that stand to lose economically or socially from the transition are adequately supported. Consequently, just transition focuses on jobs and livelihoods, and on advancing social and economic justice. It also incorporates the principle that transition processes should be based on dialogue and cooperation.



Why is the document required?

Although there are numerous policy documents with relevance to the Jiu Valley's transition¹, there is a need for a strategic overview which provides a clear call to action for diverse actors with a shared interest in achieving a Just Transition in the Jiu Valley. Critically, there is a need to articulate the "big picture" in terms of opportunities and the required actions to realise it. The time has come to convert strategic intentions into actions.

In particular, the document provides a unifying narrative for the twenty projects identified through consultations, undertaken by PwC and START support, and places them in wider strategic and investment contexts and articulates their linkages, thereby illuminating the need for co-ordination. In addition, conditions for the successful delivery of these catalytic projects of change are identified. These include:

- adequate resources and capacity
- multi-scalar and multi-actor partnership working
- supporting / enabling infrastructure and future investment

The document also identifies illustrative gaps in infrastructure investment that should be addressed if the benefits generated by these twenty projects are to be optimised.

Finally, the document aims to foster a wide and inclusive understanding of the process of transition in the Jiu Valley. Transparency will bring legitimacy and buy-in across diverse stakeholders.

1 These include the Strategy for the Transition of Coal in Jiu Valley, Hunedoara's Territorial Just Transition Plan, the Regional Operational Programme for the West Region

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Technical assistance

From 2019 until late 2021, the European Commission provided technical assistance via PwC and the Coal Regions in Transition START Programme. This assistance engaged local, regional and national stakeholders in the analysis of the challenges and opportunities for a Just Transition in the Jiu Valley. Through consultation, the technical assistance also identified twenty initial projects to enable a just transition.

Who is this document for?

"Delivering a Just Transition in the Jiu Valley, today and tomorrow: From Strategy to Action" has been developed to inform the development of the new local development association (Association for Integrated Territorial Development Valea Jiului) and its activities and priorities in the short to medium term, especially regarding investments identified through the consultations undertaken by PwC and START. The document will also provide a unifying point of reference for the six local authorities, encouraging a holistic view of the Jiu Valley's development and promoting ongoing collaboration.

It will also provide the new local development association and the six local authorities with a structured and integrated manifesto of change with which to engage external actors and communities and organisations in the Jiu Valley.

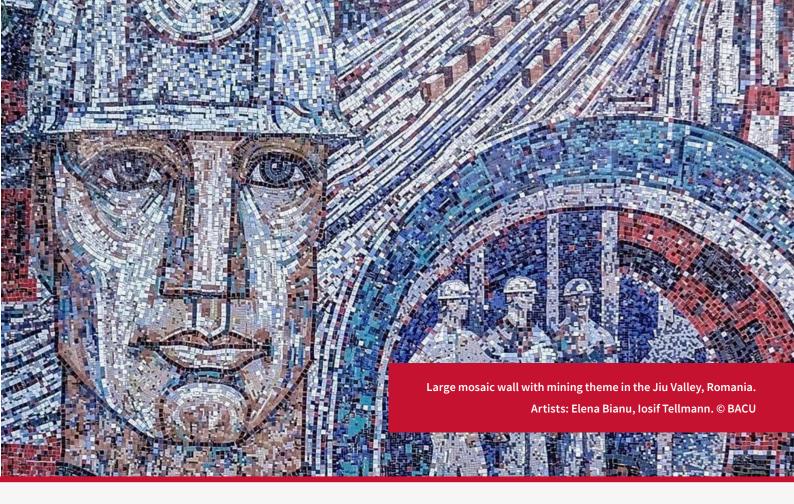
As regards external actors – such as, Hunedoara County, RDA West, national Ministries, the European Commission – this document further illuminates the opportunities for transition in the Jiu Valley and the need for sustained support and engagement. The reinvention of the Jiu Valley is a long-term effort of many actors and it needs to gather momentum.

Finally, the document is for the communities and inhabitants of the Jiu Valley. All have been affected by coal phase-out. The recent decades have been uncertain and anxious times for the Jiu Valley residents and this document aims to provide insights into what is being done to improve the fortunes of the Jiu Valley.

A unique place, a unique transition

The Jiu Valley has a unique history as a major driver of economic growth for nearly a century and a half. The hard coal mines of the Jiu Valley provided employment and wages for thousands of families whilst its output underpinned national energy and industrial production. It is no exaggeration to say that Romania's modern history is intertwined with the Jiu Valley.

However, between 1990 and 2020, the combined dynamics of market and energy reforms, led to coal related employment falling from approximately 55, 000 jobs to less than 4,000 in the Jiu Valley. Out of 15 underground mines in 1990, only 4 are still operational - Vulcan, Livezeni, Lonea and Lupeni – as part of Hunedoara Energy Holding company. The Lupeni and Lonea mines are scheduled to close by 2024 and the other two mines will close in the coming years. The industrial collapse has had a major impact on the area's



Jiu Valley: Geographic and Historic Context

Situated in south-western Romania, the Jiu Valley impresses with its mountain landscapes, industrial heritage, and recreational areas. Surrounded by Parâng and Retezat Mountains and intersected by the Jiu River, the Jiu Valley is a gateway to Retezat National Park – the oldest national park in Romania and a UNESCO Reserve of the Biosphere.

Coal mining dates back to the mid-19th century, prior to which the Jiu Valley was sparsely populated due to its mountainous terrain and extensive forests. The economically important hard coal mining that emerged in the Jiu Valley attracted settlers from across the Austro-Hungarian Empire (Hungary, Czechia, Poland etc.) and from the Kingdom of Romania, giving the area a unique and rich culture. By the second half of the 20th century, the Jiu Valley developed into one of the four most important industrial centres of socialist Romania, along with Ploieşti (oil extraction), Braşov (industrial equipment) and Constanţa (maritime trade).

The first community in the Jiu Valley to become a town was Petroşani (1923), followed by Petrila, Lupeni, Vulcan (1956), Uricani (1968), and Aninoasa (1989). In parallel to the expansion of hard coal mining, the population of the Jiu Valley grew exponentially – from 5 000 inhabitants in 1868 to over 165 000 by the 1990s, owing to significant immigration and natural growth.

The economic role of the Jiu Valley became more uncertain in the 1990s with Romania's transition to a market-based economy. This transition led to a sharp decline in coal mining, mass lay-offs, rising economic inactivity and overall demographic decline, driven by out-migration and falling natural growth. In recent times the overall population has contracted by around 20% from its peak in the early 1990s, with communities that were mono-industrial in nature being more severely affected.

Jiu Valley's unique story, landscapes and heritage have attracted considerable attention over the years. Various media outlets and international organisations have featured the Jiu Valley in film, media and cultural reportage. Some examples include:

- "Romania's coal-black heartland embraces Europe's Green New Deal" (Euronews)
- "What Life After Coal Looks Like" (New York Times)
- "Planeta Petrila" (HBO Europe)
- "The mural raises the moral!" (Greenpeace)

demography with the population falling from 165,000 in 1992 to 135,000 in 2018, largely due to out-migration and an ageing population. In this same period, the contribution of mining to local government budgets fell from 76% to 2% of public revenues.

The sharp decline in mining activities has led to an anomaly, whereby the Jiu Valley has become a poor area within what is the second most economically advanced region of Romania, the West Region. One of the implications of this disparity is that the region-wide state aid intensity is capped at 35%, which is a low figure given the challenges faced by the Jiu Valley.

To assist the current transition to a carbon-neutral economy, the European Union and the national government are making resources available through national and regional development programmes. Instruments such as the EU's Just Transition Mechanism and the National Recovery and Resilience Facility offer funding that can transform the Jiu Valley economically, environmentally, and socially. The six Jiu Valley municipalities and local organisations have been actively carving out a vision for the development of the area by contributing to strategies, such as the Territorial

Just Transition Plan. Prominent voices in the transition process, in addition to local government, include local NGOs and civil society, trade unions, business representative bodies, and the University of Petrosani.

While the coal industry once dominated economic life, today other local economic activities reflect sectors of national and regional competitive advantage. These sectors include tourism and eco-tourism, textiles and leather, wood and furniture, energy and environmental management, food and beverages. This makes the Jiu Valley well-placed to develop new industries and enterprises.

The past economic success of the Jiu Valley was located deep underground in some of the deepest coal mines in Europe (reaching depths of nearly 1,000 metres). Paradoxically, the area's future economic success will in part be determined high above ground through taking advantage of its mountain landscape and the retraining of former miners as wind turbine technicians at the Renewable Energy School of Skills (RESS) which will open in the Jiu Valley soon. This should see the Jiu Valley's focus change from the depths to the heights!

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Jiu Valley Programme of Action

The content of this document should evolve as policy and funding certainty emerges in the coming months (e.g., approval of Hunedoara's Territorial Just Transition Plan; finalisation of the Romanian State Aid Map; clarity on co-financing). Its content needs to be "owned" by the Association for Integrated Territorial Development Valea Jiului and updated as circumstances change. This can be done via the creation of a detailed Programme of Action based on this document and associated documents, and the commitments of other partners, that is refreshed on a regular basis by the new local development association. The Programme of Action should be accompanied with a monitoring and reporting framework to track progress towards a Just Transition in an inclusive and transparent manner.



Local commitment with external support: The vital mix

Local government and civil society in the Jiu Valley have demonstrated a commitment to change. This intent was clearly demonstrated by the signing of a Memorandum of Understanding in Brussels in 2019 by the Jiu Valley's local authorities. The Memorandum committed the signatories to collaborate to achieve a successful transition for all Jiu Valley communities. On a very practical level, several Associations for Inter-Community Development have also been agreed by the local authorities to create economies of scale in the provision of local government services.

These important steps have been augmented by greater collaboration between local government and other local development actors – such as University of Petrosani, the Business Association of the Jiu Valley (ACIVJ) and numerous networked NGOs (Valea Jiului Implicată) – culminating in the creation of the Association for Integrated Territorial Development Valea Jiului. The Invest in Jiu Valley initiative is another notable example of the desire to create a new and better future for the Jiu Valley².

Local stakeholders have proactively engaged in strategy and planning processes to re-imagine and prepare for a Just, Decarbonised and Diversified future.

These include³:

- Just Transition in Hunedoara: Economic Diversification in a Fair and Sustainable Manner (CEROPE, 2019)
- Best Practice Report on Labour Markets, Social Issues and Tourism (TRACER, 2020)
- Strategy for the Transition of Coal in Jiu Valley (PwC, 2021)
- Project fiches to support the Jiu Valley PwC strategy (START, 2021)
- Hunedoara's Territorial Just Transition Plan (draft, 2021)

However, local commitment can only achieve a Just transition if external support is maintained and developed.

3 The processes and activities were supported through funding and assistance from the European Commission (DG REFORM, DG ENER, Horizon 2020) and the European





Further clarity on EU funding for the Jiu Valley's transition is needed⁴. Several factors are notable in this context:

- · co-financing
- · management capacity
- enabling access to EU funding on a scale proportionate to the territorial challenge.

The six local authorities of the Jiu Valley have experienced severe demographic and economic contraction and, subsequently, notable revenue reduction and fiscal uncertainty. Given the need for co-financing for EU funding, the local authorities are thus disadvantaged in the utilisation of these funds. In May 2021, all six Mayors of the Jiu Valley wrote to the Romanian Prime Minister requesting that the local authorities should only be required to provide a maximum financial contribution of 2% for Territorial Just Transition Plan funded projects. These projects relate to thermal rehabilitation of residential blocks; the revitalisation of former mining areas; and green energy for public buildings and public lighting.

This request illuminates the need for innovative blending of EU and national resources to enable the projects identified via the PwC and START processes.

In addition, the PwC Analysis of Key Challenges and Opportunities for the Jiu Valley (2020) observed a limited local capacity for handling and managing EU funding as an obstacle to transition. This is not a problem that can be immediately addressed by the establishment of the local development association. Moreover, given that RDA West is the Managing Authority for Regional Operational Programmes, its ability to assist in this matter is circumscribed.

The requirement for local capacity to manage external funding needs addressed in the short-term (i.e., the next two years) whilst the Association for Integrated Territorial Development Valea Jiului evolves and systems for applying and managing EU funding across the Jiu Valley are developed and embedded.

Given the exceptional circumstances faced by the Jiu Valley, greater certainty needs to be provided on how the communities and residents can benefit from EU funding on a scale that is proportionate to their evident needs. Now that there is confidence about the establishment of the local development association (reflecting an Integrated Territorial Investment approach), there needs to be clarity on the specific modality of development funding for the area.

Greater detail and certainty on the utilisation of EU funding should be ideally developed as soon as possible.

In recognition of the Jiu Valley's exceptional circumstances, including it being a socio-economically disadvantaged area in a relatively prosperous region, there should be consideration of how private sector investment can be incentivised. Consideration should be given to making the State Aid and/or the fiscal regime more conducive to private sector investment in the Jiu Valley. Tailoring the state aid regime to the characteristics of the area could boost investments by allowing for a higher public co-financing rate and thus reduce the economic disparities with other parts from West Region.

Finally, the Jiu Valley faces complex, interconnecting challenges that require external investment across a broad set of areas. Moreover, the projects identified through the PwC and START consultation processes are dependent on the delivery of other investments e.g., new PV facilities are dependent on electricity distribution / grid investments; tourism projects are dependent on improvements to transport infrastructure; and digital hubs and the enhancement of IT skills are dependent on 4G coverage.

In short, interventions and investments by non-local development actors should ideally be co-ordinated and programmed.



 $^{4\,} These\, EU\, funding\, sources\, include\, the\, Just\, Transition\, Fund\, and\, Cohesion\, Policy\, funds$

Vision and Strategy for the Future

As noted, for more than a century and a half, the economic and social development of the Jiu Valley has been inextricably linked to coal mining and coal related industrial activity. As this era comes to a definitive end, the Jiu Valley must trace a new path forward that can deliver prosperity and well-being to its citizens and communities. New economic activities need to be developed, the legacy of environmental degradation of former mining and industrial activities needs to be addressed, the outflow of the population and especially younger generations needs to be stemmed, and opportunities need to be created for the economic and social integration of the Valley's marginalised and vulnerable groups.

The Jiu Valley today is one of the territories on the frontline of the clean energy transition that will suffer the most if the impacts of the shift away from fossil fuels are not mitigated. If the EU's ambitions for a Just Transition are to apply anywhere, then certainly they must apply in the Jiu Valley. Just Transition is not only about helping workers displaced by transition to find new jobs, though this is clearly important. Just Transition is also about improving the overall quality of life of the Valley's citizens and communities by promoting equality and inclusiveness, moving to cleaner and healthier ecosystems, ensuring greater energy security, and stimulating a more dynamic and innovative local economy.

BOX 4

Inter-linked visions for transition and regional development

The draft "Strategy for the transition from coal of the Jiu Valley" delivered by PricewaterhouseCoopers (hereafter, "Jiu Valley Development Strategy")¹ sets out a vision for the Jiu Valley as "a socially revived region, sustainable and interconnected, with a competitive economic environment, boosted by investments and innovation, and acknowledged for the local specifics".

At the wider level, the draft "Territorial Just Transition Plan for Hunedoara Country" (hereafter, "Hunedoara TJTP")² sets out a general objective that by 2030 Hunedoara County should "become a county with a diversified economy, competitive at the regional level, which offers opportunities to the local workforce and with a high quality of life in both urban and rural areas." And, additionally, the County "maintains and attracts population, investments and tourists."

At the regional level, "The plan for regional development of the West Region 2021-2027" (hereafter, "West Region RDP")³ presents a vision that by 2030 "The West Region is a national reference for the innovative, sustainable, and inclusive development model, based on sustained economic growth due to the promotion of innovation, digitalization and creativity at all levels and on a balanced territorial development, which ensures equitable access to modern public services, education and opportunities."

¹ PwC (2021), Strategia pentru dezvoltarea economică, socială și de mediu a Văii Jiului (2021-2030), draft, April 2021 [RO]. Strategy for the transition from coal of the Jiu Valley (Romania), Deliverable 4 – Strategy for the economic, social and environmental development of the Jiu Valley (2021-2030), June 2021 [EN: PwC unpublished].

² Planul Teritorial pentru Tranziție Justă Hunedoara 2021-2027 Draft 1 [RQ], [EN: own translation].

³ Planul pentru Dezvoltare Regionala al Regiunii Vest 2021-2027 [RO], [EN: own translation].

Jiu Valley Development Strategy

Overview of themes and intervention areas

GOALS TERRITORIAL IMPROVING GREEN **ECONOMIC COHESION AND QUALITY OF LIFE TRANSITION** REJUVENATION **INTEGRATION** THEMATIC AREAS **Economic** Social Sustainable Sustainable and Connectivity development and development environment secure energy and accessibility diversification **INTERVENTION AREAS** Environmental Reconfigure energy **Employment** Investment Transport rehabilitation and activation attraction infrastructure renewables protection Energy **Innovation and Education** Circular **Public transport** performance of entrepreneurship services economy services **buildings** Telecoms and Regeneration of Diversification Health Clean transport industrial and and adaptability services and mobility infrastructure mining sites Social protection **Public** and inclusion utilities and leisure Urban Agro-foods Digitalisation/ accessibility digital services **Development Pillars** Improving life quality and creating a healthy and sustainable environment Economic diversification, innovation and entrepreneurship Sustainable capitalisation on the local specificity PILLAR IV Accessibility, mobility and connectivity

Looking forward a decade, what are the aspirations for the development of the Jiu Valley?

The overall vison set out in the "Jiu Valley Development Strategy"5 foresees a rejuvenated, diversified, and sustainable local economy with its competitiveness boosted through investments and innovation, and where new career opportunities are created from harnessing the Valley's potential in sectors such as tourism, creative industries, and food production. This economic development goes hand in hand with social progress through improved education, health, and other social services, infrastructure improvements (e.g., urban regeneration and mobility, and enhanced transport and digital connectivity), and a responsible approach towards environment (e.g., rehabilitation of former mining and industrial sites, nature restoration and preservation, circular economy). The Jiu Valley of the future should be a place where citizens and visitors alike can enjoy a high quality of life in a clean, healthy, well connected,

5 Ibid.

and sustainable environment. This vision aligns closely with those set out at the wider geographical levels of Hunedoara County and West Region (see Box 4) and, as already described, with European ambitions for a Just Transition.

How can a Just Transition that matches the economic, social, and environmental aspirations of the Jiu Valley be realised?

The "Jiu Valley Development Strategy" identifies a wide array of interventions across four principal development pillars that collectively cover economic development and diversification (with specific attention to exploiting the Valley's nascent potential in tourism, leisure, culture and creative industries, and agri-food and craftmanship), sustainable and secure energy supplies, environmental sustainability, social development (with an emphasis on strengthening services for education, health, and social inclusion), and infrastructure investments targeting urban regeneration, the upgrade

BOX 5

Territorial Just Transition Plan for Hunedoara County (draft) main transition objectives

The draft "Hunedoara TJTP" sets out the following specific objectives:

- To develop the R&D&I ecosystem that supports and stimulates sustainable economic growth
- To increase the adaptability of the local economy and to create new opportunities for the workforce through the development of entrepreneurship
- To increase the degree of digitization of enterprises and public services, to support the sustainable transformation of the economy of Hunedoara County
- To improve thermal comfort and lower energy costs by increasing energy efficiency and capitalizing on renewable energy resources
- · To decarbonise the local transport system by promoting green mobility
- To increase the quality of life by decontaminating and regenerating polluted sites and their integration into the local economy, and to promote a green and healthy approach to the regeneration of cities
- To strengthen the circular economy by stimulating new consumption patterns that prevent waste generation and reduce its quantity, efficient reuse and recycling
- To reduce pollution by improving the energy efficiency of district heating systems and to improve heat systems and to reduce population costs
- To develop and increase the quality of medical and social services to mitigate the effects of the economic transition and demographic decline
- To retrain, diversify and improve the competences and skills of human resources to support the economic transition and promote active measures for employment

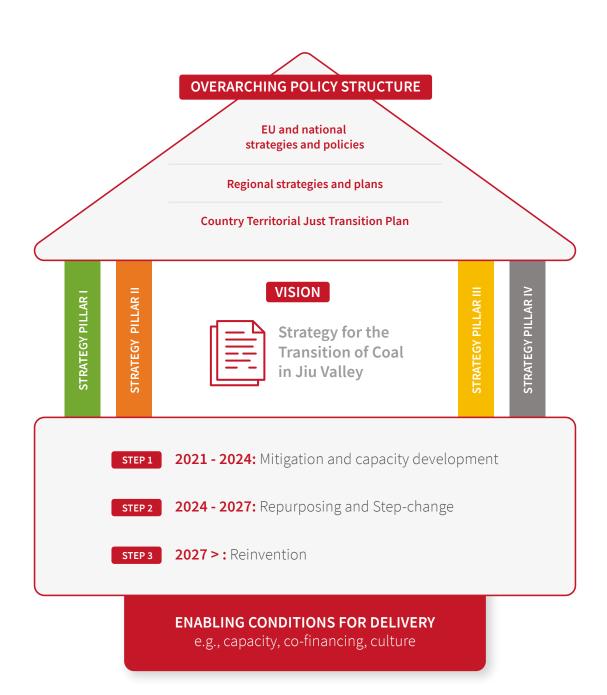


FIGURE 2 Relational Representation of Policy and Delivery

of public utility networks, and enhanced mobility and transport connectivity. Without doing it full justice, Figure 1 provides an overview of the main themes and intervention areas identified in the Development Strategy.

Given their breadth and depth, successful implementation of the interventions proposed in the Development Strategy should provide for a radical 'reinvention' of the Jiu Valley. Doing so will require mobilising and coordinating public, private and civil actors across the Valley, and it will require ongoing and sustained support at the regional, national, and eventually European levels. Securing this support, crucially in terms of finance but also at an operational level will, to a large extent, depend on the alignment of projects and other interventions proposed for the Jiu Valley with policies and strategies at higher regional, national, and EU levels. For example, to be eligible for financial support under the EU Just Transition Mechanism (JTM), intervention in the Jiu Valley should fall within the scope of the objectives and proposed transition operations and projects presented in the "Territorial Just Transition Plan for Hunedoara Country"⁶, which is largely the case (see Box 5). At the same time, the comprehensive nature of the Jiu Valley Development Strategy means that it contains proposed interventions that are outside scope of the JTM and will, therefore, need to look to other regional (e.g., Regional Development Strategy 2021-277 and Regional Operating Programme 2021-278), national, and EU strategies and funding mechanisms.

Ultimately, for a successful transition, the economic, social, and environmental development of the Jiu Valley should become self-sustaining. Investments made now and in the coming years will need to enable a more resilient and adaptable Jiu Valley, whose development is driven from within and that is able to take advantage of the opportunities of 'mega' trends and policy drivers – such as decarbonisation and digitalisation – and has the capacity to respond to shocks coming from outside. To achieve this will require developing the necessary entrepreneurial and innovative capacity in the Jiu Valley, primarily within its enterprises but in its public administrations and among its citizens, also.

The Association for Integrated Territorial Development Valea Jiului will need to frame its actions and priorities within this overarching policy structure and align funding and resources against the policy domains of

the four strategic pillars. Only by adopting a holistic approach to policy implementation, the strategic vision for the Jiu Valley can be achieved. In addition, the new local development association will need to plan its programme of activities over the longer term and recognise that transformation will represent a pathway of change with distinct phases. Underpinning successful implementation will be a set of enabling conditions which are detailed in Section 2 of this document. Figure 2 summarises these policy and delivery relationships that the new Association for Integrated Territorial Development Valea Jiului needs to consider.

A Transition Pathway for the Jiu Valley

The "Strategy for the transition from coal of the Jiu Valley" (2021) relates to the economic, social and environmental development of the area to 2030. It is a period that will be critical for achieving a Just transition for the Jiu Valley. Success will require the synchronisation of actions and resources by local, regional and national actors in a programmed manner.

From the experience of transition in other European regions, the decade could be delineated into several steps or phases, although there will be overlap between them. These are: Mitigation and Capacity Development; Repurposing and Step-change; and, finally, Reinvention. It is in this final phase that territorial transformation will become increasingly evident e.g., in terms of demography, environment, equity and prosperity. Indicative steps and timings are noted below.

A key feature of the implementation of this transition pathway should be further engagement and consultation of local stakeholders and sectors. The establishment of the Association for Integrated Territorial Development Valea Jiului represents a significant organisational milestone for the transformation of the Jiu Valley. The new body should identify how its agenda of change can be shared, shaped and followed by local stakeholders and representatives of differing sectors.

⁶ Ibid.

⁷ Planul pentru Dezvoltare Regionala al Regiunii Vest 2021-2027 [RQ], EN: own translation]. For example, the West Region RDP 2021-27, in comparison to the Hunedoara TJTP, gives more attention to investments in transport and digital infrastructure and networks, the development of tourism, culture and heritage, and sustainable and intelligent development of rural areas.

⁸ Programul Operational Regional Vest 2021-2027 Draft 11 noiembrie 2021 [RQ]

Illustrative Transition Pathway

STEP 1 2021 - 2024

Mitigation and Capacity Development

Illustrative aims

Shorter term mitigation of socio-economic consequences of transition

Design and commencement of delivery of initial catalytic investments

Assessing and securing local assets and legacies (e.g., RES, former mining infrastructure)

Enhancing community and citizen resilience and adaptation

Developing an agreed long-term pipeline of key development projects

Increased momentum and credibility in transition process

Illustrative activities

Employment and training opportunities and guidance, especially in relation to targeted sectors, through funding and incentives

Preparation, funding & implementation of projects identified via PwC and START consultations

Creation of programme of publicly funded projects / investments to 2030 (a project pipeline)

Audit and plan for rehabilitation and repurposing of brownfield sites and audit and plan for utilising Renewable Energy Sources

Develop fit-for-purpose capacity in new local development association and ensure absorption capacity for EU funding

Create co-ordinated regulatory support across government authorities and agencies for local projects

Projects to address social exclusion and to address fuel poverty in residential neighbourhoods through thermal rehabilitation and energy efficiency

Programme of events on just transition hosted in Jiu Valley

STEP 2 2024 - 2027

Repurposing and Step-change

Illustrative aims

Scaling-up and acceleration of public and private investments relating to economic diversification and infrastructure

Landmark green energy, digital and technology transfer projects implemented

Environmental remediation / enhancement and biodiversity at scale

Jiu Valley seen as EU exemplar of planning and delivering transition

Illustrative activities

Employment and training opportunities and guidance, especially in relation to targeted sectors, through funding and incentives

Further investments to support sustainability of projects identified via PwC and START consultations

Delivery of major infrastructure and step-change projects relating to RES, transport, environmental remediation, and business and industry

Flagship technology projects delivered in relation to new industries and production technologies and green transport

Upgrading and introduction of innovative energy networks / grid and storage solutions

Programme of smart green energy districts implemented

Ongoing investments to address social exclusion and to address fuel poverty in residential neighbourhoods through thermal rehabilitation and energy efficiency

Major international conference and events on just transition hosted in Jiu Valley $\,$

STEP 32027 >

Reinvention

Illustrative aims

Territorial reinvention (e.g., regarding demography, environment, equity and prosperity) via energy transition, digital and enterprise

Extensive economic and social utilisation of repurposed local assets and industrial legacy

Jiu Valley seen as an EU exemplar of a successful just transition

New national and international perception of the Jiu Valley

Illustrative activities

Implementation of the remainder of programme of publicly funded projects / investments to 2030 (the project pipeline)

Next generation of projects and investments for digitalisation, energy transition, and growth in new and dynamic sectors identified

Section 2: The projects

Through the project "Strategy for the transition from coal of the Jiu Valley" and the START technical assistance, concepts for 20 priority projects with the potential to contribute to Just Transition in the Jiu Valley have been developed. Collectively, these projects address a spectrum of transition-related challenges, needs and aspirations. They offer clear and defined starting points but they will require further refinement and analysis if they are to become adequately detailed for funding. Hopefully, this is an activity to be taken forward by the Association for Integrated Territorial Development Valea Jiului , either directly or through collaboration with project partners and experts.

Moreover, although the scope of proposed projects is wide, there is a limit in how far they go (for example, in terms of economic diversification and new energy sources, such as large-scale deployment of renewable energy sources, hydrogen etc.). New challenges for transition will arise, and new ideas for development of the Jiu Valley will come forward. Beyond the 20 proposed projects and over time, a pipeline of projects should be put in place. Turning projects into reality will, however, require adequate capacity and support for transition, as outlined in the following section.

BOX 6

The need for partnership in delivery

The successful transformation of the Jiu Valley and the delivery of related transformational projects are conditional on development actors in and outside the Jiu Valley working together i.e., successful change at the local level is dependent on the mobilisation of powers, policies, and resources at the local, regional, national and EU levels. For example, the delivery of the Strategy for the Transition of Coal in Jiu Valley and Related Action Plan (2020-21) is dependent on co-ordination across scales of government. Although the new local development association will have a unified voice for engaging and influencing higher levels of government, there is a requirement for an explicit method to co-ordinate the actions and resources of local, regional, and national government (see also Box 3).



Enabling conditions for successful project implementation

The successful development and delivery of the projects identified by the PwC and START consultation processes is dependent on number of conditions. These are:



Project and funding capacity

There must be fit for purpose capacity for the development and delivery of the projects (e.g., in terms of project preparation, procurement, project management) and for applying for and managing funding.



Economies of scale

Wherever possible, projects should be developed in a collaborative and co-ordinated manner, across the six local authorities and local partners, to minimise bureaucracy and duplication, and enhance the efficient use of resources.



Co-financing and incentives

There is a need for innovative blending of EU and national funds to mitigate the limited ability of the six local authorities to co-finance projects, in addition incentives to simulate private sector investment need to be considered.



Enabling infrastructure

For project benefits to be realised, optimised and sustained, complementary investments in infrastructure are required e.g., rehabilitation of post industrial sites, electricity grid upgrade, transport improvements, comprehensive and enhanced 4G coverage (this issue is discussed further below).



Institutional innovation and responsiveness

Institutional inertia and regulatory blockages need to be addressed by politicians and public servants if the projects are to progress in the short term.



Public sector culture

Although progress regarding collaboration in the Jiu Valley is evident, there needs to be ongoing and enhanced commitment to engagement, transparency and integration amongst local actors and with those outside the Jiu Valley (see Box 6).

Projects overview

Within the scope of the project "Strategy for the transition from coal of the Jiu Valley", PwC developed ten concept project fiches derived from actions described in the Action Plan¹ and selected in consultation with key stakeholders.² Similarly, an additional ten project concepts have been developed by START. These projects were identified with reference to a long list of project ideas prepared originally by PwC and through subsequent consultation with local stakeholders – specifically local authorities, business representatives, NGO representatives, and regional and national administrations – with the aim of being complementary and avoiding duplication of the projects developed by PwC.³

Figure 4 provides an overview of the combined 20 project concepts. Each project has been assigned with reference to the four main development pillars (priority axes) of the "Strategy for the transition from coal of the Jiu Valley" based on the main goals of each project. The figure also aims to indicate some of the main potential interlinkages and interdependencies between projects, illustrating the intertwining of projects across the main development pillars. The individual projects and potential linkages are summarised below.



¹ Strategia pentru tranziția de la cărbune a Văii Jiului: Plan de acțiuni (aprilie 2021) [RO]

² The selection process was based in criteria related to: relevance for the development of Jiu Valley in key areas considered of utmost need by local authorities and other stakeholders; the expected social and economic impact generated by the project; ease of implementation; and alignment with the available funding sources.

³ Criteria applied by START to define and select projects are: relevance and applicability across the six municipalities of the Jiu Valley; the potential to be quickly delivered; the potential to generate employment in the short term and promote economic diversification; alignment with EU funding and strategic priorities.

⁴ The boxes around the outside of the figure indicate some of the key development areas from the Strategy that will, at least in part, be addressed by the projects.

Medical Recovery Centre

PwC₁

This is a project of essential importance for the health and well-being of all inhabitants and visitors of the Jiu Valley and the city of Uricani in particular. The first phase of the project envisions the construction of a medical centre that will provide recovery and other medical services to both adults and children. A primary target group of the project are vulnerable groups, such as elderly people, including former miners and other workers from the mining industry who are living on their own or have complex care needs. The second phase of the project, which runs in parallel with the first one, is an investment in a solar park and solar heating installation next to the medical center building. A feasibility study for both components of the project has been completed.

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Implementation:	2022-2025 (for the entire project)	
Interlinkages:	Possible interaction with 'Integrated Social Services Network'	PwC 2
	Possible use of restored unproductive land for solar park to provide energy to the medical recovery center	START 4

Integrated Social Services Network of Jiu Valley

PwC 2

The project aims to optimize existing social services and develop new ones for vulnerable and marginalized groups in the Jiu Valley. The project seeks to address critical shortages such as the low access to social services, weak response time in social intervention, and low digitalization of public social services. To define the exact needs of the project, the initial phase envisions a mapping exercise that would evaluate the strengths and weakness of the current system. Building on the outcomes of the first phase, in the second one, the construction and expansion of social infrastructure will take place. Aside from addressing the infrastructure needs, the project also envisions to develop the capacities of social care workers and ensure the proper supervision and management of social services in the final phase of this project. Local NGOs and the University of Petrosani, which as a specialized work social work program, are expected to play a strong role in this project, along the relevant local and regional authorities.

Implementation:	2022-2026 (for the entire project)	
Interlinkages:	Possible interaction with 'Inclusive Jiu Valley'	START 4
	Possible interaction with 'Medical Recovery Center'	PwC 2
	Possible interaction with 'Digital Skills Jiu Valley'	START 2

Inclusive Jiu Valley START 1

The project addresses the needs of socially excluded persons, primarily those in marginalised communities and those with disabilities, to support their integration into the labour market. Firstly, a social enterprise will be created to provide employment opportunities. Secondly, a disability adapted hotel, operating as a social enterprise, will act as a place of training and practice for persons of disability. These initiatives will provide entry points to employment and social integration for traditionally excluded persons.

Implementation:	2022-2027	
Interlinkages:	Possible interaction with 'Integrated Social Services Network'	PwC 2
	Probable interaction with 'Tourism Skills Jiu Valley' as part of an integrated skills development and training package for abled and disable persons	START 9
	Possible interaction with support actions for agri-food development (Agritourism & agri-food support' through a social enterprise for local production of food products.	PwC 8
	Indirect interaction with projects developing tourism, leisure & culture activities in the Jiu Valley	PwC 4, 5, 6, 7 START 10

Improving quality of life

Capitalising on local specificity

Economic diversification

Digital Skills Jiu Valley

START 2

The project focuses on developing and strengthening local human resources and capacity in the fields of digital education and digital technology through the introduction of new, specialised programmes of education and training, supported by required ICT technologies and resources. Firstly, the project will adapt educational curricula and professional training to deliver skills and competences for young people that are aligned to current and emerging labour market demands, in the digital sphere. Secondly the project will modernise curricula and study programmes at the University level, in the digital sphere. The project will also build in the emerging expertise and interest in Robotics in the Jiu Valley. By developing human resources in the digital sphere, local companies will have access to appropriate skills, new enterprises will be created, and new investments will be attracted to the area.

Implementation:	2022-2027	
Interlinkages:	Interaction with 'Digital Hubs Jiu Valley' through an integrated education, skills development, and training package linked to opportunities and capacities of digital hubs	START 6
	Possible interaction through digital opportunities and needs of the 'SMART cities' project	PwC8

Building Renovation Jiu Valley

START

The project will improve energy efficiency in residential apartment blocks and expand on recent efforts to improve the valley's housing stock. It will contribute to improving the quality of life of residents through integrating energy efficiency measures with renewable energy options (e.g., PV, heat pumps etc.). The project will also promote the creation of a healthy and sustainable environment for current and future generations by addressing the carbon footprint of residences and fuel poverty.

Implementation:	2021-2027	
Interlinkages:	Possible interaction with use of restored unproductive land for solar parks (or other renewable energy supply) if it is possibility to use generated energy for renovated buildings	START 4

Land restoration and renewable energy supply (RES)

START 4

The project focuses on increasing the use of renewable energy by restoring and re-using former coal mining sites for the installation of ground based solar photovoltaic utilising PVPs equipped with concentrated photovoltaic (CPV). The installation will focus on the southern slopes of the mining tailings / dumps with the maximum solar irradiation potential. The project will involve: 1. Planning; 2. Permitting and EPC (engineering, procurement, construction); 3. In parallel, the final form of ownership will be defined (potentially a partnership of local public & central authorities together with UPET).

Implementation:	2022-2027	
Interlinkages:	Possible interaction with 'Building Renovation Jiu Valley'	START 3
	Possible interaction with 'Smart Energy Storage Systems'	START 5

Improving quality of life

Capitalising on local specificity

Economic diversification

Smart Energy Storage Systems

START 5

The project will provide a resilient local electrical storage system and charging infrastructure for e-vehicles such as e-buses, cars, bicycles and electric scooters. It is informed by future local dependence on e-mobility, probable power grid instability due to RES unpredictability and the proposed Green Line public transport project. The project has the following elements: 1. Planning & permitting for the SESS; 2. Engineering, procurement and construction of a new factory or a reconverted & renovated existing facility for the SESS technology assembly / manufacture / maintenance; 3. Installation and operation of the system – potentially extending the business to the national level for public parking lots; 4. Upscaling and increasing SESS capacity as a backup system when the public electricity distribution network is overloaded. SESS will be a modular "stand alone" system based on lithium batteries, including a smart management system for charging & payment based on a user-friendly software application.

Implementation:	2022-2027	
Interlinkages:	Possible interaction with use of restored unproductive land for solar parks (or other renewable energy supply)	START 4
	Interaction with Sustainable Mobility, where used to charge electric vehicles	PwC 10

Jiu Valley Industrial and Business Park

PwC:

The Jiu Valley Industrial and Business Park will provide commercial tenants with state-of-the-art premises and related infrastructure and utilities. The project will focus on attracting companies in line with the identified regional growth areas and will also provide dynamic local companies with premises for expansion, thereby supporting significant job creation and diversification opportunities. Once constructed, the Jiu Valley Industrial and Business Park can host an enterprise support centre – see Enterprise Jiu Valley project (START 7). Initially, only the first phase of the Park will be implemented. Subsequent phases are dependent occupancy levels and identified need for new floorspace.

Implementation:	2022-2027	
Interlinkages:	Possible interaction with 'Digital Hubs Jiu Valley' if co-location of hubs and business parks	START 6
	Possible interaction with 'Enterprise Jiu Valley' if co-location of enterprise support centers and business parks	START 7
	Possible interaction with 'PCB Factory' if the factory located in one of the parks	START 8

Digital Hubs Jiu Valley START 6

The project establishes multi-purpose digital hubs in the Jiu Valley to serve micro and small businesses, social enterprises, civil society, and local communities. The hubs will be equipped to provide users with access to a variety of digital technologies and support services, including training and mentoring programmes for enterprises and residents. Additionally, the hubs can provide digital working spaces for micro and start-up enterprises and potential entrepreneurs, to create new commercial activities and jobs.

Implementation:	2022-2027	
Interlinkages:	Probable interaction with 'Enterprise Jiu Valley' through integrated provision of support services to enterprises and possible co-location of facilities	START 7
	Possible interaction with 'Jiu Valley Industrial and Business Park' if colocation of hubs and business parks	PwC3
	Interaction with 'Digital Skills Jiu Valley' through an integrated education, skills development, and training package linked to opportunities and capacities of digital hubs	START 2

Improving quality of life

Capitalising on local specificity

Economic diversification

Enterprise Jiu Valley START 7

The project relates to the provision of services and advice for the creation of new enterprises and the expansion and consolidation of existing ones. The support will increase the quantity and quality of enterprises in the Jiu Valley, thereby creating more and better jobs, and stimulate the development of a more dynamic entrepreneurial culture and diversified economy. Enterprise support centres will be located in each municipality.

Implementation:	2022-2027	
Interlinkages:	Probable interaction with 'Digital Hubs Jiu Valley' through integrated provision of support services to enterprises and possible co-location of facilities	START 6
	Possible interaction with 'Jiu Valley Industrial and Business Park' if colocation of enterprise support centers and business parks	PwC3

PCB Factory START 8

The project aims to develop a PCB (Printed Circuit Board) factory in the Jiu Valley, complementing the PCB assembly activities of other companies in the West Region of Romania. The project is based on the opportunity to manufacture more of these products in Romania and the EU given significant challenges in their supply from Asia. The project includes several innovations, including: targeting a fully smart factory investment, with state-of-the-art technologies that have been recently developed for mass PCB production; a "clean" technological process observing EU environmental standards; deployment of an industry 4.0 concept in the quality control and manufacturing process; a factory building to be renovated as a positive energy building; upskilling programmes in high-tech industry and digitalisation (with links to the University of Petrosani and local labour market and education / training system). The project represents a major step-change project for the area in terms of economic diversification.

Implementation:	2022-2027	
Interlinkages:	Possible interaction with 'Jiu Valley Industrial and Business Park' if the factory located in one of the parks	PwC 3

Integrated development of skiing areas

PwC4

The complex, multi-dimensional project, targets a wide variety of complementary activities to develop the Jiu Valley's skiing areas, improve inter-modal transportation for tourists, introduce spa and wellness centres, and bike trails utilising the ski slopes outside winter months. This last component will be the initial focus of project, delivering a range of bike trails, and can be amalgamated with the Cycle Jiu Valley project (START 10). These trails will benefit from the cable transport infrastructure (e.g., gondolas and chairlifts) which will be available outside the ski season.

Implementation:	2022 for mountain bike trail phase only (according to the analysis by the promoter)	
Interlinkages:	Interaction with projects developing tourism, leisure, and culture activities in the Jiu Valley	PwC 5, 6, 7, 8
	Interaction with 'Cycle Jiu Valley' for integrated development of mountain biking infrastructure and services	START 10
	Interaction with 'Tourism Skills Jiu Valley'	START 9

Improving quality of life

Capitalising on local specificity

Economic diversification

Integrated development of mountain & adventure tourism

PwC 6

The integrated project encompasses diverse complementary activities: (i) setting-up and developing the network of mountain tourist circuits of different types (walking, running, cross-country bike, horse, alpine and cross-country skiing, rafting, and canoeing); (ii) thematic trans-regional circuits (e.g., mining & industrial heritage, archaeological/historical, sculptural (Brancusi), ecology); (iii) enhanced connectivity between circuits and core urban areas; (iv) opening up access and integration of caves in circuits; and (v) refurbishment and new construction of accommodation in mountain and sub-mountain areas. The initial focus will be a pilot project for development of a cross country bike tourist circuit (Jiul de Vest – Jiul de Est), which can be amalgamated with the Cycle Jiu Valley project (START 10)

Implementation:	2022-2023 for cross country bike tourist circuit pilot project	
Interlinkages:	Interaction with projects developing tourism, leisure, and culture activities in the Jiu Valley	PwC 4, 5, 7, 8
	Interaction with 'Cycle Jiu Valley' for integrated development of cycle routes (infrastructure and services)	START 10
	Interaction with 'Tourism Skills Jiu Valley'	START 9

Cycle Jiu Valley START 10

The project will attract new and return visitors to the Jiu Valley based on the quality of the diverse, world-class cycling infrastructure across the area. Firstly, it will enhance mountain biking and off-road cycling infrastructure. Secondly, it will deliver a network of cycling routes connecting tourist attractions and places of interest. These aspects of the project have a direct relationship with the bike trail component of the 'Integrated development of skiing areas' project (PwC 4) and the cycling components of 'Integrated development of mountain & adventure tourism (PwC 6). Thirdly, the project will enhance environmentally friendly inter and intra-urban mobility for residents. The project will create jobs, improve amenity for residents and promote the area's image.

Implementation:	2022-2025	
Interlinkages:	Interaction with projects developing tourism, leisure & culture activities in the Jiu Valley	PwC 4, 5, 7, 8
	Possible interaction with 'Tourism Skills Jiu Valley'	START 9
	Interaction with 'Sustainable mobility'	PwC 10

Agritourism and agri-food support

PwC8

The project targets those parts of the Jiu Valley with more rural characteristics where there is unrealised potential in agriculture, agri-food, agritourism, crafts etc. The project proposes the creation of *de minimis* state aid schemes for microenterprises and SMEs that would support their set-up and development of activities, with a focus on tourism and tourism related services and craftmanship.

Implementation:	2022-2025	
Interlinkages:	Interaction with projects developing tourism, leisure & culture activities in the Jiu Valley	PwC 4, 5, 6, 7 START 10
	Possible interaction with 'Tourism Skills Jiu Valley'	START 9
	Interaction with 'Inclusive Jiu Valley'	START 1

Improving quality of life

Capitalising on local specificity

Economic diversification

Tourism Skills Jiu Valley

START 9

This project will further develop and underpin the Jiu Valley as an all-year-round tourism destination by preparing a skilled workforce for various tourism market segments and customers e.g., relating to skiing, hiking, cycling, culture. This project focuses on both young people, who are preparing to enter the labour market, as well as the existing labour force and those of a working age that can be reskilled to access a range of job opportunities in tourism.

Implementation:	2022-2027	
Interlinkages:	Interaction with projects developing tourism, leisure & culture activities in the Jiu Valley	PwC 4, 6, 7, 8 START 10
	Possible interaction with 'Inclusive Jiu Valley'	START 1
	Possible interaction with 'Digital Skills Jiu Valley'	START 2

Functional reconversion of former mining sites

PwC 5

This is a complex, multi-dimensional project, targeting the development of several former mining sites in: Petrila, Lupeni, Uricani, Aninoasa and Vulcan. Phase 1, which is the largest investment with the greatest economic and social impact, relates to the creation of the Petrila Multicultural Centre, building on the recent history of nationally and internationally recognised events held in the area. The site has the potential to contain the Museum of Industry and Art (MInA) and visitor and exhibition spaces, a Sci-Tech Park and an R&D Robotic Centre. The multi-cultural centre has been recognised as one of potential hubs in the Digital Hub project (START 6).

Implementation:	2022-2030 for Phase 1 only	
Interlinkages:	Interaction with projects developing tourism, leisure & culture activities in the Jiu Valley	PwC 4, 6, 7, 8
	Possible interaction with 'Tourism Skills Jiu Valley'	START 9
	Probable interaction with 'Digital Hubs Jiu Valley', if converted sites used to host hub facilities	START 6

Urban Regeneration Pilot Project

PwC 7

The project aims to engage local young people in the Jiu Valley transition process and in shaping the future. The project will involve various consultations – especially towards local high schools and colleges –to identify potential regeneration sites and proposals for urban regeneration projects. Preferred proposed projects will be taken forward as the basis for a contest open to professionals in urban planning and architecture to design pilot regeneration projects, with one pilot project to be chosen and implemented for each ATU.

Implementation:	2022-2026	
Interlinkages:	Possible interaction with 'Functional reconversion of former mining sites'	PwC 5
	Possible interaction with 'SMART cities'	PwC 9
	Possible interaction with 'Sustainable mobility'	PwC 10

Improving quality of life

Capitalising on local specificity

Economic diversification

Integrated SMART cities

PwC9

This project focuses on the infrastructure development of the Jiu Valley through the implementation of important elements of the Smart City concept in day-to-day urban interaction. The project has a wide scope, covering a range of topics, such as digitising of public services, 4G internet coverage, intelligent traffic management, and street lighting. The concrete actions and phases under this project are still to be defined as part of an integrated concept that encompasses the entire territory of the Jiu Valley.

Implementation:	2022-2025	
Interlinkages:	Possible interaction with 'Sustainable mobility'	PwC 10
	Possible interaction with 'Urban Regeneration Pilot Project'	PwC 7
	Possible interaction with 'Digital Hubs Jiu Valley'	START 6
	Possible interaction with 'Digital Skills Jiu Valley'	START 2

Integrated sustainable mobility

PwC 10

This large transport infrastructure project aims to provide a strong foundation for the successful implementation of many of the other projects, such as on tourism and industry development. The project envisions the rehabilitation, modernization, construction, and expansion of road infrastructure across the Jiu Valley, as well as the modernization and development of the local railway infrastructure. To further improve the connectivity between the different localities, the project also envisions an investment into the upgrade of public transport, including by acquiring new low-emission buses, as well as investments in green mobility solutions, such as developing bicycle lanes and constructing e-charging stations. A similar initiative already covers certain components of this project is the "Green Line Jiu Valley".

Implementation:	2022-2030	
Interlinkages:	Possible interaction with 'Integrated SMART Cities'	PwC 9
	Possible interaction with 'Smart Energy Storage Systems'	START 5
	Possible interaction with 'Cycle Jiu Valley' and also through transport connections for other tourism development projects.	START 10
	Possible interaction with 'Urban Regeneration Pilot Project'	PwC 7

Upgrading and strengthening enabling infrastructure

The project concepts outlined above have the potential to make a major contribution to a successful transition in the Jiu Valley. However, achieving the full potential of these projects – and others proposed now or in the future – will depend on the implementation of a range of complementary investments in essential infrastructure (see Figure 1). Three areas stand out as requiring significant investments, for which key decisions may largely be made beyond the Valley:

- Transport infrastructure, where better road and rail connectivity is needed to improve competitiveness as a location for business investments and to allow easier and speedier access for the tourists that the Jiu Valley hopes to attract.
- Digital infrastructure, which is necessary to enable many of the development ambitions of the Jiu Valley, in both economic and social spheres.
 The benefits of modernising production processes, developing digital skills of citizens, or pushing forward SMART city concepts, will be significantly diminished if there is a lack of investment in digital networks and connectivity.
- Utilities, including energy production and distribution also need to be upgraded to become more sustainable. Uncertainty over the future of power generation and supply in the Jiu Valley is of obvious concern for enterprises, citizens, and public administrations alike, while opportunities to participate in renewable energy solutions as foreseen by several proposed projects and possibly further in the future in new fields such as hydrogen will require appropriately configured energy transmission and distribution networks.

Currently, a small number of significant infrastructure projects are being progressed, notably the Green Line Jiu Valley transport project and the upgrading of water and sewerage networks in urban centres (being undertaken by Apa Serv Valea Jiului SA Petroşani). However, achieving the collectively agreed vision for transition and regional development will require the programming of significant additional infrastructure investments by local, regional, and national authorities, alongside continued support at EU levels.

Widening and deepening the portfolio of projects and actions

Although the twenty project concepts cover a broad sweep of areas identified as priorities for transition and regional development, they are far from encompassing the entire range of actions envisaged in the "Jiu Valley Development Strategy", or at higher levels of the "Hunedoara TJTP" and "West Region RDP". In addition to the enabling investments mentioned above, there are several intervention areas where potential opportunities may warrant further exploration (see Figure 1). For example, the project concepts largely leave untouched areas such as the circular economy, while environment rehabilitation and protection are considered in the limited context of former mining sites but have much wider connotations, especially given the ambitions for development of outdoor tourism. Enterprise development is addressed generically by a few of the projects, but arguably there is scope for deeper assessment of the diversification potential of businesses in the Jiu Valley. This could enable the development of more targeted actions for enterprise support and investment attraction. Generally, further consideration is needed to identify how to best leverage all the latent assets of the Jiu Valley, its land and rivers, its human capital, and the knowledge and capacities of its enterprises.

Section 3: Closing remarks

"Delivering a Just Transition in the Jiu Valley, today and tomorrow" is a call to action for local, regional, and national development actors. Strategies and plans have now been written and significant EU funds are available. It is now time for collective implementation and delivery.

Over the last two years, PwC and START have engaged with stakeholders and identified twenty projects that can act as catalyst for a Just Transition in the Jiu Valley. These projects require differing degrees of additional analysis to prepare them for submission to funding programs. Not all of them may reach that stage. Nor do the projects represent a definitive list of required investments.

Nonetheless, they do represent a diverse, consequential portfolio of scoped projects generated through consultation. Their implementation (or even a significant proportion of them) will have a profound and positive impact on the Jiu Valley. Moreover, their delivery will signal to Jiu Valley residents and communities that a positive future is attainable and being actively pursued.

Preparing these projects for funding and delivery should be a priority of local development actors in the Jiu Valley. The new Association for Integrated Territorial Development Valea Jiului is a much needed and welcome co-ordinating mechanism. The delivery of these initial projects will be a critical measure for assessing the effectiveness of these new local development arrangements.

The successful preparation and implementation of the projects is dependent on several conditions, many of which are not in the control of local actors. These include: the need for augmented development capacity and expertise in the short to medium term; requisite project co-financing and development incentives; and supporting infrastructure investments. There is a need for enhanced operational and institutional support from regional and national partners to ensure that these conditions are addressed as soon as possible.

Over two hundred years ago, Jean-Jacques Rousseau observed that "The objectives of all institutions must be adapted to meet local conditions and meet the character of the people concerned". The people of the Jiu Valley are the product of a unique history and a unique place. This string of relatively small communities and spirited, resolute inhabitants now need institutions which are co-ordinated, responsive, inclusive and have ambitions commensurate with the Jiu Valley's previous contribution to Romania's economic development.

The transition pathway for the Jiu Valley is a long-term journey of transformation and local actors have demonstrated a willingness to take bold steps on this journey. Going forward, collective local commitment with external support will be the vital formula for achieving a Just Transition.

