

Jiu Valley

GENERAL INFORMATION

Country: Romania

Region Name: Vest

Region NUTS2 code: R042 – Vest

Region NUTS3 code: R0423 – Hunedoara County

Affected coal communities: Jiu Valley

Main urban centres in the region (by population):

A network of 6 towns in the Jiu Valley:

Petrila (population^{}: 24,450)**

Petroșani municipality (population^{}: 41,872)**

Town of Aninoasa (population^{}: 4,564)**

Vulcan municipality (population^{}: 28,305)**

Lupeni municipality (population^{}: 26,257)**

Town of Uricani (population^{}: 9,539)**

**NUTS: Nomenclature of Territorial Units for Statistics*

***population by domicile, 2018*



NOTICE ON COVID-19

The data contained within this regional profile was primarily gathered prior to the COVID-19 pandemic. It is recognised that the pandemic has had an adverse impact on energy demand. Although the consequences and implications are significant, they remain emergent and dynamic. An update to this document should be considered, once these consequences and implications are clearer and more quantifiable.

Overview

The Jiu Valley lies in Hunedoara County in Romania and comprises of 3 municipalities (Petroșani, Vulcan, Lupeni), 3 towns (Petrița, Aninoasa, Uricani) and a commune (Bănița); with a total population of 134,987 (2018). Coal mining activities in the valley started in the mid-19th century, prior to which the region was sparsely populated due to its geographic isolation in the Retezat and Parâng Mountain ranges. The economically prosperous mining centres attracted settlers from Hungary, Czechia, Poland and Germany in the 19th and 20th centuries. However, in recent decades restructuring has resulted in the decline of the mining industry, with only four mines remaining in operation today. Existing coal infrastructure is largely outdated, with related coal power plants being on average over 40 years old. A national plan or timescale for coal phase-out has yet to be set.



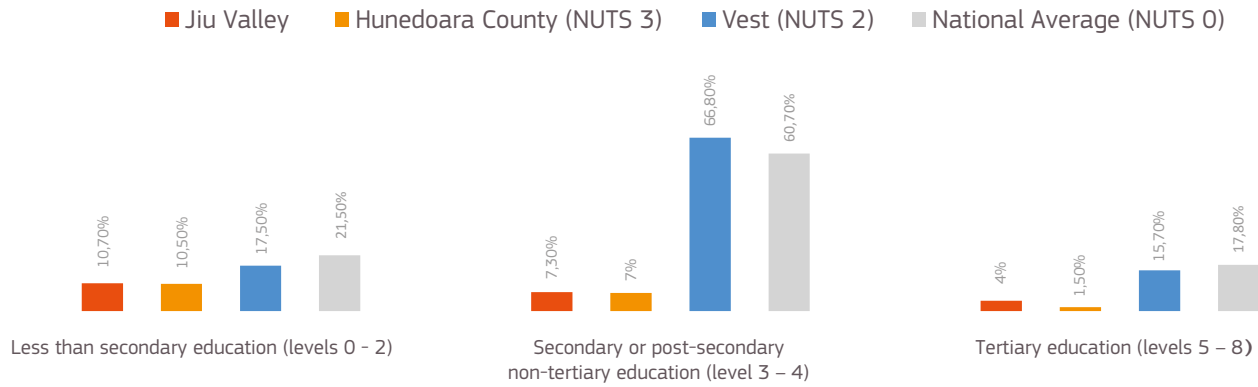
MAP OF JIU VALLEY

Source: National Company for Mine Closures

Regional socio-economic profile

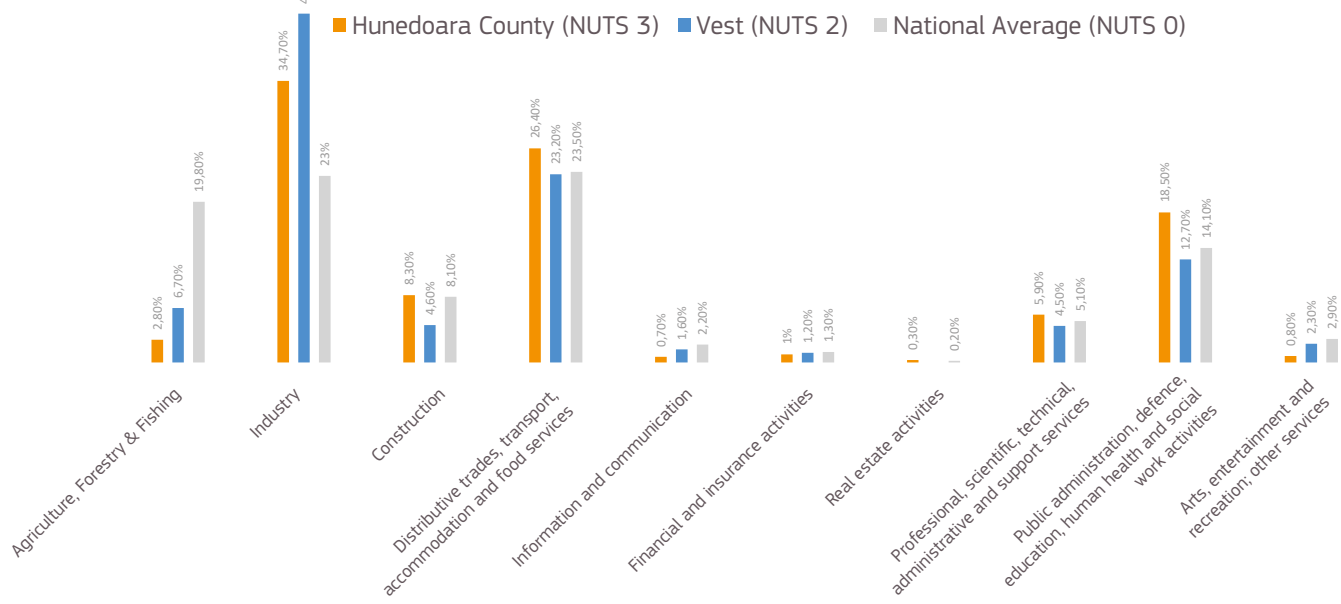
	Jiu Valley	Hunedoara County (NUTS 3)	Vest (NUTS 2)	National Average (NUTS 0)	Date / Source
Population [persons]	134,987	460,194	1,115,865	10,626,430	2018 Hunedoara County Statistics Department
Population density [persons/km ²]	139.7	65.1	62.6	93.1	
Employment [No. persons employed]	24,971	105,407	526,887	5,068,063	
Employment rate [% share of population aged 20-64]	27.2%	35.3%	64.5%	69.9%	
Unemployment rate [% share of labour force aged 15-74]	Vulcan: 2.3% Lupeni: 1.5% Petroșani: 1.8% Aninoasa: 2.5% Petrița: 1.9% Uricani: 1.4%	2%	3.6%	4.2%	Jiu Valley and NUTS 3: 2018 Hunedoara County Statistics Department
GDP per person [€]	No data	No data	€10,200	€9,600	NUTS 2 and 0 Eurostat 2018

Educational attainment



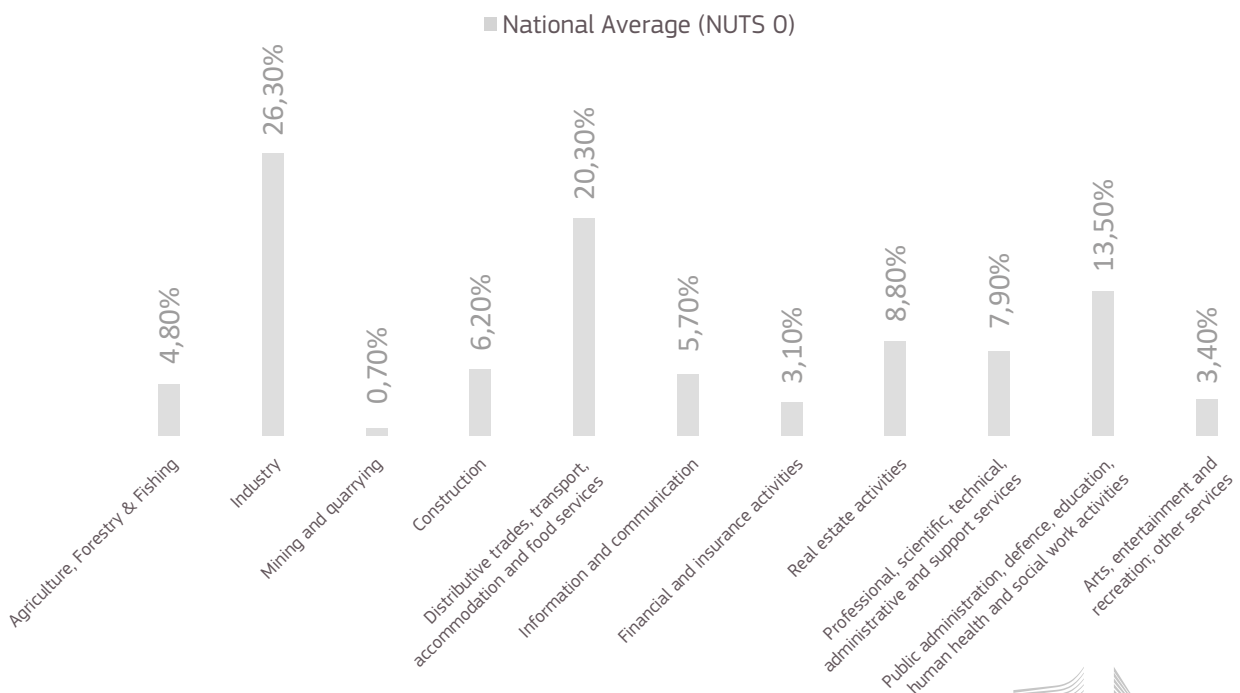
Jiu Valley and NUTS 3 (2018): Hunedoara County Statistics Department
NUTS 2 and 0: Eurostat 2018

Employment by sector



Data / Source
Jiu Valley and NUTS 3 (2018): Hunedoara County Statistics Department
NUTS 2 and 0: Eurostat 2018

GVA per sector



Data / Source: 2017 Eurostat

Regional coal industry profile – recent historic profile				
Coal mining			Date	
Type of coal (e.g. hard or lignite)	Hard coal		2019	
Type of coal extraction (e.g. surface or deep mining)	Deep mining coal extraction			
Number of coal mines	Four, two of which are included in the mine closure programme (E.M.Lonea and E.M.Lupeni)			
Production of coal [Mt annual]	597.000 tons / year			
Main coal mining enterprises				
Name	Ownership (e.g. public or private)	Number of employees	Date	
Complexu Energetic Hunedoara SA	State-owned	2724	2019	
EM Lonea		516		
EM Livezeni		820		
EM Vulcan		691		
EM Lupeni		697		
Regional coal power plant profile			Date	
Number of coal power plants	2		2019	
Installed capacity [MW]	1255MW			
Share of coal in regional power generation mix [%]	In February 2019, coal accounted for 23% of the energy mix (1,821 MWh/h), the main source for electricity generation.			
Main coal power plant operators				
Name	Ownership (e.g. public or private)	Number of employees	Date	
Deva Power Plant	State-owned	721	2019	
Paroseni Power Plant		318		
Regional employment in coal mining and coal power plants				
Employment	Number	Share of total employment in the Jiu Valley Region [%]	Date	
Coal mining (direct employment)	2724	10.9%	2020	
Coal power plants (direct employment)	1039	4.1%		
Other coal-related activities [e.g. supply chain and services to coal operations]	367	1.4%		
Employment by age group [% of total employment]	Less than 30 years old	30-54 years old	More than 54 years old	Date
Coal mining (direct employment)	0.5%	9.9%	0.5%	2019
Coal power plants (direct employment)	0.02%	3.2%	1%	

General description of the economic and demographic profile of the region including notable trends and projections

The Jiu Valley is a traditional coal-mining region with mining activities dating back over 150 years. High levels of industrialisation, and a flourishing economy and a distinct culture and heritage, drew in many people from (poorer and less developed) regions of Romania and other European countries. From 1850 to 1900, the mining centres of Petrosani, Lupeni and Vulcan saw a significant increase of their cumulative population, from 3,636 in the 1850 to 95,000 in the 1950s.¹ Throughout the communist era, Jiu Valley's population kept expanding through an intensive industrial development programme, which focused on steel and other manufactured products. By the end of the 1970s, the number of miners alone had reached nearly 180,000.²

The majority of the population is concentrated along the six mining towns - Petrosani, Lupeni, Vulcan, Ulricani, Petrila and Aninoasa - though some residents are located in more isolated settlements in the surrounding hills and mountains. To this day, the Jiu Valley has a largely undiversified economy focused on mining and agricultural activities. At the end of the communist era in 1989, restructuring of the coal-sector and a shift towards natural gas contributed to a decrease in both the production and consumption of domestic coal².

Since the early 1990's, the Jiu Valley has registered an ageing population in parallel to an overall decrease of inhabitants, partly induced by the emigration of young people and those of working age and an accompanying fall in the birth-rate. The decline of the mining industry and related significant layoffs in the workforce triggered this negative migration trend. This demographic trend was even more pronounced in smaller towns with little economic diversification. The mining industry and the state have somewhat ameliorated this situation through compensatory payments that were provided to miners affected by collective redundancies¹. However, unsuccessful re-investments, deteriorating infrastructure, mine closures and further waves of lay-offs, as well as environmental degradation, led to an overall decline in the Jiu Valley's population and its heritage.

¹ See Law no. 216/1997 for the approval of Government Ordinance no. 22/1997 on some protection measures granted to personnel in the mining industry and in the activities of geological prospections and exploration.

Overview and general characteristics of coal-related industry and locations

The organised exploitation of coal in the Jiu Valley began in 1840, centred on the Petrila and Lonea mines. Other mines opened along the valley, around which mining towns developed, with flourishing economies and a distinct culture based on the unique socio-economic characteristics of the workforce and the cultures of the migrant workers and their families. Since the late 1990s, economic contraction and the restructuring of industrial mining in the Jiu Valley have led to the closure of half of its mines, namely Lonea, Livezeni, Vulcan and Lupeni; thus negatively impacting on the economy, demography and culture of the mining communities.

The Romanian coal power plants have been operating for an average period of 42 years and are outdated. No plans to upgrade the infrastructure are being implemented or developed – partly due to the economic and commercial circumstances of the operators, but also due to a legacy of ongoing re-investment in previous decades. Yet investment in such upgrades has become all the more necessary in the context of rising emission standards and the ETS pricing regime which operators currently cover by loans. Furthermore, in line with the European Union Decision no. 787/2010, exploitation activities at Lonea and Lupeni mines were supposed to cease by 2018. However, the sites are still running due to the potential risks associated with their closure (see section on transition challenges).

Complexul Energetic Hunedoara SA is the only large producer of electricity in Central and North-West Romania and its main activities lie within the production, supply and marketing of coal-based electric energy. In recent years it provided circa 5% of Romania's electricity generation; and has an existing installed capacity of 1,255 MW. Production capacities are split amongst the Deva Power Plant (approx. 875MW, about 100 km from the Jiu Valley), Paroşeni Power Plant (150 MW, approx. 1.5km from Lupeni and Vulcan) and mining operations / mining fields at Lonea, Livezeni, Vulcan and Lupeni. These mines are closely associated with the cities of Petrila, Petrosani, Vulcan and Lupeni, respectively. The average production capacity is 500 thousand tons of coal per annum. Today, 2724 miners are still employed (compared with 180,000 miners in the 1970s), a further 1039 employees are in the coal power plants, and 367 in coal-related activities.

Socio-economic characteristics of coal-related industry

The mining activities within the Jiu Valley and its resulting largely mono-industrial economy were heavily affected by the restructuring of the mining industry in the past decades.

Significant layoffs and, consequently, outward migration of the population was particularly pronounced in smaller towns that had a marked focus on coal-mining and related activities, despite efforts to retain the affected workforce by providing compensatory payments. In combination with a lack of investment in the diversification of the Jiu Valley's economy, the region consequently registered a decrease in and ageing of its population since the early 1990s.

Employment rates in Jiu Valley are significantly lower than the Hunedoara county average (39.4% and 53%, respectively), although the valley has comparatively low unemployment rates, ranging between 1.4% and 2.5% across its communities. In the past decade, the number of unemployed people within the Jiu Valley and Hunedoara County has declined. This trend may imply a partial redress of some of the socio-economic consequences of the contraction of mining industry but also suggests significant levels of economic inactivity and emigration within the former mining communities. A degree of economic restructuring and diversification towards manufacturing and service activities is evident in the valley, although entrepreneurship and business start-ups are still relatively limited.

Characteristics, trends and challenges of coal-related locations and communities

The Jiu Valley is facing difficult and complex challenges associated with the ongoing closure and contraction of significant coal mining facilities and associated activities in a relatively isolated and mountainous geography. Many of these challenges relate to socio-economic conditions and dynamics, in terms of unemployment, including long-term unemployment and unemployment among older workers, economic inactivity and emigration. Due to a lack of economic opportunities to absorb redundant workers and new entrants to the labour market, inhabitants of the region are also at risk of poverty, exclusion and long-term dependence on social security.

In terms of economic structure, the scale of the challenge of addressing the valley's long history of mono-industrialisation and pronounced specialisation have not been historically matched by diversification and retraining programmes of sufficient scale and innovation. This has led to inadequate economic diversification within the local economy and limited reorientation of the skills and knowledge of the workforce and population, thereby reducing the attractiveness of the Jiu Valley to national and international investors. Furthermore, the region suffers from limited transport infrastructure and connectivity, partly due to the mountainous topography. In addition, poor housing and a lack of educational infrastructure have limited the valley's development options and increased outward migration, benefitting urban growth poles in Romania and beyond.

Coal transition strategies, plans and projects

Current status and timeline of coal transition

Currently, there is no programme and timeline for national coal transition. However, as noted by European Union Decision no. 787/2010, Romania has been gradually closing its uncompetitive coalmines.

Current strategies and plans for economic diversification / development and decarbonisation

At national level:

- The National Energy Efficiency Action Plan (NEEAP):** The first NEEAP committed Romania to reduce its final energy consumption in the sectors covered by the Energy Services Directive (Directive 2006/32/EC) by 1.5% per annum during the period 2008 to 2016, compared to the average of the period 2001 to 2005. It adopted as an intermediate target the reduction of consumption by 940 thousand tonnes for 2010 (corresponding to 4.5% of the average final energy consumption in 2001 to 2005). The second NEEAP focused on primary energy savings for 2020. The main measures for increasing energy efficiency were aimed at high efficiency cogeneration plants, increasing energy efficiency in households, public buildings and public lighting (through the obligation of certificates on energy performance or thermal rehabilitation of apartment blocks and public buildings), and supporting information campaigns aimed at the general public and business. Finally, the NEEAP aims to promote the use of renewable energy sources by consumers.
- The National Strategy for Sustainable Development 2016-2020-2030:** The strategy defines the key objectives and actions to be taken towards 2030 in accordance with the strategic guidelines of the European Union. The objective is to ensure the efficient and safe operation of national energy systems and to attain current average levels of energy intensity and energy efficiency of the EU. It aims to fulfil its obligations in accordance with the EU legislative package on climate change and renewable energy and with international targets of the Paris Agreement and Sustainable Development Goals.
- Plan for Regional Development of the Western Region 2014-2020:** The plan identifies in its priority axis: the promotion of sustainable growth through a transitioning to a green economy; and the adaptation and mitigation of negative effects and risks associated with climate change. Its objective is to preserve natural resources and improve the quality

of the environment in the Western Region and move towards a low-carbon economy by supplementing conventional energy sources through renewable energy. It aims to improve public and municipal services through better access to water supply, wastewater treatment, and waste recycling and recovery. It supports better insulation and reduction of energy costs in public and residential buildings (new and existing) through smart monitoring and control systems. Finally, the plan supports projects that increase the potential for local tourism activities.

At regional level:

- **The Plan for Regional Development 2014-2020 – Hunedoara County:** The plan defines under its priority axis 5, the aim to combat the negative effects of industrial activities on the environment and promote modern technologies to increase the quality of the environment and combat the effects of climate change; and also the use of alternative energy sources and refurbishment and modernisation of the energy system.
- **The Local Development Strategy for the Jiu Valley Micro-Region:** The strategy defines development priorities for the development of the Jiu Valley micro region, focusing on the modernisation of street lighting and civic amenities, and environmental protection through the reduction of VOC (Volatile Organic Compounds) emissions from industrial activities, as well as ecological rehabilitation of areas affected by intense economic activities.

At local level:

All strategies and / or development plans of the localities in the Jiu Valley identify development axes and priorities related to the increase of energy efficiency in public and residential buildings, the exploitation of alternative energy resources (wind, photovoltaic, micro-hydroelectric), modernization of public street lighting systems, in order to reduce energy and carbon dioxide emissions. Notable plans are:

- The Strategic Plan for the Socio-Economic Development of the City of Petrita.
- The Local Development Plan of Petroșani Municipality during 2014-2020.
- The Development Strategy of Vulcan Municipality 2014-2020 - updated in 2015.
- The Development Strategy of Lupeni Municipality during 2014-2020
- The Strategic Development Plan of the City of Uricani during 2015-2020

Current or expected transition challenges facing the region	High (priority) importance	Moderate importance	Minimal importance	Not important
Air quality		X		
Environmental degradation of land			X	
Demographic change (e.g. population ageing, outward migration)	X			
Narrow / concentrated industrial structure	X			
Modernisation of industry / re-industrialisation	X			
Employment creation	X			
Reskilling	X			
Transport infrastructure and mobility	X			
Social cohesion	X			
Limited partnerships and consensus		X		
Other challenges (please specify):				
Poor educational infrastructure	X			
Limited local budget / extremely low financial capacity to contribute to projects	X			
Extremely degraded housing infrastructure	X			

Principal actors in development and implementation of transition strategies and plans

- Public authorities at local, county and central government levels
- Civil society: NGOs, professional associations, trade unions, civic, social and sports clubs, media, community and political organizations, philanthropic and religious organizations, cultural institutions, environmental movements. Historically, local trade unions have played a major role in the socio-economic development of the Jiu Valley. In recent years, NGOs have played a notable role in shaping dialogue and perspectives about the development of the area.

Principal legislative drivers of transition

- The European Commission/ The European Parliament
- The Parliament of Romania
- The Government of Romania
- Hunedoara County Council
- The Local Councils of the 6 Territorial Administrative Units
- Local, county, and central public authorities

Transition challenges and opportunities

Nature and scale of transition challenges and opportunities

Romania does not yet have a clear and agreed phase-out plan or timeline for coal, therefore the future of the industry, both in terms of extraction and power generation, remains uncertain, as does the speed and nature of transition in the Jiu Valley. Despite this uncertainty, there is a pressing need to address the challenge of economic diversification within the respective communities of the valley, whilst ensuring a joined up and coordinated approach to development across these communities. The relative isolation of the area in relation to the wider national economy, and social and demographic vulnerability, paucity of critical infrastructure (educational, industrial, transport etc.) and the scale of contraction within the local coal industry (90% of employment in recent decades) underscores the need for innovative, targeted and joined up policy making and project / programme delivery.

A recent study, "A Just Transition in Hunedoara – Sustainable, Equitable and Economic Diversification", has identified alternate economic activities across the primary, secondary and tertiary sectors, offering insights into the possible opportunities for a just transition in the Jiu Valley. The study indicates that the primary

Transition opportunities where the region is already active or where there is interest to develop activities	High (priority) interest	Moderate interest	Minimal interest	Not interest
Reconversion of coal-related sites / locations for renewable / alternate energy	X			
Biomass	X			
Energy storage		X		
Gas			X	
Geothermal				X
Hydro power and pumped hydro-storage	X			
Hydrogen				X
Solar	X			
Wind	X			
Other energy				
Reconversion of coal-related sites for new economic and social activities	X			
Repurposing of coal-related industrial infrastructure	X			
Heritage, culture and tourism	X			
Low carbon mobility and transport	X			
Diversification of coal-related supply chain and service activities	X			
Other opportunities				
Modernization and development of the educational structure (primary, secondary and pre-university)	X			

sector should focus on the development of micro-farms, encouraging and modernising local traditional pastoral activities, and fruit growing. The study suggests that the secondary sector focuses on the exploitation of renewable energy sources, especially solar and wind power, to maintain Jiu Valley's role as a critical energy provider for Romania; and recommends the promotion of energy efficiency. The study also calls for the enhancement of competitiveness in a number of industries, such as food, textiles, wood processing and furniture. Lastly, the study notes that the tertiary sector is reliant on the stimulation of entrepreneurship and innovation, by establishing business support structures, such as industrial parks and business incubators; and promoting tourism (e.g. agro-tourism) given to the excellent potential of the surrounding natural environment, the potential for quality food production and cultural heritage.

Economic and Infrastructure Weaknesses

Despite some notable concentrations of expertise, there is a lack of a diverse educational offerings for the reskilling of the workforce and the training of young persons. In regard to the latter group, this weakness has led to the outward migration of young people to gain a degree and/or professional qualification (lack of job opportunities means that most emigrants do not return to the region after completion of studies).

The topography and location of the valley makes transport connectivity difficult, leading to relative isolation for residents and enterprises. Although the East and West national road network (DN 7A towards the East and DN 66A towards the West) provide a connection to other main towns, average travel time by car from Petrosani to Bucharest is usually over five hours. Within the valley, infrastructural networks connecting the towns are of modest quality, limiting the development of an integrated labour market and hindering the development of new sectors, for example tourism. Digital connectivity, which could reduce isolation, remains partial.

There is limited development in alternative sectors, in part due to a lack of entrepreneurship and a relatively low number of SMEs per head of population. Despite its natural beauty and natural resources, tourism infrastructure and agriculture / food processing infrastructure and facilities remain relatively undeveloped. Furthermore, there is limited history and capacity for economic development and integrated partnership working across the diverse communities (although recent commendable efforts to rectify this legacy are evident).

Transition opportunities

Current partnerships and initiatives supporting economic diversification / development and decarbonisation

- The “Platform for Coal Regions in Transition”, launched by the European Commission
- The Memorandum “Approval of the Measures Plan for the Implementation of the Carboniferous Regions in Transition Initiative for the Jiu Valley”, approved by the Government 4 October, 2018
- The Memorandum of Understanding between the six administrative units of the Jiu Valley, for the establishment of “Jiu Valley Partnership for Just Transition”, signed by the mayors in the Jiu Valley on 16 July, 2019, in Brussels, in the presence of the European Commission representatives;
- The “Jiu Valley Socio-Economic Development Strategy”, which will be elaborated by the Ministry of European Funds with the support of the European Commission through the Structural Reform Support Program (SRSP)
- The Report “A Just Transition in Hunedoara – Sustainable, Equitable and Economic Diversification”, a report prepared by the Romanian Center of Economic Policies – CERPE, launched by the Greenpeace Romania Foundation and Bankwatch Romania Association, at the Cultural Palace in Lupeni, on 23 September, 2019
- The project for retraining in the Jiu Valley coal region in transition, launched by RWEA – Romanian Association for Renewable Energy (<http://rwea.ro/>); the RESS-MONSSON Academy (www.gwo-training.eu); CEZ Romania and the Ministry of Energy, the Training Center for Renewable Energy and Electricity Distribution for the inauguration of the Academy for Renewable Energy and Electricity Distribution in Petroșani, on October this year, together with Petroșani University

Notable research and educational capabilities and facilities

- The University of Petroșani
- National Research and Development Institute for Mining Security and Anti-Explosive Protection

Notable knowledge and competences in electro-mechanical, heavy mechanical and hydraulic engineering and science exist within Petrosani University. Also, notable capabilities exist in specialised high-schools regarding economics, informatics and industrial subjects.

Notable development infrastructure

PETROSANI:

Livezeni land:

Situated in Petroșani, 200 m from the DN 66 Craiova-Simeria road, with a total surface of 12 ha. The land was originally used for mining related installations and buildings which were demolished by the programme for the closure of mines and the land was rehabilitated. The industrial area does not have contaminated soil. There is a transformation station of the S.C. Electrica S.A. at the limit of the industrial area perimeter. The gas supply pipeline is at a distance of about 350 m; the water supply pipeline is at a distance of 100 m; and the sewerage pipeline is at a distance of 100 m.

Dâlja land:

Situated in Petroșani, at 1.5 km from the DN 66 Craiova-Simeria road, with a total surface of 1.382 ha, the land is divided into 3 parcels: 0.25 ha, 0.315 ha and 0.817 ha. The land was originally used for mining related installations and buildings which were demolished by the programme of the closure of mines and the land was rehabilitated and greened. The area does not have the threat of a polluted soil.

Industrial premises:

- Industrial premises/building, 738 sqm./ Owner: BRAU UNION ROMÂNIA; <https://investitori.primariapetrosani.ro/2016/09/23/hala-industrial-a-738-mp-brau-union-romania/>
- Industrial premises/ building, 714 sqm / 809 sqm / Owner: RONCONSTRUCT; <https://investitori.primariapetrosani.ro/2016/09/19/hale-ronconstruct-714-mp-809-mp/>
- Industrial premises/ building and office spaces, 3000 sqm / Owner: UPSROM INDUSTRY; <https://investitori.primariapetrosani.ro/2016/09/19/hala-upsrom-industry-3000-mp/>
- Industrial premises/ building, 1922 sqm / Owner: GOLDEN MARKET; <https://investitori.primariapetrosani.ro/2016/09/18/hala-industrial-a-1922-mp-borotea-golden-market-2/>
- Industrial premises/ building, 2150 sqm / Owner: TED TRANS 2002; <https://investitori.primariapetrosani.ro/2016/09/18/hala-industrial-a-2150-mp-ted-2/>

PETRILA

Former Petrița Mine, Minei street no. 2, 163,855 sqm, Petrița.

VULCAN

- Land with a total surface of 50,000 sqm, situated within the built-up area of Vulcan municipality. The land is accessible by road.
- Real estate with a total surface of 5,522 sqm, with a hall built on and situated in Avram Iancu Street. This real estate has access to roads and utilities (water, sewerage, electricity).

LUPENI:

Former South Mine: 10,930 sqm of construction consisting of a building with ground floor + 3 floors (P + 3) and industrial premises, as well as 6,193 sqm of land. The location situated on DN 66A road, at the entrance of Lupeni municipality, has access to utilities: electricity, water, canal, gas, auto access road.

- Land situated at the entrance of Lupeni municipality on DN 66A, total surface of 15 hectares. It has access to utilities: electricity, water, canal, gas, 2 auto access roads.
- Land on Revoluției street, total surface of 4,855 sqm. It has access to utilities: electricity, water, canal, gas, auto access road.
- Land - former Carolina Well in total surface of 7,774 sqm. It has access to utilities: electricity, water, auto access road.
- Land - former Bărbăteni Mine – situated on Mierleasa street, in total surface of 8,61 hectares. It has auto access road.
- Land situated on Stadionului Street, in total surface of 6,492 sqm. It has access to utilities: electricity, water, auto access road.
- Land and buildings in the premises of former Viscoza, in total surface of 5,67 hectares. It has access to utilities: electricity, water, canal, gas, auto access road, railway access.

URICANI:

URICANI – FORMER PREPARATION

- Surface of the real estate, land/ building: land with a surface of 141,472 sqm
- Available utilities/ Technical infrastructure: DN66A access road, access by railway line, water, electricity
- Current designation: Industrial area

URICANI – PREMISES OF URICANI MINING EXPLOITATION

- Surface of the real estate, land/ building: land with a surface of 74,335 sqm
- Available utilities/ Technical infrastructure: DN66A access road, access by railway line, water, electricity
- Current destination: Industrial area

URICANI – FORMER VALEA DE BRAZI MINE

- Surface of the real estate, land/ building: land with a surface of 122,034 sqm
- Available utilities/ Technical infrastructure: DN66A access road, water, electricity
- Current designation: Industrial area

URICANI – POIANA MARE WASTE DUMP AND JIRI PIT

- Surface of the real estate, land/ building: land with a surface of 38,500 sqm
- Current designation: Industrial area/ Complementary function.

Notable recent coal transition, economic diversification and social development initiatives

Energy transition

PETROSANI:

- Increasing the energy efficiency of blocks of flats in Petroșani municipality – SMIS Code 117296, financed by Regio – Regional Operational Program 2014 – 2020, Priority Axis 3 – Supporting the transition towards a low carbon emissions economy, Investment Priority 3.1 – Supporting energy efficiency, smart energy management and energy use from renewable sources in public infrastructure, including public buildings and housing sector, Operation A – Residential Buildings; stakeholders: UAT Petroșani Municipality and the associations of owners, project in progress, deadline for completion 2021. https://www.primariapetrosani.ro/wp-content/uploads/2019/07/Fisa-Proiect_SMIS-117296_sigle.pdf
- Increasing energy efficiency of blocks of flats in Petroșani municipality – SMIS Code 119885, financed by Regio – Regional Operational Program 2014 – 2020, Priority Axis 3 – Supporting transition towards a low carbon emissions economy, Investment Priority 3.1 – Supporting energy efficiency, smart energy management and energy use from renewable sources in public infrastructure, including public buildings and the housing sector, Operation A – Residential Buildings; stakeholders: UAT Petroșani Municipality and the associations of owners, project in progress, deadline for completion 2022. https://www.primariapetrosani.ro/wp-content/uploads/2019/07/Fisa-Proiect_SMIS-119885_sigle.pdf

- Increasing energy efficiency of blocks of flats in Petroșani municipality – SMIS Code 119886, financed by Regio – Regional Operational Program 2014 – 2020, Priority Axis 3 – Supporting transition towards a low carbon emissions economy, Investment Priority 3.1 – Supporting energy efficiency, smart energy management and energy use from renewable sources in public infrastructure, including public buildings and the housing sector, Operation A – Residential Buildings; stakeholders: UAT Petroșani Municipality and the associations of owners, project in progress, deadline for completion 2022. https://www.primariapetrosani.ro/wp-content/uploads/2019/07/Fisa-Proiect_SMIS-119886_sigle.pdf
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PETRILA

- Intervention works at I.D. Sîrbu Secondary School Petrila – The structure of Secondary School No. 6 from Petrila city, Hunedoara County, in order to increase energy efficiency, financed by ROP/2016/3/3.1/B/1/7REGIONS, SMIS Code 114988
- Intervention works at Constantin Brâncuși Technical College – The structure of Secondary School No. 5 from Petrila city, Hunedoara County, in order to increase energy efficiency, financed by ROP/2016/3/3.1/B/1/7REGIONS, SMIS Code 114987
- Intervention works at I.D. Sîrbu Secondary School from Petrila city, Hunedoara County, in order to increase energy efficiency, financed by ROP/2016/3/3.1/B/1/7REGIONS, SMIS Code 114984
- Intervention works at Constantin Brâncuși Technical College – School No. 2 from Petrila city, Hunedoara County, in order to increase energy efficiency, financed by ROP/2016/3/3.1/B/1/7REGIONS, SMIS Code 114985
- Intervention works at Constantin Brâncuși Technical College from Petrila city, Hunedoara County, in order to increase energy efficiency, financed by ROP/2016/3/3.1/B/1/7REGIONS, SMIS Code 114977

- Intervention works at Petroșani Emergency Hospital – The structure of Petrila Multifunctional Health Center from Petrila city, Hunedoara County, in order to increase energy efficiency, financed by ROP/2016/3/3.1/B/1/7REGIONS, SMIS Code 114989
- Thermal efficiency of residential buildings, stage I (Blocks of flats 1, 3, Muncii Street and Block of flats A, M. Eminescu Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 117773
- Thermal efficiency of residential buildings, stage II (Blocks of flats 28 and 37, 8 Martie Street and Block of flats 61, Republicii Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 117517
- Thermal efficiency of residential buildings, stage III (Block of flats 14, 8 Martie Street), financed by ROP/2017/3/3.1/A/1/7REGIONS, SMIS Cod 118019
- Thermal efficiency of residential buildings, stage IV (Blocks of flats 22A, 28 and 30 Minei Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 117129
- Thermal efficiency of residential buildings, stage V (Block of flats 7, 8 Martie Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 117823
- Thermal efficiency of residential buildings, stage VI (Block of flats 3, 8 Martie Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 119996
- Thermal efficiency of residential buildings, stage VII (Block of flats 52, 8 Martie Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 120761
- Thermal efficiency of residential buildings, stage VIII (Blocks of flats 11 and 43, 8 Martie Street), financed by ROP/2017/3/3.1/A/2/7REGIONS, SMIS Code 120950

VULCAN

- THERMAL REHABILITATION OF BLOCKS OF FLATS IN VULCAN MUNICIPALITY – A PLUS OF HEAT FOR CITIZENS Component 1/ROP/2017/3/3.1/A/2/7 REGIONS, Priority Axis 3 - Supporting transition towards a low carbon emissions economy, Operation 3.1 A - Increasing energy efficiency in residential buildings, public buildings and public lightning systems, especially those with high energy consumption

URICANI

- Energy efficiency of the blocks of flats situated on 1 Mai street, on Revolution street and on Sterminos street, Uricani city, Hunedoara county, financed by ROP 2014 – 2020, stakeholders: UAT Uricani and the associations of owners, project in progress, deadline for completion 2021. <http://orasuluricani.ro/proiecte-finantate-din-por-2014-2020/>

- Energy efficiency of the blocks of flats situated on 1 Decembrie and Aleea Trandafirilor streets, Uricani city, Hunedoara county, financed by ROP 2014 – 2020, stakeholders: UAT Uricani and the associations of owners, project in progress, deadline for completion 2021. <http://orasuluricani.ro/proiecte-finantate-din-por-2014-2020/>
- Energy efficiency of public buildings, Uricani city, Hunedoara county, financed by ROP 2014 – 2020, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2021. <http://orasuluricani.ro/proiecte-finantate-din-por-2014-2020/>
- Modernization of the street public lightning in Uricani city, project financed by the National Program for Local Development, subprogram “Urban regeneration of municipalities and cities”, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2022. <http://orasuluricani.ro/proiecte-finantate-din-programul-national-de-dezvoltare-locala-pndl-2/>

Rehabilitation and repurposing

PETRILA

- Regeneration of urban public space – PETRILA PARK, SMIS Code 118178 ROP/2017/5/5.2/2 REGIONS

URICANI

- Urban Regeneration in Uricani city, Hunedoara county, financed by ROP 2014 – 2020, interested parties: UAT Uricani and the population of the city, project in progress, deadline for completion 2020. <http://orasuluricani.ro/proiecte-finantate-din-por-2014-2020/>
- Urban Regeneration – Former Administrative Headquarters E.M. Valea de Brazi, financed by ROP 2014 – 2020, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2020. <http://orasuluricani.ro/proiecte-finantate-din-por-2014-2020/>
- Rehabilitation of Kindergarten No. 1, Uricani city, Hunedoara county, project financed by the National Program for Local Development, subprogram “Urban regeneration of municipalities and cities”, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2020. <http://orasuluricani.ro/proiecte-finantate-din-programul-national-de-dezvoltare-locala-pndl-2/>

Sustainable spatial development

URICANI

- Construction of kindergarten with 4 classrooms, Uricani city, Hunedoara County, project financed by the National Program for Local Development, subprogram „Urban regeneration of municipalities and cities”, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2022. <http://orasuluricani.ro/proiecte-finantate-din-programul-national-de-dezvoltare-locala-pndl-2/>

Mobility

- „GREEN LINE OF ELECTRIC BUSES BETWEEN PETRILA-PETROSANI-ANINOASA-VULCAN-LUPENI-URICANI GREEN LINE JIU VALLEY - COMPONENT 1 AND COMPONENT 2”, a project financed by ROP/2017/3/3.2/1/7 REGIONS, Priority Axis 3- Supporting the transition towards a low carbon emissions economy, Operation 3.2 - Reducing carbon emissions in urban areas based on sustainable urban mobility plans. The applicant is UAT Vulcan Municipality and the beneficiary of the project will be the partnership made up of: 3 UATs Municipalities (VULCAN, PETROȘANI, LUPENI), 3 UATs cities (PETRILA, ANINOASA, URICANI) and UAT HUNEDOARA COUNTY, there are 6 urban localities which belong to the partnership, Vulcan municipality is the leader of the partnership.

LUPENI

- Modernization of Tudor Vladimirescu Street (boulevard) SMIS Code 126946 - project in implementation by the Regional Operational Program 2014 – 2020

URICANI

- Modernization of side roads from Uricani city and the component localities, project financed by the National Program for Local Development, subprogram „Urban regeneration of municipalities and cities”, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2022. <http://orasuluricani.ro/proiecte-finantate-din-programul-national-de-dezvoltare-locala-pndl-2/>
- Modernization of streets and pedestrian alleys in Uricani city, Hunedoara county, project financed by the National Program for Local Development, subprogram „Urban regeneration of municipalities and cities”, stakeholders: UAT Uricani and the population of the city, project in progress, deadline for completion 2022. <http://orasuluricani.ro/proiecte-finantate-din-programul-national-de-dezvoltare-locala-pndl-2/>

Social cohesion and welfare

VULCAN

- NOW FOR THE FUTURE OF VULCAN – LOCAL PARTNERSHIP FOR SOCIAL INCLUSION: Component 1 “Preparatory support for the elaboration of Local Development Strategies” – cities/ municipalities with a population of over 20,000 inhabitants (Less developed regions), financed by Priority Axis 9- Supporting economic and social regeneration of the disadvantaged communities in the urban environment, Investment priority 9.1 – Local development placed under the responsibility of the community.

LUPENI

- BAHTALO! TOGETHER WE FIGHT POVERTY AND DISCRIMINATION – SMIS Code 115903 – project in implementation by the Human Capital Operational Program: <https://primarialupeni.ro/proiectul-bahtalo-impreuna-combatem-saracia-si-discriminarea/>

Heritage and culture

PETROSANI

- Rehabilitation of the Mining Museum building and museum arrangement, SMIS Code 116194, financed by Regio – Regional Operational Program 2014 – 2020, Priority Axis 5, Investment Priority 5.1 – Conservation, protection, promotion and development of natural and cultural heritage; stakeholders: UAT Petroșani Municipality, project in progress, deadline for completion 2020. https://www.primariapetrosani.ro/wp-content/uploads/2019/08/Fisa-Proiect_SMIS-116194_sigle.pdf

Others: administrative capacity

PETROSANI

- ePas - streamlining the Administrative Procedures by Simplification at Petroșani City Hall, SIPOCA Code/ SMIS 642/127741 – financed by the Operational Program Administrative Capacity 20014 – 2020, Component 1 – CP12/2018 for the less developed regions – Substantiation of decisions, strategic planning and simplification measures for citizens at the level of the local public administration from the less developed regions, Priority Axis – Public Administration and Judicial System accessible and transparent, Operation – Introduction of common standards and systems in local public administration that optimize beneficiary-oriented processes in accordance with SCAP; stakeholders: UAT Petroșani Municipality, project in progress, deadline for completion 2021. https://www.primariapetrosani.ro/wp-content/uploads/2019/06/Descriere-proiect-SIPOCA-642_SMIS-127741.pdf

LUPENI

- „SIMPLIFIED ADMINISTRATIVE PROCEDURES THROUGH DIGITAL EFFICIENCY AT LUPENI MUNICIPALITY TOWN HALL” – SMIS Code 128531, Human Capital Operational Program – project in implementation. <https://primarialupeni.ro/proiecte-cu-finantare-europeana-finalizate/>

Notable planned coal transition, economic diversification and social development initiatives

Future joint integrated projects for the Jiu Valley include:

- Increasing energy efficiency in the public and residential buildings from the localities of Jiu Valley
- Development of tourism, heritage and culture in Jiu Valley
- Supporting SMEs and creating technology parks
- Rehabilitation of the local transport infrastructure at the level of Jiu Valley, as well as of the national transport infrastructure for the opening of Jiu Valley to the East (DN 7A Petroșani - Voineasa) and to the West (DN 66A Câmpul lui Neag – Herculane);
- Improvement of environmental conditions in Jiu Valley (production and use of renewable energy, regularization of water courses, landfills for materials resulting from demolitions)
- Development of an industry for the construction of components for photovoltaic and wind farms
- Improving the life quality of the inhabitants in Jiu Valley (regeneration of green areas, parks etc.);
- Development of social infrastructure
- Improvement of the educational infrastructure in the Jiu Valley.

SOURCES

CEROPE (2019): Just Transition in Hunedoara. Economic diversification in a fair and sustainable manner. Bucharest, Romania.

Renaissance Program Strategic Plan 2000© - Appendix B – Background excerpt: History – Jiu Valley (2000): Political Economy of Lupeni / Jiu Valley. https://web.archive.org/web/20071030114250/http://www.jiuvalley.com/engl/tourism/history_pol_econ.pdf

BalkanInsight (2020): Ailing Romanian Coal Region sees new hope in EU Green Deal. <https://balkaninsight.com/2020/05/29/ailing-romanian-coal-region-sees-new-hope-in-eu-green-deal/>

Bankwatch Network (2020): Coal phase-out by 2030: an unreachable goal? An analysis of Romania's National Energy and Climate Plan. <https://bankwatch.org/wp-content/uploads/2020/02/Briefing-NECP-Romania-EN.pdf>

Romania Country Commercial Guide 2019. <https://export.gov/article?id=Romania-Energy>

The National Action Plan in the Field of Energy Efficiency – 2020 https://ec.europa.eu/energy/sites/ener/files/documents/ro_neeap_2017_ro.pdf

The National Strategy for Sustainable Development 2016-2020-2030 (<http://www.insse.ro/cms/files/IDDT2012/StrategiaDD.pdf>)

The Plan for Regional Development - Western Region 2014-2020: <https://adrvest.ro/wp-content/uploads/2016/09/PDR-2014-2020-ro.pdf>

The Plan for Regional Development 2014-2020 – Hunedoara County: <http://www.cjhunedoara.ro/documente/hotarari/2017/anexa%20hot%20131%20plan%20de%20dezv/>

SDJ_HD_rev_09.06_N.pdf

Local Development Strategy for the Jiu Valley Micro-Region: <http://www.strategvest.ro/media/dms/file/Valea%20Jiului/strategie%20valea%20jiului.pdf>

The Strategic Plan for the Socio-Economic Development of the City of Petrila:

http://www.orasulpetrila.ro/?attachment_id=2259

The Local Development Plan of Petroșani Municipality during 2014-2020:

Hunedoara County Statistics Department (<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>)

<https://www.primariapetrosani.ro/planul-de-dezvoltare-locala-a-municipiului-petrosani-peperioada-2014-2020/>

The Development Strategy of Vulcan Municipality 2014-2020, updated in 2015: ([http://www.evulcan.ro/portal/hunedoara/vulcan/portal.nsf/0289F06F518C2031C225811E00429277/\\$FILE/Strategia%20Locala%20Vulcan%202014-2020.pdf](http://www.evulcan.ro/portal/hunedoara/vulcan/portal.nsf/0289F06F518C2031C225811E00429277/$FILE/Strategia%20Locala%20Vulcan%202014-2020.pdf))

The Development Strategy of Lupeni Municipality during 2014-2020:

<https://primarialupeni.ro/wp-content/uploads/2019/09/STRATEGIA-DE-DEZVOLTARE-AMUNICIPIULUI-LUPENI.pdf>

The Strategic Development Plan of the City of Uricani during 2015-2020 :<http://orasuluricani.ro/strategie-de-dezvoltare/>

„GREEN LINE OF ELECTRIC BUSES BETWEEN PETRILA-PETROSANI-ANINOASA-VULCAN-LUPENI-URICANI GREEN LINE JIU VALLEY : <http://www.e-vulcan.ro/portal/hunedoara/vulcan/portal.nsf/AllByUNID/Linia-verde-de-autobuze-electrice-intre-Petrila--Petrosani--Aninoasa--Vulcan--Lupeni--Uricani--Green-Line-Valea-Jiului--Componenta-1-0000879A?OpenDocument>

Modernization of Tudor Vladimirescu Street (boulevard) SMIS Code 126946 - project in implementation by the Regional Operational Program 2014 – 2020: <https://primarialupeni.ro/proiecte-cu-finantare-europeana-finalizate/proiectul-modernizare-strada-tudor-vladimirescu-bulevard/>

Sources on notable infrastructures:

- Livezeni Land: <https://investitori.primariapetrosani.ro/2016/09/19/teren-livezeni/>
- Dalja Land: <https://investitori.primariapetrosani.ro/2016/09/19/teren-dalja/>

Initiative for coal regions in transition

The Initiative for coal regions in transition is an initiative by the European Commission.

➔ ec.europa.eu/coal-regions-in-transition

✉ secretariat@coalregions.eu

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