

UNECE JUST TRANSITION STUDY 2023



Mirëdita



Workshop 11. December 2023

Tirana



Overview

1. Our Team of Experts
2. Framework of Analysis
3. Insights from Country Analysis
4. Insights from Fact Finding Mission
5. Issues & Propositions for a Just Transition Process
6. Debate

Our Team

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Mirë se vini

Frameworks of Analysis

#1 Supply Chains and Smart Specialization of Regions

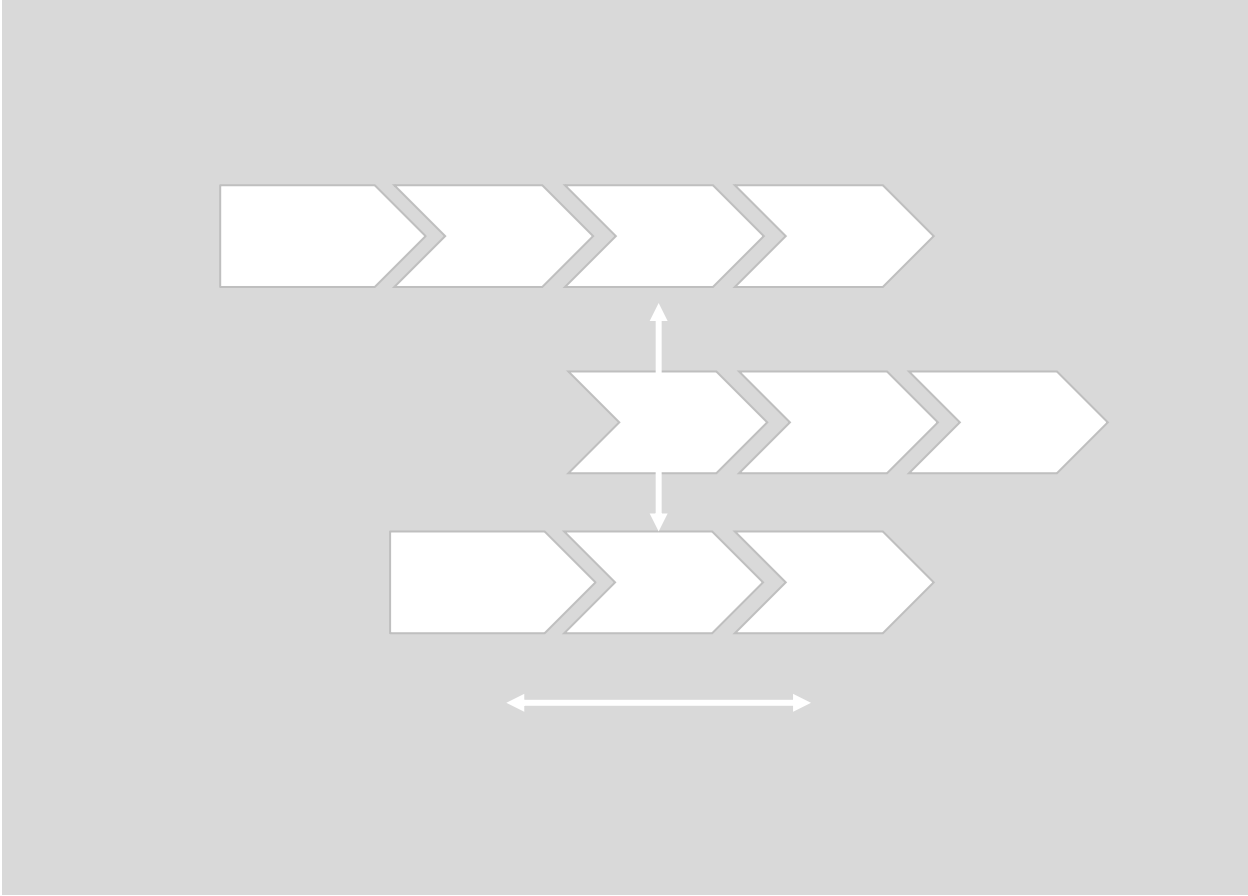
#2 Multi-Level Understanding of Socio-Economic Transitions

#3 Entrepreneurial Ecosystems and Possibilism

#4 Sustainable Development Goals of the United Nations

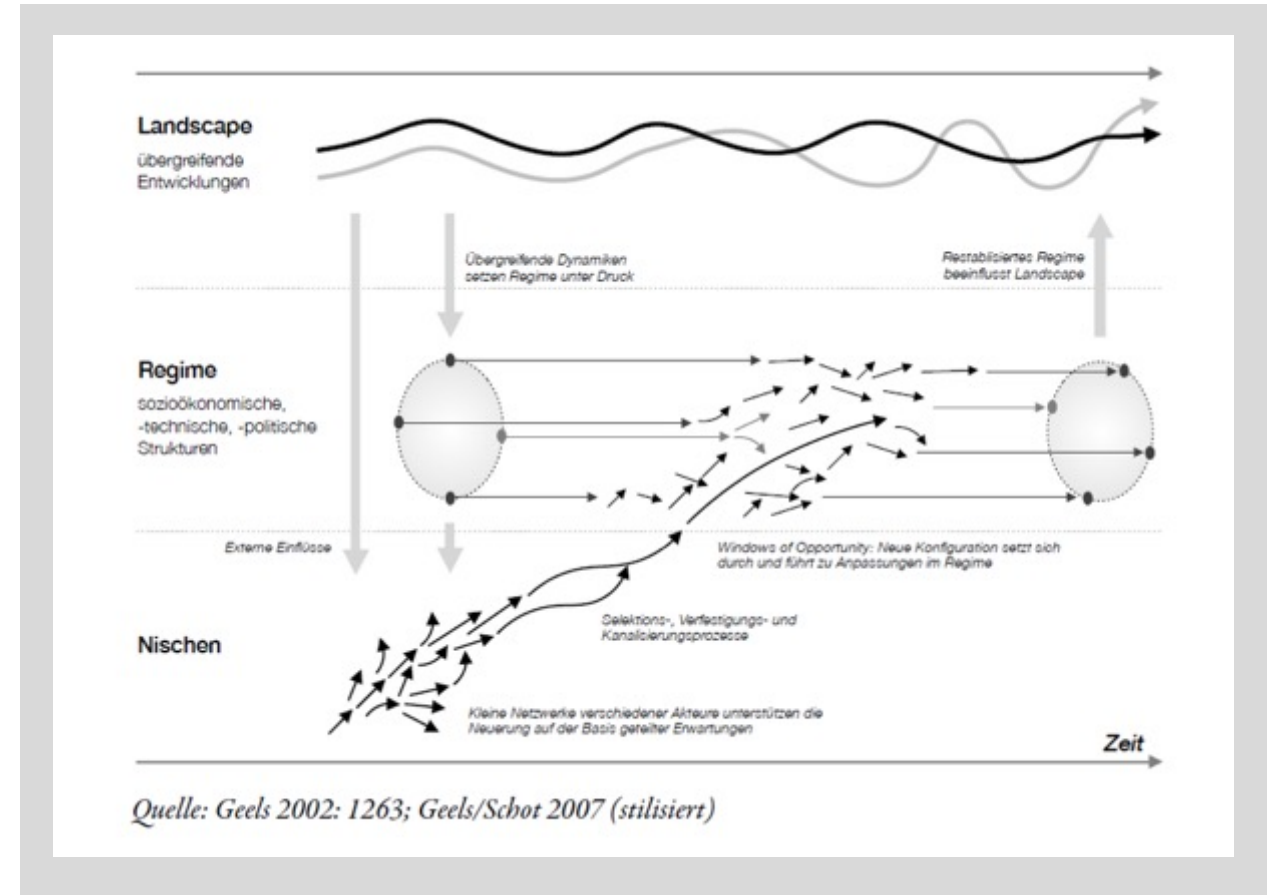
Framework of Analysis

Supply Chains and Smart Specialization of Regions Supply Chains & Value Networks



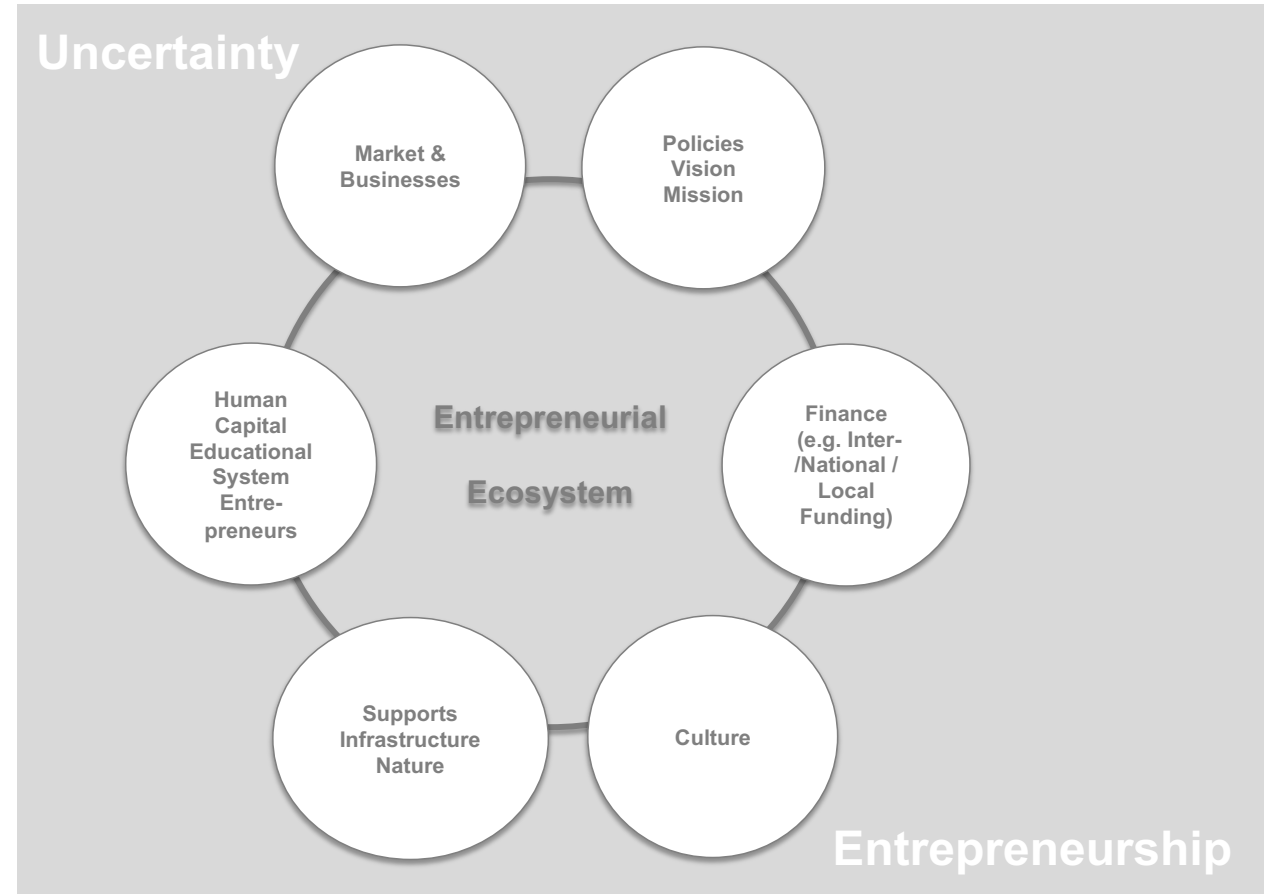
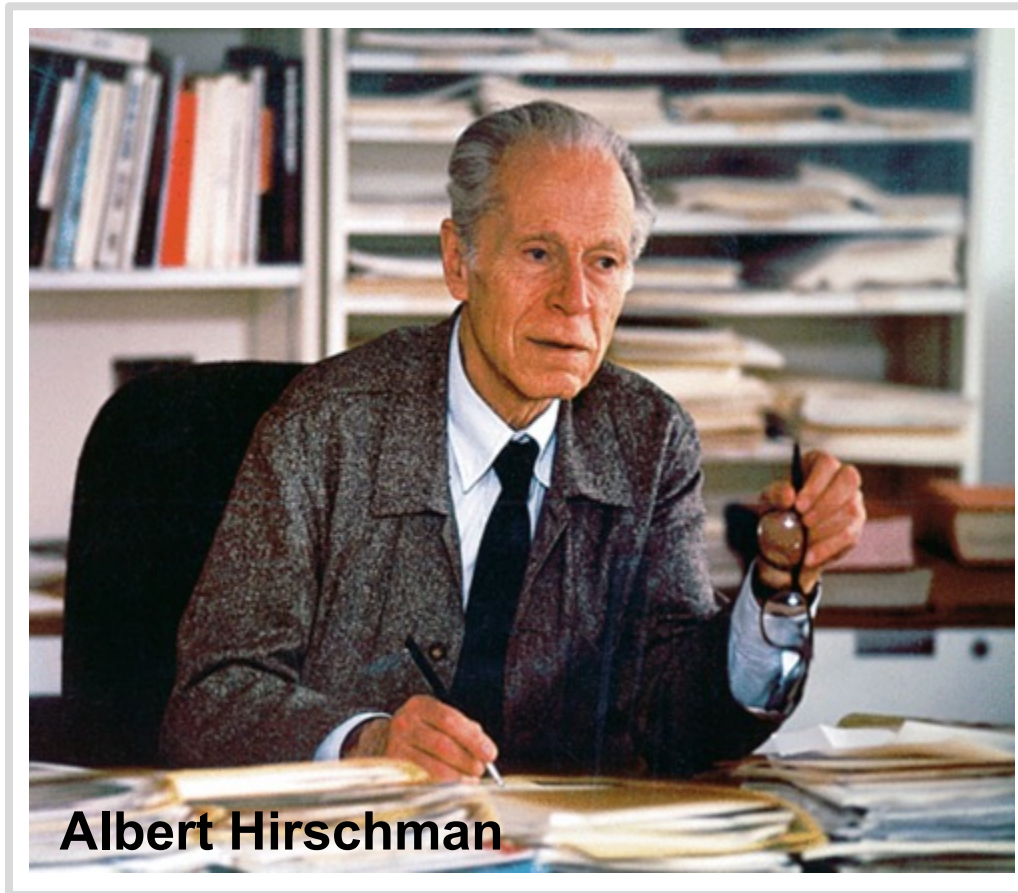
Framework of Analysis

Multi-Level Understanding Socio-economic transitions



Framework of Analysis

Entrepreneurial Ecosystems and Possibilism Uncertainty, agency, entrepreneurs and communities



Isenberg (2011)

Framework of Analysis

Sustainable Development Goals of the United Nations People, Peace, Planet, Prosperity, and Partnership



People, Peace, Planet, Prosperity, and Partnership

General Insights

Fact Finding Mission Albania September 2023

#1 National Circumstances

#2 Political and institutional framework

#3 Demography of Albania

#4 Economy of Albania

#5 Power supply and generation

#6 Scenarios of Development

Sustainable Development of Albania

NATIONAL CIRCUMSTANCES Infrastructure and Culture

Key Facts

- Albania is a country very rich in nature reserves and extraordinary landscape
- high variability in terrain relief creates high rates of soil degradation and highly erosive river flows
- Considerable water reserves in an an arid region
- Considerable solar (220 sunny d/a) and wind exposure

Opportunities

- National Adaptation Plan (NAP, 2020)
- Green Deal EU-Western Balkan Six
- Albania is a cultural x-road between different cultures

Challenges

- Unclear property rights
- ...

Total Area	28,748 Square Kilometers
Land Area	27,398 Square Kilometers
Water Area	1,350 Square Kilometers
Land Boundaries	717 Kilometers
Irrigated Land	1,884 Square Kilometers
Border Countries	Greece 282 km, The Former Yugoslav Republic of Macedonia 151 km, Serbia and Montenegro 287 km
Coastline	362 Kilometers
Geographic Coordinates	41 00 N, 20 00 E
Terrain	Mostly mountains and hills; small plains along the coast
Highest Point	2,764 Meters
Highest Point Location	Maja e Korabit (Golem Korab) 2,753 m
Lowest Point Location	Adriatic Sea 0 m
Natural Resources	Petroleum, natural gas, coal, bauxite, chromite, copper, iron ore, nickel, salt, timber, hydropower

Sustainable Development of Albania

POLITICAL & INSTITUTIONAL FRAMEWORK (with respect to Sustainability) Policies and Finance

Key Facts

- First post-socialistic constitutional reforms in 1990 ff
- Second wave with respect to EU accession
- Administrative territorial reform in 2015
- Albania is since 2016 signatory state of the Paris Climate Agreement
- Since 2010, Albania has committed to the UN SDG

Opportunities

- This policy framework opens a lot of project options for the mining communities related to green energy and nature conservation as well as industrial supply chain integration (rare earths)
- Regional markets

Challenges

- Continuing change and uncertainty of legal framework
- Tax system
- Mining sector is not a priority for national government

The EU will open certain areas of the EU Single Market to the Western Balkan, bringing tangible benefits to its citizen prior to accession.

The focus will be on the following seven initial **priority areas**:

1. *Free movement of goods*
2. *Free movement of services and workers*
3. *Access to the Single Euro Payments Area*
4. *Facilitation of Road transport*
5. *Integration and de-carbonisation of the Energy Markets*
6. *Digital Single Market*
7. *Integration into industrial supply chains*

UN SDGs. Two government committees – the Inter-ministerial Committee for the Achievement of Sustainable Development Goals, and the Parliamentary Subcommittee on Sustainable Development promote Albania's progress towards the Sustainable Development Goals (SDGs)

Sustainable Development of Albania

DEMOGRAPHY & EMPLOYMENT Human Capital and Educational System

Key Facts

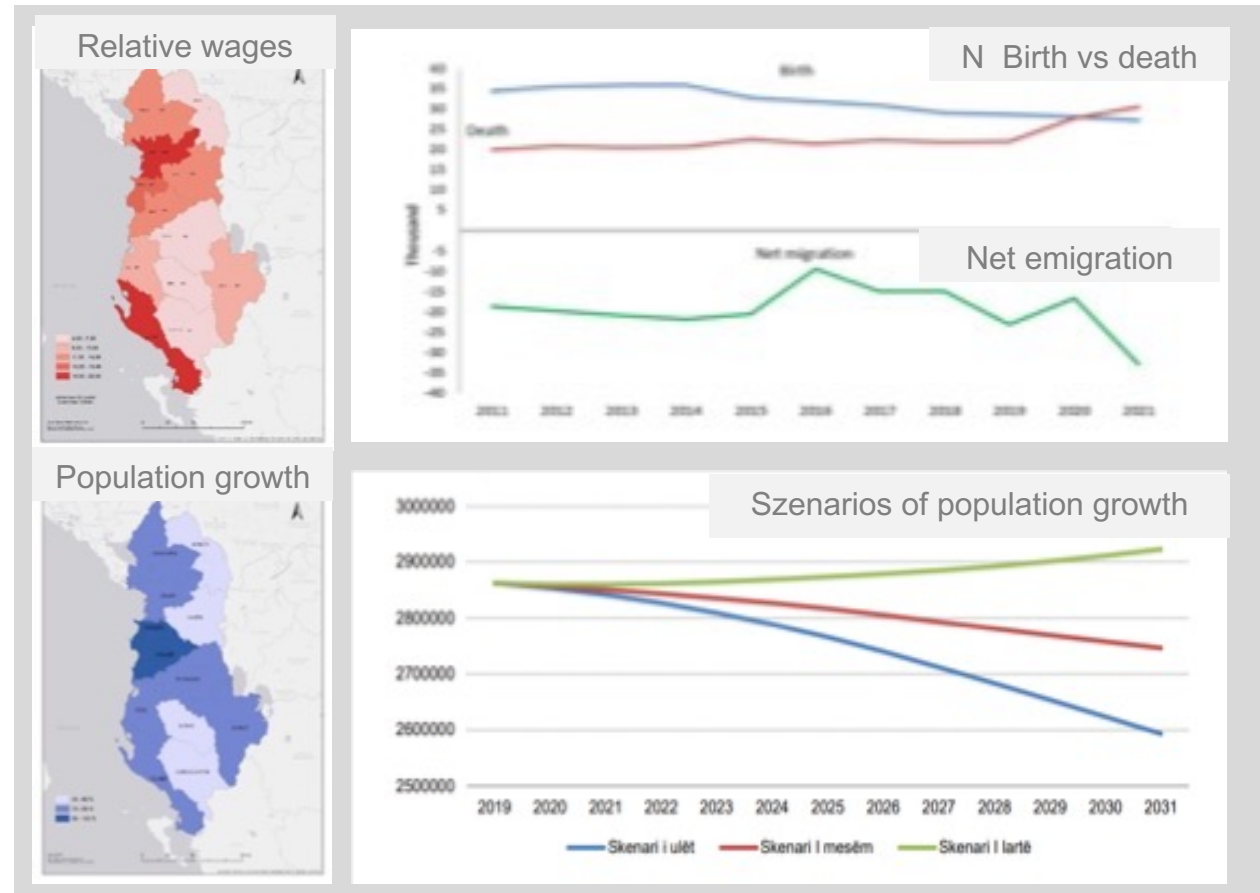
- Albanian population is decreasing and aging rapidly
- Former mining regions are nearly abandoned
- Mining sector is no longer attractive for young generation

Opportunities

- Just Transition could help to improve the attractiveness and demographic stability of the concerned mining communities

Challenges

- Demographic decline
- Strong trend towards urbanization
- Challenge to provide the necessary workforce
- Adapt the educational offer and output to shifting demand.



Sustainable Development of Albania

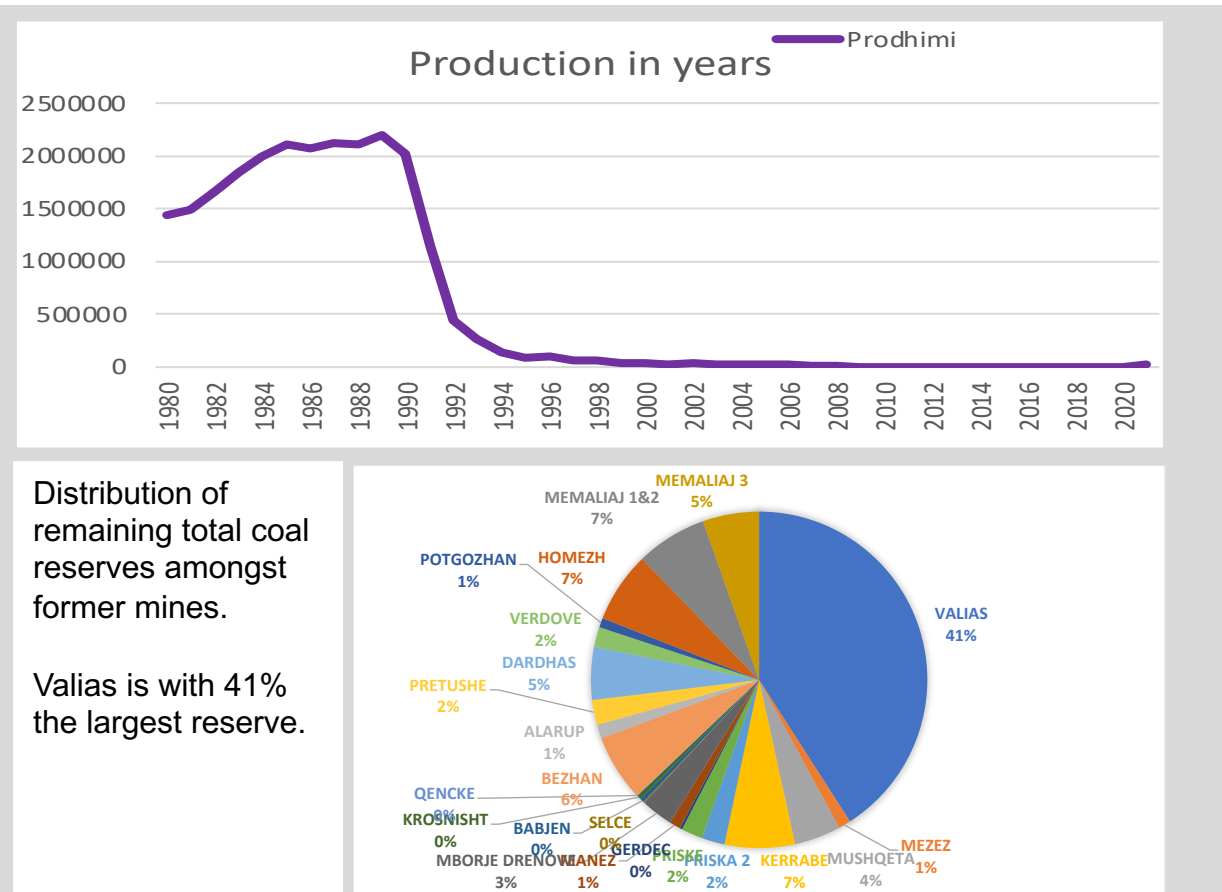
ECONOMY (Coal Mining Sector) Markets and Sectors, focus on Coal Mining

Key Facts

- Domestic coal production culminated in 1989 @ above 2 mio. t/a and fell below 0,5 mio. t/a until 1992
- This „economic coal exit“ has been extremley disruptiv
- In terms of employment, 15.000 mining jobs in 1989 reduced to less than 50 since 2010.
- Coal was essentially used domestically, with a short period of export of a minor share in the end of socialistic regime
- In average, coal reserves have been exploited at about 30% of total reserves in Albania

Challenges

- Residual activity remains
- Mining closure has been not complete – dangerous zones remain
- Monitoring generally in place, with improvement potential



Sustainable Development of Albania

POWER SUPPLY & GENERATION Energy and Environment

Key Facts

- 90% of electricity generation from renewables (hydro)
- Albania has been a net exporter of electricity

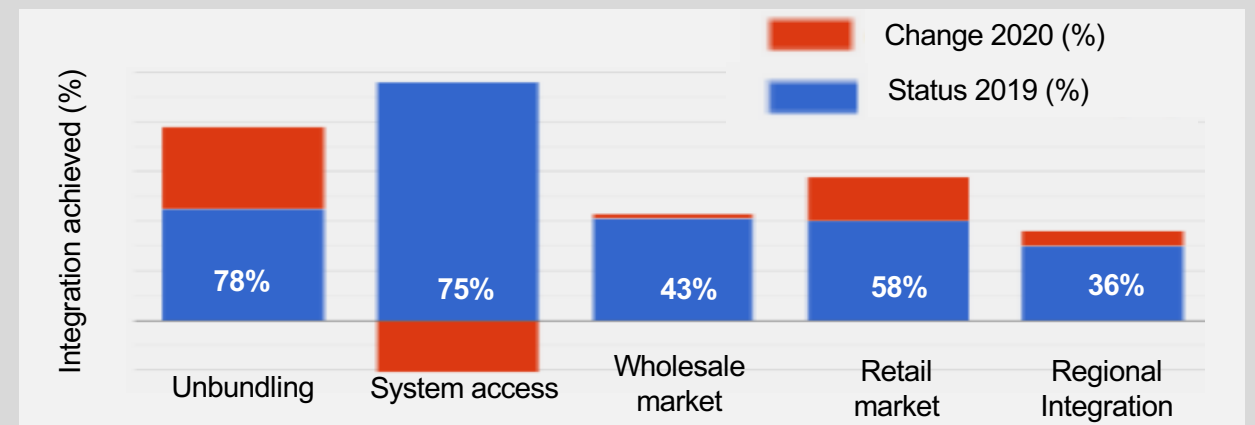
Opportunities

- Energy & Decarbonization is a top priority for EU
- EU-Western Balkans Summit 12 / 2022 discusses a €30 billion Economic and Investment Plan
- 40 flagship projects including six in the energy sector
- Hydro boom (new projects)

Challenges

- Enabling economic growth while keeping 90% RE-part
- Land rights uncertainty hinders renewable expansion
- Broaden the access to decentral RE production
- Conflicts between hydrocarbon exploitation and CO2-reduction targets
- Conflicts between energy and natural use of water

	Geothermal		Fossil Fuels		Hydro		Other Renewables (specify)		Total	
	Capacity MWe	Gross Prod. GWh/yr	Capacity MWe	Gross Prod. GWh/yr	Capacity MWe	Gross Prod. GWh/yr	Capacity MWe	Gross Prod. GWh/yr	Capacity MWe	Gross Prod. GWh/yr
In operation	0	0	97	0	2,283	7,629	0	0	2,380	7,629
Under construction	0	0	0	0	557.8	2,435	0	0	557.8	2,435
Funds committed, but not yet under construction	0	0	0	0	1,204	5,391	50	0	1,254	5,391



Sustainable Development of Albania

SCENARIO DEVELOPMENT Policies, Visions, Missions

Back Ground: EU accession process West Balkan States

Back Ground: IPCC economic. scenario development

- IPCC has developed a general framework and public data base simulating a defined set of scenarios
- This data base has been used to develop scenarios for Albania

Key characteristics

- In all scenarios, Albania shows GDP growth (factor 2 – 5 until 2060 vs. 2005)
- Population growths in urban areas, while scenarios vary in the degree of urbanization (total population growth +- 10% 2060 vs. 2010; urbanization between 65 – 85 % in 2060)

Key Insights for UNECE study on mining regions

- ...

In search for data - work in progress

Sector	Indicator	What it is proxy for	Relationship to vulnerability
Agriculture	Cereals yield	Labor force, total agricultural production, water demands by the sector, and sector contribution to GDP.	Demand ↑ as population ↑ Sensitivity ↓ as production ↑
Urban Development			
Energy Sector			
Tourism	Number of visitors	Waste management, flooding risk, water demand.	Tourism demand ↑ as population ↑ Sensitivity ↑ as economic growth ↓
Population	Population growth (change) rate	General needs people for infrastructure (e.g., schools, hospitals, housing, roads), resources (e.g., food, water, electricity), and jobs.	Sensitivity ↑ as population ↑

Application of Frameworks of Analysis to Albanian Mining Communities

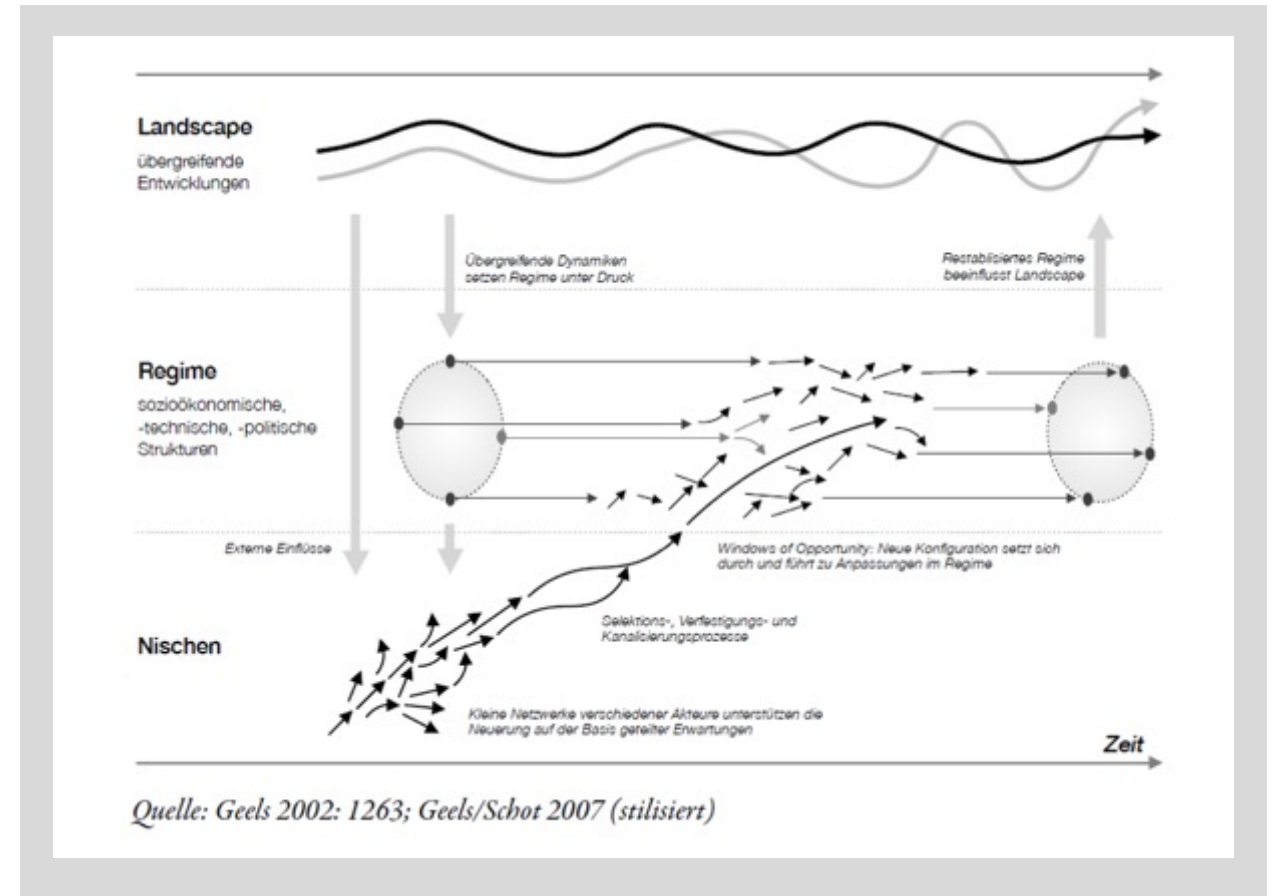
#1 Supply Chains and Smart Specialization of Regions

#2 Multi-Level Understanding of Socio-Economic Transitions

#3 Entrepreneurial Ecosystems and Possibilism

Framework of Analysis

Multi-Level Understanding Socio-economic transitions



Socio-Economical Transition Mapping

Socio-Economic Transition Phases

smart specialized

shock disruption

entrepreneurial exploration

regime reshaping

smart specialized



Albanian Phases of Development

„Socialistic Coal Mining System“

„Political Disruption & Coal Exit“

„Adaptation“

„EU Ascension“

„Just Transition achieved“

Socio-Economic Levels

Landscape

Regime

Niche

Central Mining Administration	89/90 Toppling of government International Closure Consultants	International Institutions New Mining Law 1994	UN Program EU Candidate 2014 Westbalkan Six 2014 Paris Agreement Ratification 2016	National Emission Reduction Targets EU and regional integration Programs
Miner Commuting / Mining Town Business Model Decentral Mining Schools	Fragmented Privatization Central Divestment Agency Communal Land Redistribution	International Investors (Copper, Chrome, Coal?) Infrastructure projects	Climate & Sustainability National Programs Regional Governance Statistics & Planning Power Market 2014 Admin. Reform 2015	Projects Anchor Firms New Smart Specializations
	Stop of Mine operation Private Operating Licences Companies 1 st wave of emigration	Mine Closures Inner Albanian Migration & Urbanization	Ideas 2 nd wave of emigration	Initiatives

1944 - 1989

1990– 1994

1994 –2014

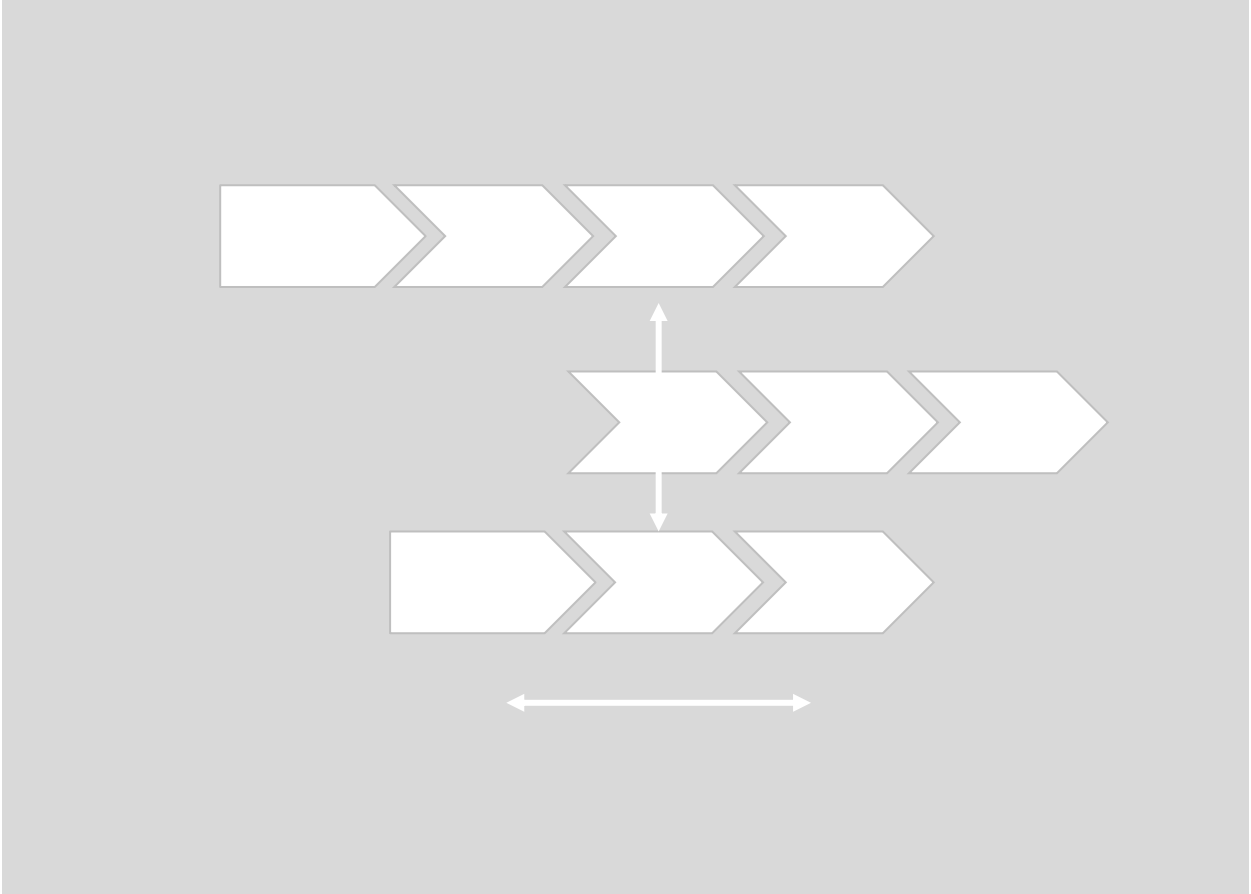
2014 –2023

2023 – 2035

transformation time

Framework of Analysis

Smart Specialization and Competitive Advantage of Regions Supply Chains & Value Networks



Mapping of Supply Chains 1988

State
Company &
Planning

Regional
Mining
Companies

Coal Mining



Local Population

Steel Industry

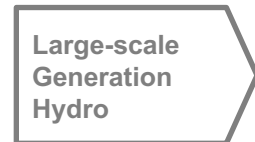
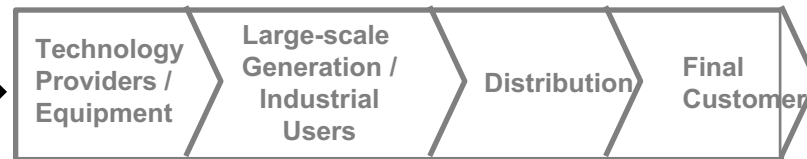
Heating Stations

Power Plants

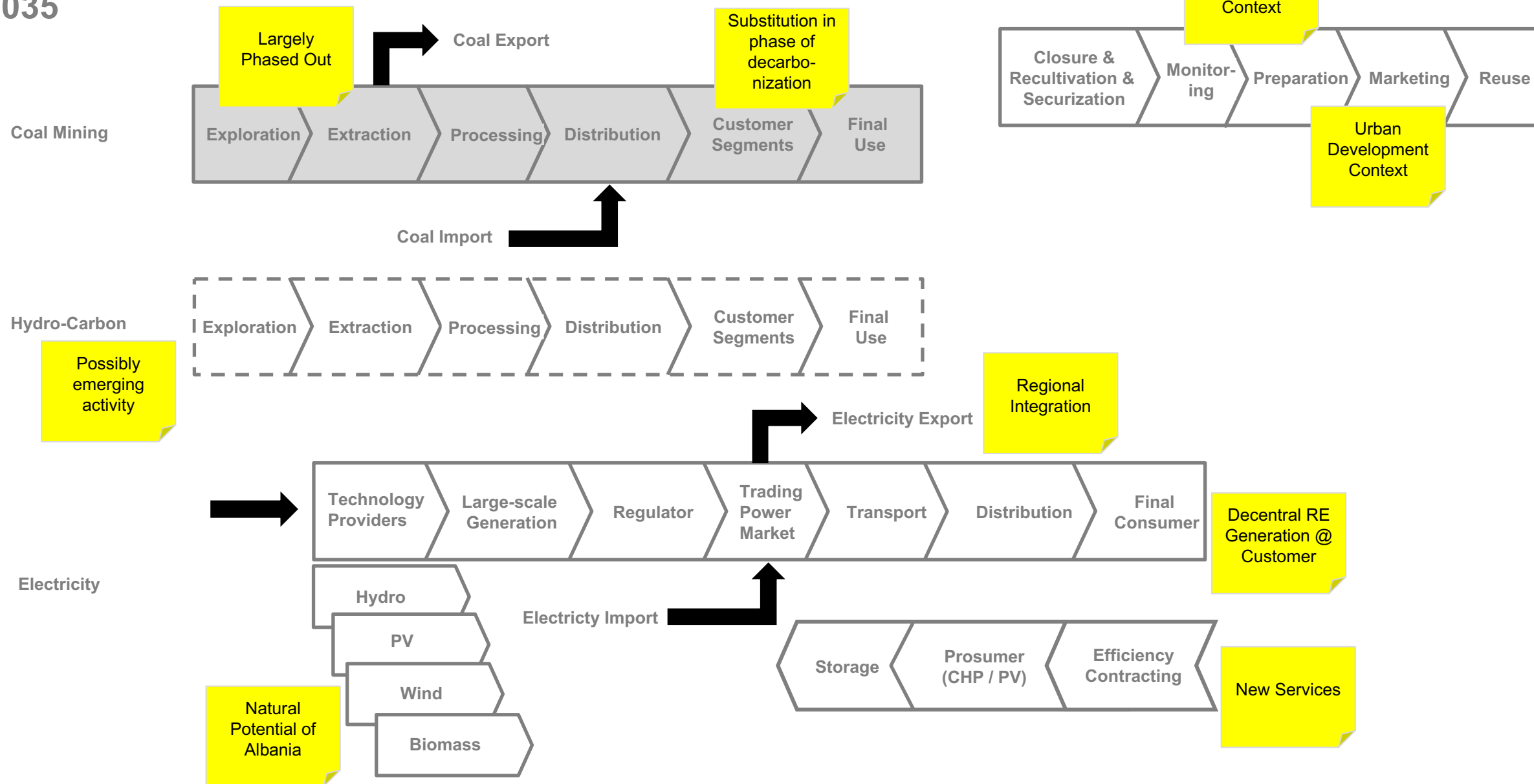
Russia
China
Poland



Electricity



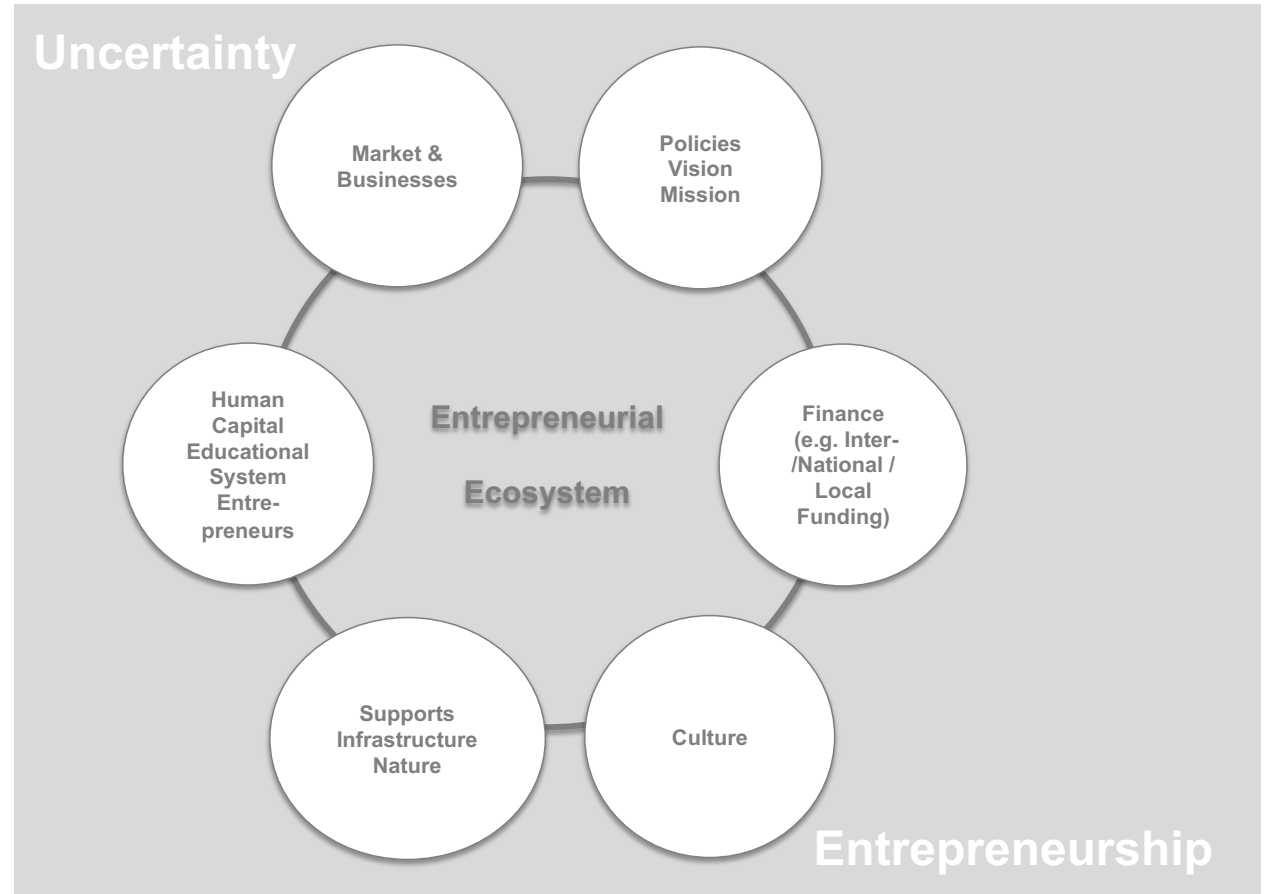
Mapping of Supply Chains 2035



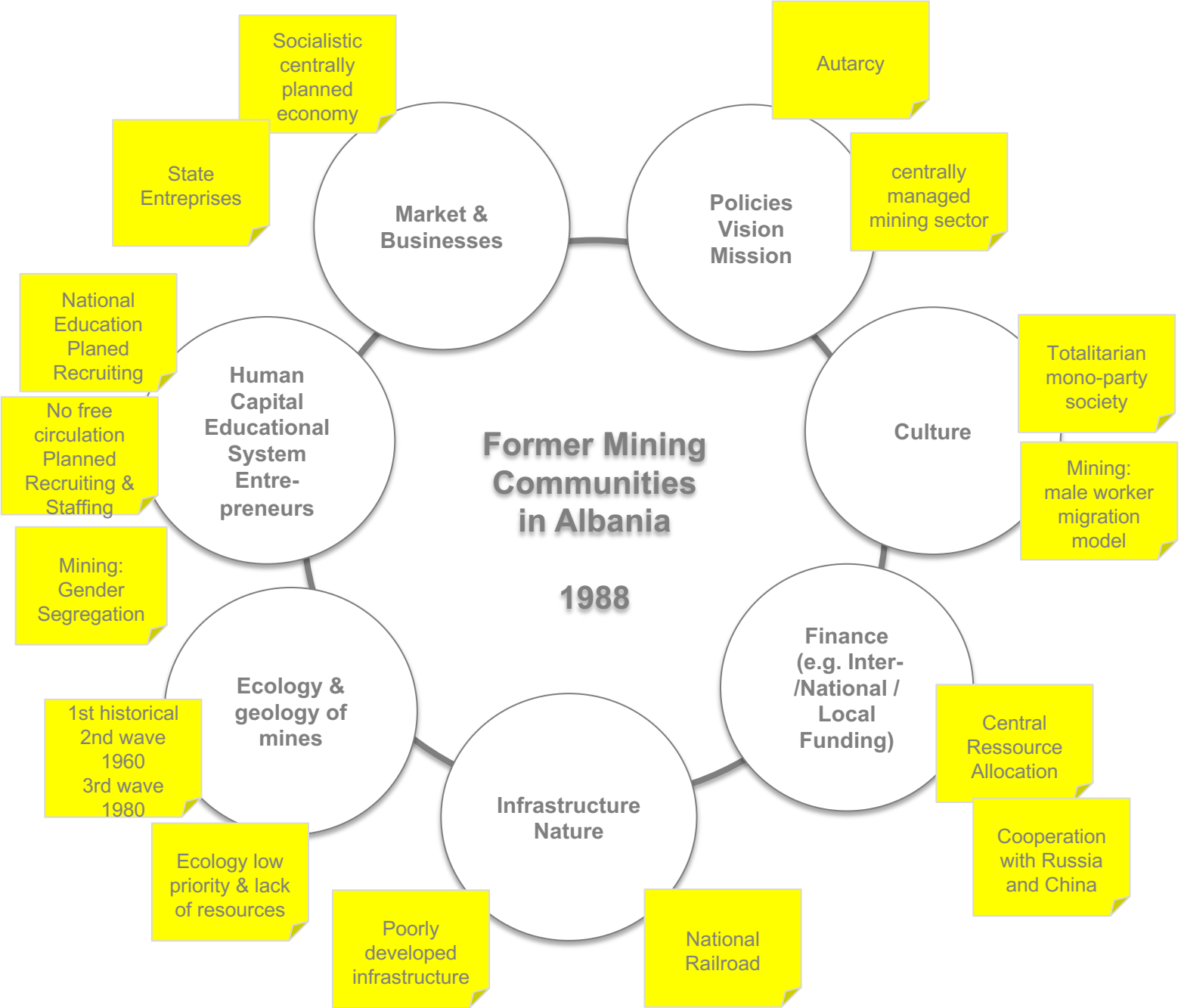
Framework of Analysis

Entrepreneurial Ecosystems

Uncertainty, agency, entrepreneurs and communities

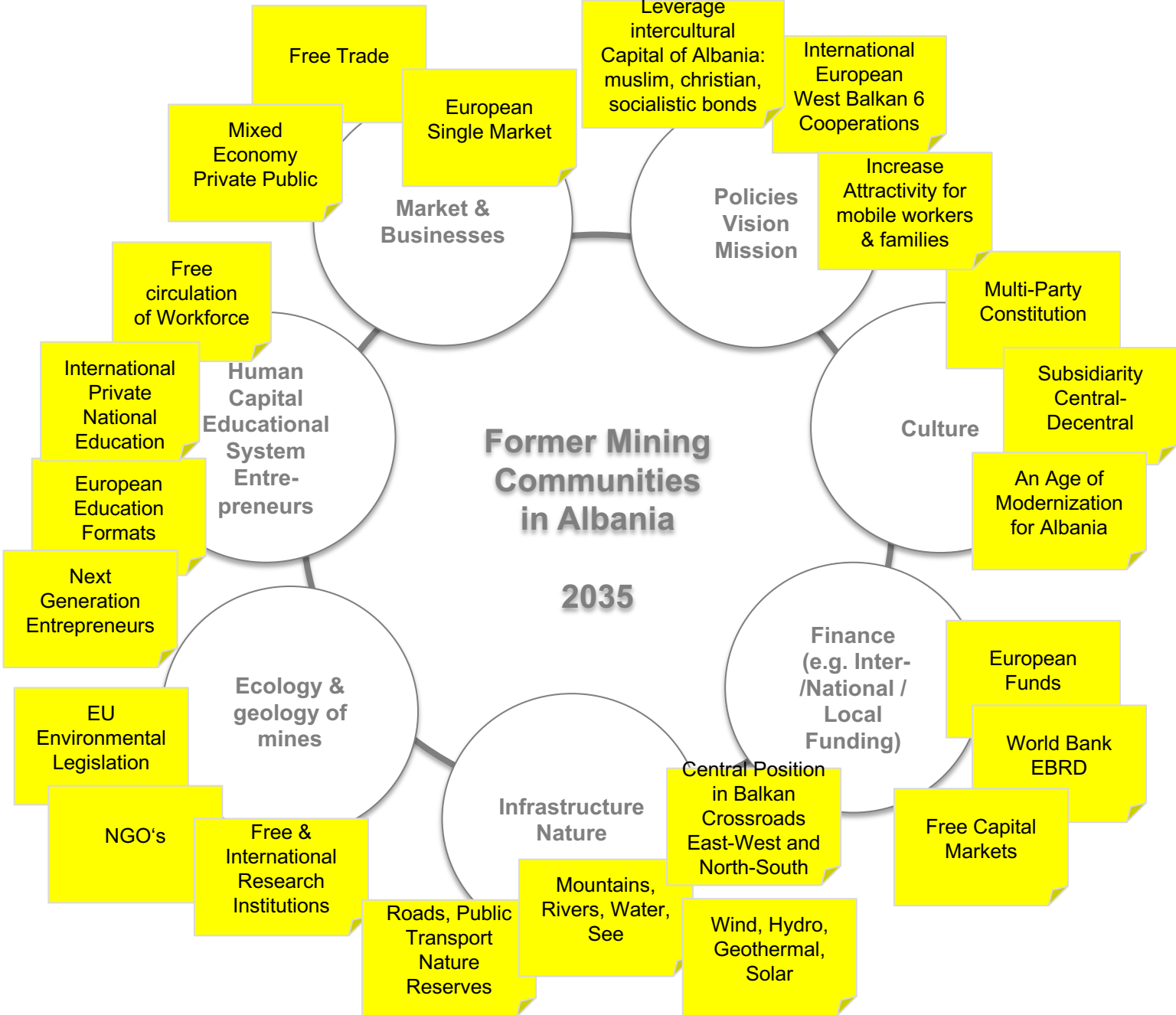


Mapping of Entrepreneurial Ecosystem



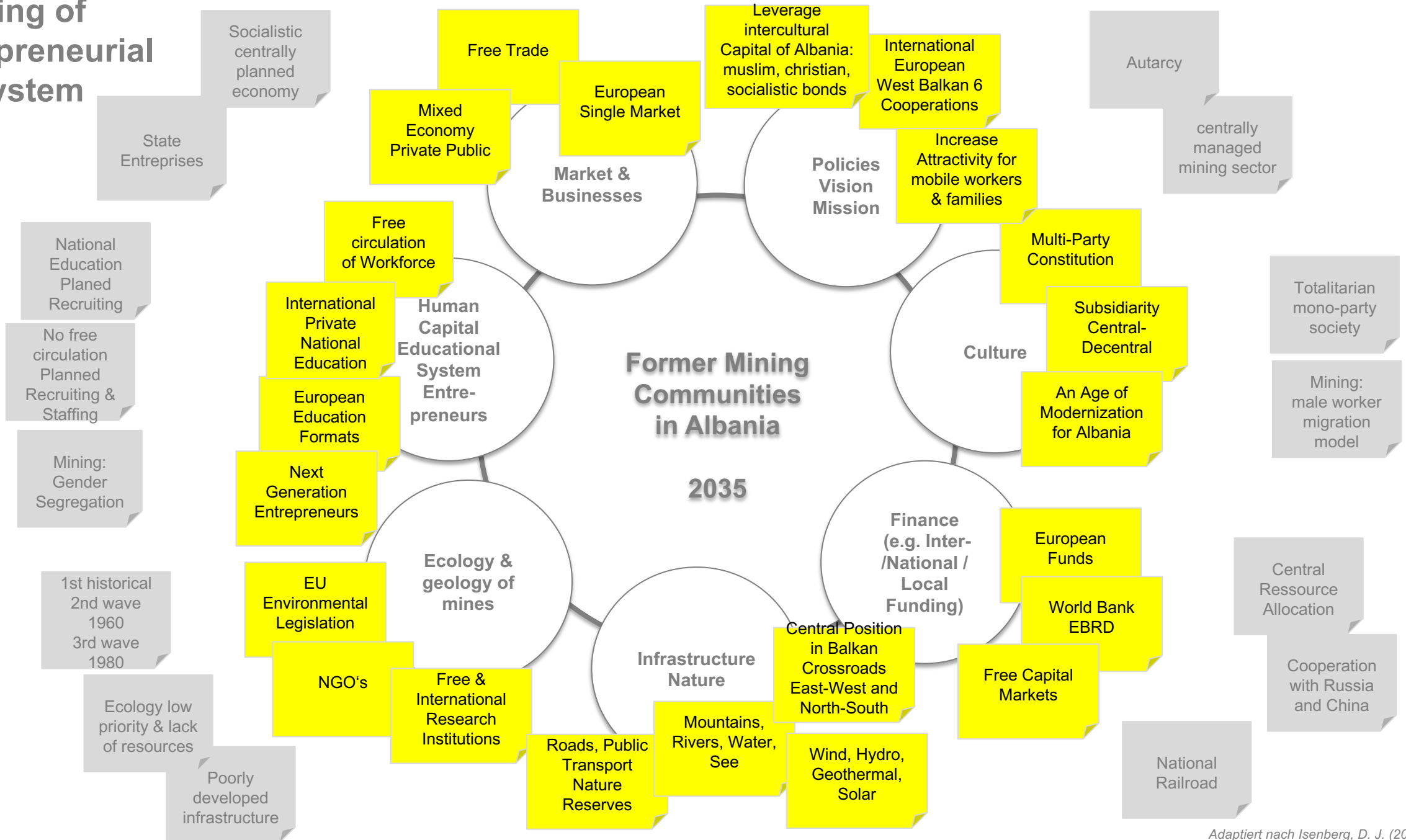
Adaptiert nach Isenberg, D. J. (2011)

Mapping of Entrepreneurial Ecosystem



Adaptiert nach Isenberg, D. J. (2011)

Mapping of Entrepreneurial Ecosystem

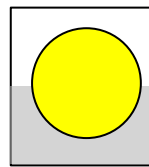
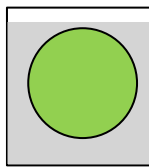
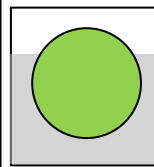


Insights from Mining Communities

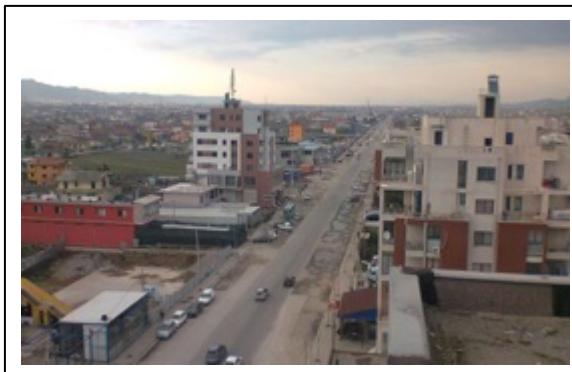
Fact Finding Mission Albania September 2023

#1 Mining Community: Kamza	}	— metropolitan
#2 Mining Community: Vora		
#3 Mining Community: Korca	}	— town of local significance
#4 Mining Community: Pogradeci		
#5 Mining Community: Tepelena	}	— remote locations
#6 Mining Community: Maliqui		
#7 Mining Community: Tirana		
#8 Mining Community: Kolonja		

#1 Mining Community: Kamza Coal Mines: Valias



Just Transition Readiness Score



Social: inhabitants

Work in Progress

1989	12.500	1989	x.xxx
2001	53.000	2001	0
2007		2007	0
2011	66.841	2011	0

Transition Story:

- Historical small town 6.000 inhabitants (1975)
- Urbanization and industrialization (mine) during socialism
- Wild urbanization in vicinity of Tirana in the 1990s

Ecological

Mine closure: 2000 (90%)
Methan:
Water:
Renewable Energy:
Climate risks:

Activities & Projects:

- Agricultural University of Albania
- Since 1997 international projects for urban infrastructure
- City Train Project

Economical

Inhabitants/km² : 2802
Car: 11 km to Tirana, 0:20 h
Public: bus

No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Valias	1978	No.139, dated 20.03.1995	No.2978/2001	3.515.178	49.186.000

#2 Mining Community: Vora Coal Mines: Gërdeci & Manza

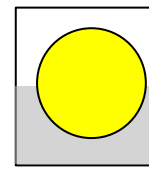
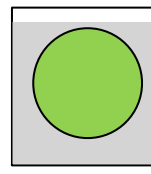
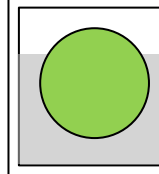


Transition Story:

- Wider metropolitan area of the capital Tirana
- Socialistic mine openings (1968, 1980)
- 2008 tragic accident with explosions in army depot devastating part of town

Activities & Projects:

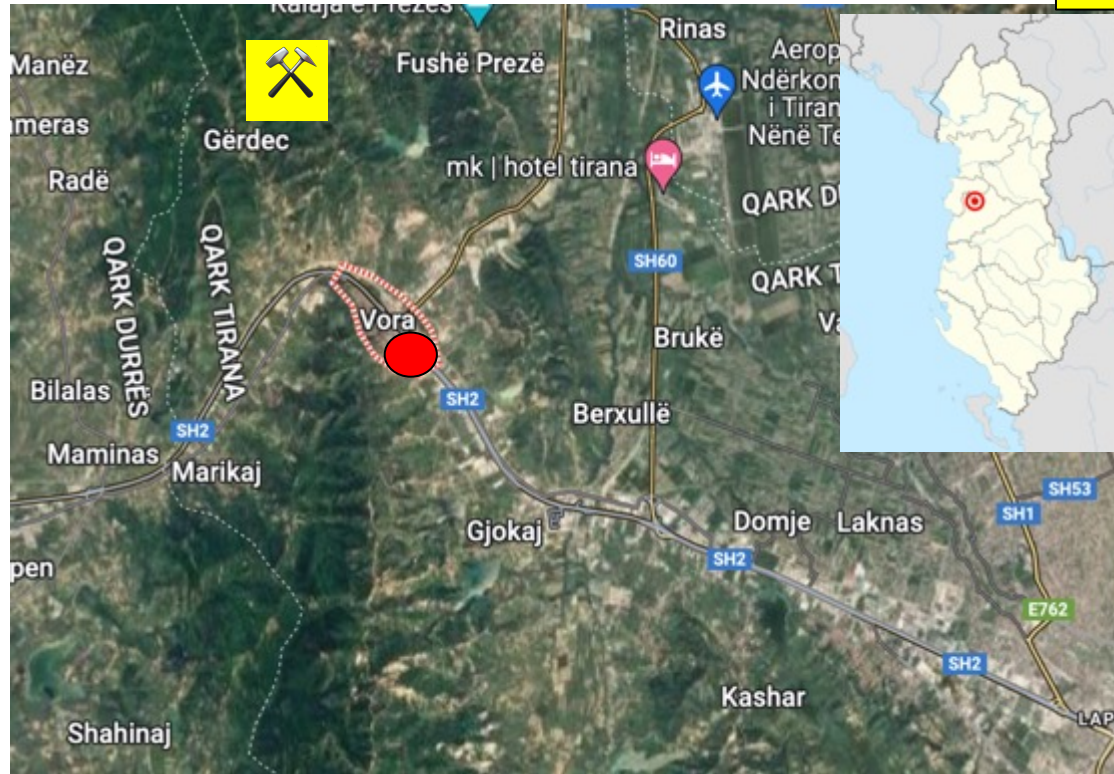
- At major transport high way in economic zone Tirana-Durres
- Business zone attractive as company location



There are no dependent communities. It is an environmental-technical issue.

Just Transition Readiness Score

Work in Progress



Social: inhabitants

1989		1989	x.xxx
2001		2001	0
2007		2007	0
2011	10.901	2011	0

Ecological

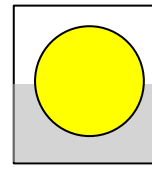
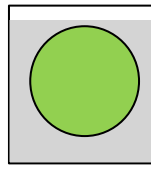
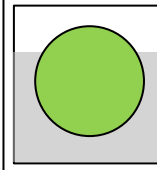
Mine closure: 2000 (90%)
Methan:
Water:
Renewable Energy:
Climate risks:

Economical

Inhabitants/km² : 308
Car: 18 km to Tirana, 0:30 h
Public: bus, train

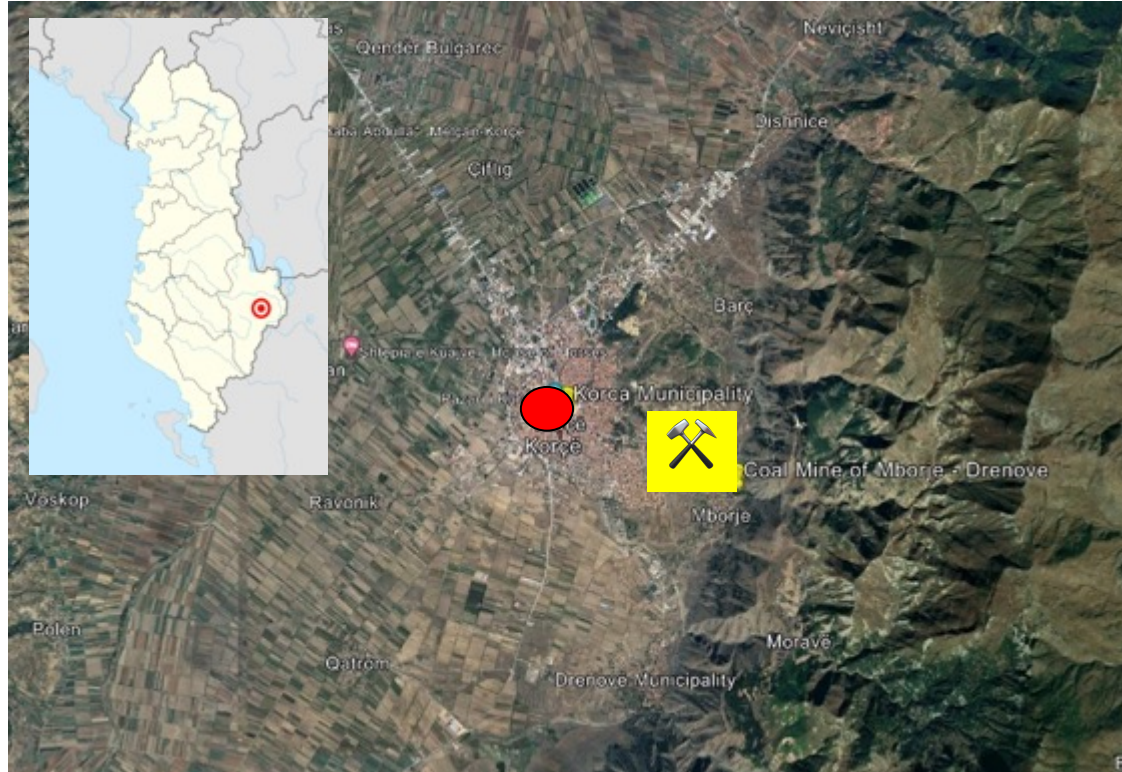
No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Gërdeci	1978	No.550, dated 26.08.1996	No.2978/2001	293.200	297.000
2	Manzë	1967	No.232, dated 15.05.1995	No.2978/2001	1.317.000	1.281.000

#3 Mining Community: Korca Coal Mine: Mborje-Drenovë



Just Transition Readiness Score

Work in Progress



Social: inhabitants

1989	63.623	1989	x.xxx
2001	55.130	2001	0
2007	86.176*	2007	0
2011	51.152*	2011	0

Transition Story:

- Historical important city
- Industrialization during socialism
- Loss of inhabitants after 1990
- Recently increase in population

Ecological

Mine closure: 2000 (90%)
Methan:
Water:
Renewable Energy:
Climate risks:

Activities & Projects:

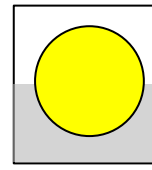
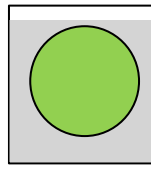
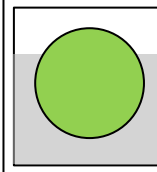
- University (7.000 students)
- Tourism
- Brewery

Economical

Inhabitants/km²:
Car: 163 km to Tirana, 2:52 h
Public: Bus, Train ?

No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Mborje-Drenovë	1930	No.349, dated 07.07.2000	No.2978/2001	1.100.000	3.698.000

#4 Mining Community: Pogradeci



Just Transition Readiness Score



Work in Progress

Social: inhabitants

1989	xx.xxx	1989	x.xxx
2001		2001	0
2007		2007	0
2011	20.848	2011	>0

Transition Story:

- Historical important city
- Mining town during socialism
- Two mines opened just in 1985 and 1987
- Loss of inhabitants after 1990
- Closure of train line

Ecological

Mine closure: 2000 (90%)
 Methan:
 Water: Waste water
 Waste: municipal challenges
 Renewable Energy:
 Climate risks:

Activities & Projects:

- UNESCO-Heritage Ohrid-Region.
- Tourism
- Wood industry
- Waste water treatment 2015
- National road connection 2022

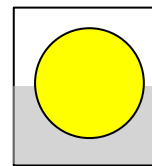
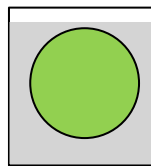
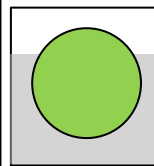
Economical

Car: 124 km to Tirana, 2:06 h

No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Alarup	1959	No.500, dated 13.08.1998	No.2978/2001	---	1.600.000
2	Petrushë	1968	No.233, dated 15.05.1995	No.2978/2001	909.300	2.885.500
3	Dardhas	1972	No.349, dated 07.07.2000	No.2978/2001	1.076.100	6.087.000
4	Vërdovë	1978	No.349, dated 07.07.2000	No.2978/2001	900.000	2.300.000
5	Potgozhan	1985	No.233, dated 15.05.1995	No.2978/2001	105.000	10.869.700
6	Homezhë	1986	No.233, dated 15.05.1995	No.2978/2001	1.377.951	8.174.500

#5 Mining Community: Tepelena Coal Mines: Memaliaj

Just Transition Readiness Score



Social: inhabitants

Work in Progress

1989		1989	x.xxx
2001		2001	0
2007		2007	0
2011	3.342	2011	0

Transition Story:

- Historical town @ road junction
- Historical mining (2016)
- During socialism centre of detention (camps)

Ecological

Mine closure: 2000 (90%)
 Methan:
 Water:
 Renewable Energy:
 Climate risks:

Activities & Projects:

- Mineral Water *Uji Tepelena*
- *Bënça* National Protection Area

Economical

Inhabitants/km² : 21
 Car: 202 km to Tirana, 2:34 h
 Public: **none**

No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Memaliaj 1&2	1916	No.268, dated 08.06.1999	No.2978/2001	10.126.170	8.200.000
2	Memaliaj 3	1980	No.29, dated 15.01.1996	No.2978/2001	---	6.500.000

#6 Mining Community: Tirana Coal Mines: Priska, Mëzez, Mushqeta & Krrabë

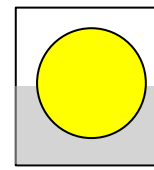
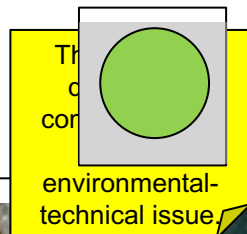
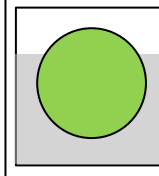


Transition Story:

- Wider metropolitan area of the capital Tirana
- Historical (1938) and socialistic mine openings (1968, 1980)
- Still predominantly rural

Activities & Projects:

- ...



Just Transition Readiness Score



Social: inhabitants

1979	189.000	1989	x.xxx
1989	238.057	2001	0
2001	343.078	2007	0
2011	418.495	2011	0

Agglomeration 895.042 (2008)

Ecological

Mine closure: 2000 (90%)
Methan:
Water:
Renewable Energy:
Climate risks:

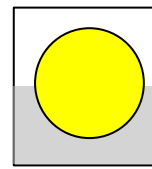
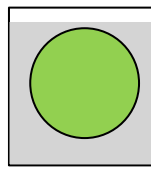
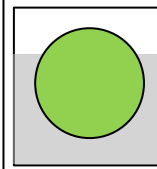
Economical

Inhabitants/km² : 805
Car: 10-30 km to Tirana, 0:40 h
Public: bus

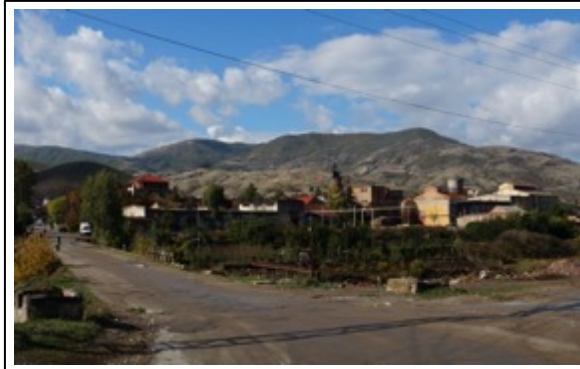
No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Mëzezi	1968	No.824, dated 04.12.1996	No.2978/2001	1.435.320	1.426.000
2	Mushqeta	1968	No.550, dated 26.08.1996	No.2978/2001	2.300.000	5.365.000
3	Krrabë	1938	No.101, dated 02.03.2001	No.2978/2001	1.658.270	8.100.000
4	Priska 2	1980	No.550, dated 26.08.1996	No.2978/2001	374.057	2.682.000
5	Priskë	1980	No.101, dated 02.03.2001	No.2978/2001	---	2.460.000

Work in Progress

#7 Mining Community: Maliq Coal Mines: Krosnisht, Selcë, Qnckë & Babien



Just Transition Readiness Score



Social: inhabitants

Work in Progress

1989	63.623	1989	X.XXX
2001		2001	0
2007		2007	0
2011	4.290	2011	0

Transition Story:

- Traditional agricultural town
- Agriculture (lake transformed into pastries) & mining industry during socialism
- Mine closure until (xxxx)
- Administrative reform 2015 bashkia Maliq

Ecological

Mine closure: **xxxx** (90%)
Methan:
Water:
Renewable Energy:
Climate risks:

Activities & Projects:

-

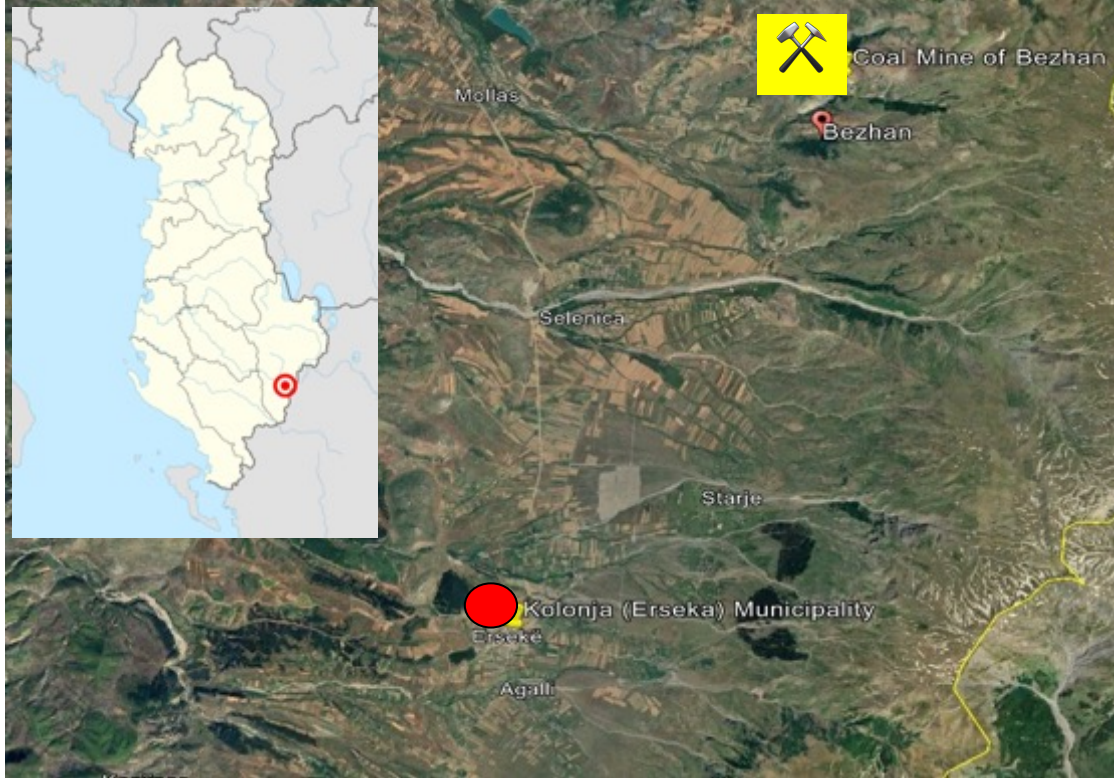
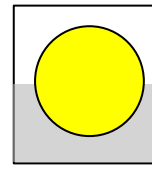
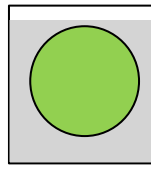
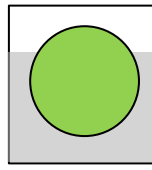
Economical

Inhabitants/km²: 64
Car: 151 km to Tirana, 2:36 h
Public: none

No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Selckë	1984	No.233, dated 15.05.1995	No.2978/2001	253.563	125.000
2	Babjen	1984	No.233, dated 15.05.1995	No.2978/2001	75.236	478.562
3	Krosnisht	1978	No.500, dated 13.08.1998	No.2978/2001	1.342.174	496.000
4	Qenckë	1978	No.349, dated 07.07.2000	No.2978/2001	23.000	69.750

#8 Mining Community: Kolonja Coal Mines: Bezhan

Just Transition Readiness Score



Work in Progress

Social: inhabitants

1989		1989	x.xxx
2001		2001	0
2007		2007	0
2011	3.746	2011	0

Transition Story:

- Rural mountain region
- Mine opening during socialism
- New border transition point with Greece (30 km)
- Strong emigration after 1990

Ecological

Mine closure: 2000 (90%)
Methan:
Water:
Renewable Energy:
Climate risks:

Activities & Projects:

- Forestry & Fishery
- Tourism potential for mountaineering

Economical

13 inhabitants/km²
Car: 204 km to Tirana, 3:35 h
Public: none

No.	Mine	First Exploitation Date	DoCM date on Mine Closing	AKBN Register Date	Production (tons)	Estimated Reserves (tons)
1	Bezhan	1972	No.233, dated 15.05.1995	No.2978/2001	1.068.519	7.714.000

UNECE

Just Transition for Coal Mining Regions Albania

PROPOSITIONS

UNECE Study 2023



An Outstanding Opportunity

Just Transition & Coal Exit Albania – Suggested Areas of Action

1. Create participatory process and governance for „Just Transition & Coal Exit in Albania“

- Win stakeholders on a national level and build a shared and methodological sound perspective on the „Just Transition & Coal Exit“
- Set up a robust multi-lever process and centrally coordinated governance via the identified areas of action
- Leverage EU driven institutional renewal: Invest in Governance, Policy Frameworks and Local Entrepreneurship for the Mining Sector, Former Mining Communities and related Education

2. Modernize into a Competitive Green Economy

- Carefully phase out fossil fuels (smart end of use strategy, CO2 risk mgt)
- Build Infrastructure (Grid, Regional Integration, Power Exchange) for a green, sustainable economical development of Albania
- Build markets for expanding usage of renewable energy and local resources

3. Reinvent local business models and foster smart specialization of communities

- Foster and accelerate adaptation via learning networks and cooperation on local, national and regional level
- Private sector and local initiative mobilization
- Private sector and local initiative support framework

Just Transition Albania: Just Transition Road Map (Workshop 11.12.)

Work in Progress

Vision:

Use Just Transition process to leverage EU accession modernization for building a green economy

AA1: Project Set Up

AA2: Government & Governance

AA3: Empower Local Activities

AA3: Green Economy Infrastructure

M1.1

M2.1

M3.1

M4.1

M1.2

M2.2

M3.2

M4.2

M1.3

M2.3

M3.3

M4.3

M1.4

M2.4

M3.4

M4.4

Program:

Component 1: Just transition process to complete mine closure and coordinate activities

Component 2: Reinvent smart specialization in the Communities in a decentral approach

Component 3: Enabling Sustainable Economic Growth by creating infrastructure and preconditions for green economy

Just Transition Albania: Just Transition Road Map (Workshop 11.12.)

Work in Progress

AA1: Project Set Up

M1.1 Identify an organization on national level in Albania who organizes a dialogue process „Just Transition“

- Stakeholder Contact Group on national level
- Stakeholder Contact Group on Westbalkan Six
- Series of 3 consecutive Workshops (Roadshow, Idea Generation, Project Selection) in concerned Mining Communities (see also M3.2)

AA2: Government & Governance

M2.2 Special Legislation to enhance decentral renewable energy generation

- Priority Clearing of Land issues in Former Mining Sites
- Declare special nature (package)
- protection status for this land in remote areas with tourism potential
- Declare favorite development status in urban areas.

AA3: Empower Local Activities

M3.2 Summer Academy of Regional Mining Universities

Students, Stakeholders and potential employers elaborate Scenarios for the concerned Mining Communities. Financing via International Educational Programs or through the West Balkan Six Initiative.

AA3: Green Economy Infrastructure

M4.4 Special Legislation to enhance decentral renewable energy generation

- Priority Clearing of Land issues in Former Mining Sites
- Declare special nature (package)
- protection status for this land in remote areas with tourism potential
- Declare favorite development status in urban areas.

Component 1: Just transition process to complete mine closure and coordinate activities

Component 2: Reinvent smart specialization in the Communities in a decentral approach

Component 3: Enabling Sustainable Economic Growth by creating infrastructure and preconditions for green economy

Just Transition Albania: Outlook & Possible Next Steps

Assessment of Just Transition Readiness of Albania

Opportunities and Options

Next possible Steps

UNECE JUST TRANSITION STUDY 2023



Mirupafshim



Faleminderit

