

From Coal Region to New Generation (H2) Industrial Hub

Transition Blueprint
(Maritsa East, Bulgaria, Balkans, SE Europe)

Just transition: Cases and learning on inclusion and ambition

Agora Energiewende

World Economic Forum

Tuesday, 6th July 2021

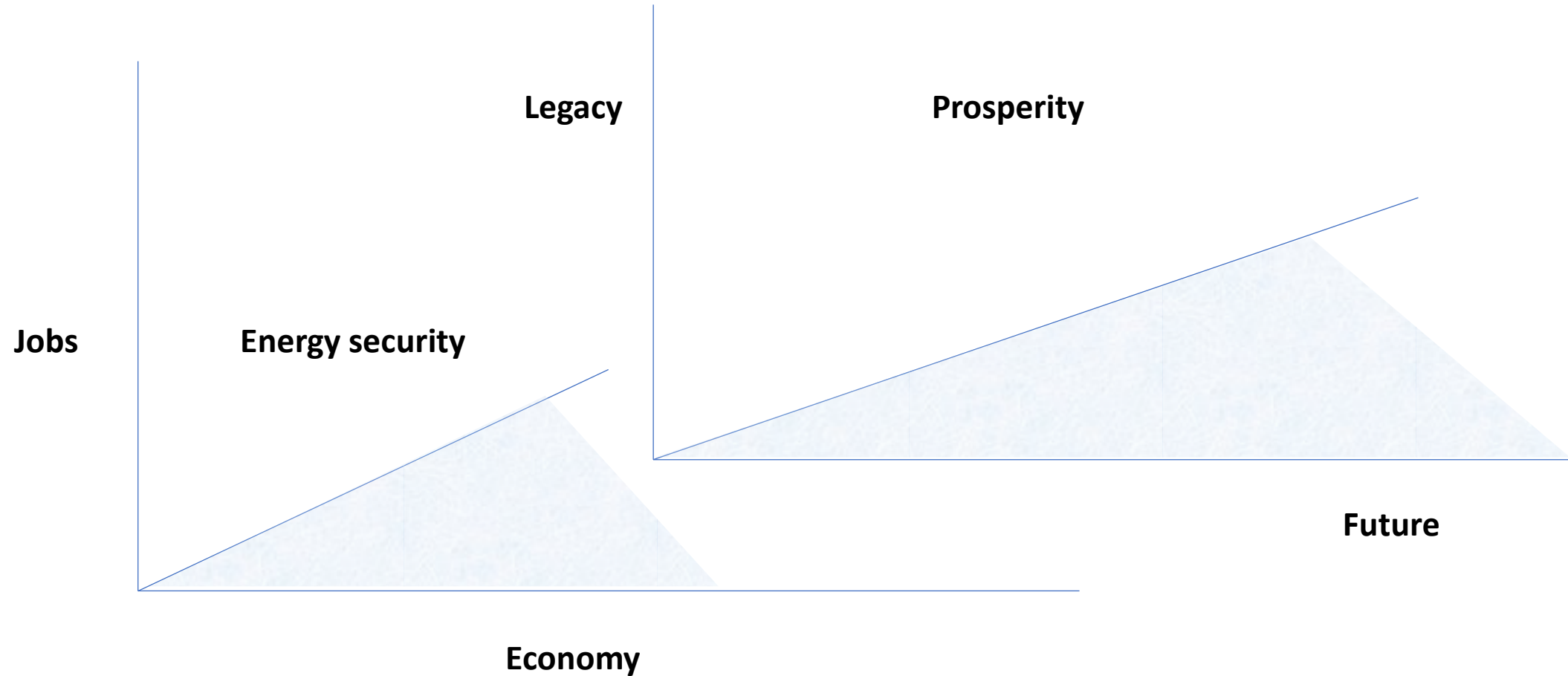
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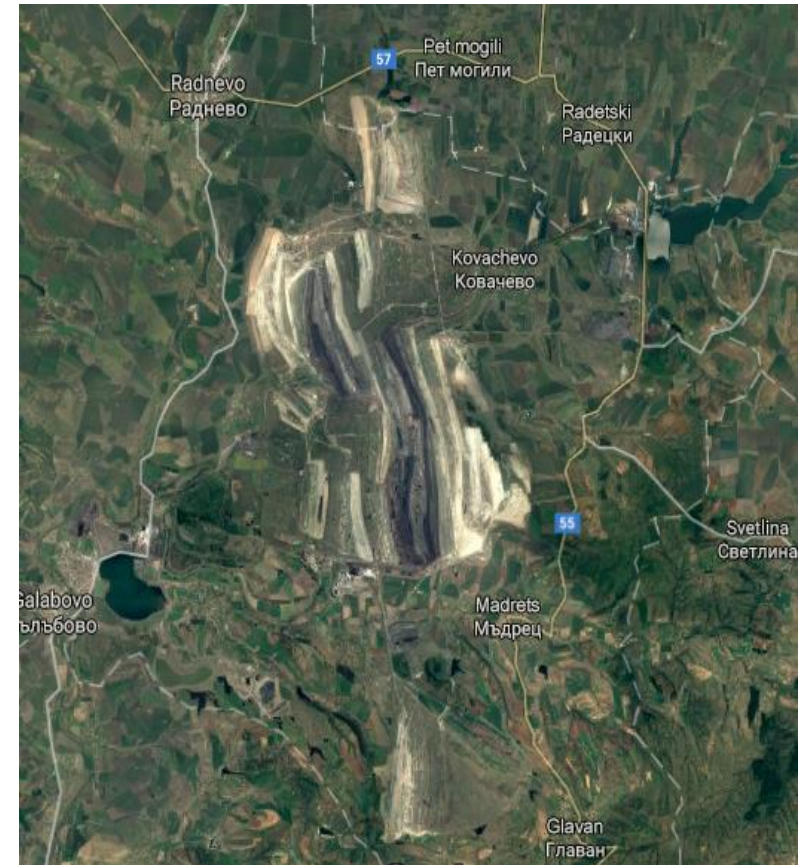
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2 x 3 dimensions of the coal regions transition



Energy centre and an exceptional national and international infrastructure crossroad on a vast state owned single plot of land

- 70 years energy industry history: development started in 1948
- 240 km² low quality open cast lignite, high content of sulphur
- State own land currently unsuitable for agriculture
- 12,000 highly qualified workforce
- The largest energy complex in the SEE
- 3 main lignite power plants, 3.3GW total generation capacity
- The heart of the Bulgarian national electricity grid
- Focal point of 3 new electricity Projects of Common Interest
- Crossroad of 3 EU transport corridors 4, 8 and 9
- Located near the main national gas ring
- Close proximity to the 5th largest city in Bulgaria
- Relatively close distance to Sofia, Burgas (port) and Istanbul



The case of Maritsa East, the largest coal power complex in South East Europe

Development of a new technologies economic zone as a competitive alternative to the current single technology specialisation of the largest energy generation complex in South East Europe aiming at retaining and improving employment, economic output and energy security.









Institute of Sustainable Transition and Development

1. Brings together key stakeholders
2. Includes academia, state, trade unions, business, state, local authorities
3. Consensus based, disagreements are natural
4. Knowledge based, knowledge led, multidisciplinary
5. Knowledge sharing, internally and externally
6. Inclusive transition – fairness and contribution
7. Sustainable growth – towards zero carbon with sound solutions
8. Regional development – lifting the regional economy
9. National driver – leads the steps of the transition on national level
10. International role – catalyses transborder collaboration

10 key inherited assets

1. Large area of consolidated land (240 km²/470km²)
2. Single owner and centralized control of the land status (state)
3. The strongest power grid in the Balkans
4. High competence engineering workforce
5. Energy and industrial tradition
6. Strong solar (probably wind) potential
7. Good transport infrastructure
8. Strategic geographic position
9. Proximity to key industrial centres
10. Agriculture region

Direction of travel

1. 10+ GW solar
2. 2+ GW wind
3. 500 + MW batteries
4. 2+ GW green hydrogen capacity
5. Steel, chemical, glass and other industries
6. Knowledge centre
7. EV, batteries, RES components, insulation + ZeroCO2 industry cluster
8. Sustainable agriculture
9. Carbon sinks
10. Zero to negative carbon built environment

Integrated development grid

Glass	Aluminium	EV roads	Infrastructure	Autonomous vehicles	Power grids	?
Steel	Hydrogen	Chemical	Rail	Mobility	Batteries production	Insulation materials
Cement	Digital	Data centres	Solar PV Wind	Invertors	Industry	Cables
Test centres	R&D	Vertical farming	Energy storage	Education	Lifelong learning	Urban development
Experimental fields	Greenhouses	Energy crops	Bioeconomy	Health	Recreation	Sports
Agriculture	Animals	No Till farming	Pharma	Lake	Museum	Spa centres

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