

Strengthening a sense of security for local coal-mining communities during Polish transition processes

KEYWORDS Human capital; Citizen participation; Coal-transition; Energy transition

TIMEFRAME Fellowship meetings with Associates took place between February and June 2020

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This Energy-SHIFTS Policy Fellowship report is part of a wider collection published in November 2020 describing dialogue between 21 energy policyworkers and [86] social scientists and humanities scholars, available via energy-shifts.eu.

Policy context

Agata Kuźmińska is the Founder and President of the Board of the Green Future Institute Foundation, a think-and-do tank/local NGO established in 2020. The goal of the organisation is to support the region of Wielkopolska Wschodnia and the local community in the post-carbon transformation of the region. Therefore, the Foundation works with stakeholders to work out the best model for the development of the region, using good practices and developing local potentials.

Wielkopolska Wschodnia (Eastern Greater Poland Region) is a lignite region located in the centre of Poland in the constituency of Wielkopolska Voivodeship (Greater Poland Voivodeship) with five districts: City of Konin, Konin Powiat, Turek Powiat, Koło Powiat and Słupca Powiat – see map. It has 230,000 inhabitants in total. The dynamic development of the region dates back to 1960-1980, when mining, energy and heavy industry related to the exploitation of brown coal developed in Konin, Turek and nearby. The City of Konin grew from a small town, which had a population of several thousand before WWII, into a city of well over 80,000 by the millenium.

Now development is slowing down. The energy sector in the region is private – ZE PAK S.A. owns the Pątnów, Adamów and Konin power plants, and lignite open casts are owned by KWB Konin. There were three power plants in the region: one in Adamów which closed in January 2018, one in Konin powered by biomass which mainly produces heat for City of Konin, and one in Pątnów which is the biggest and the most modern – it produces about 6% of Poland's energy demands. There are also four open casts: in Turek, Józwin IIb, Tomisławice, and Drzewce. Next year is the last year of concessions for Józwin IIb and Drzewce and there are some efforts to extend these further. There is also one cast still waiting for an environmental agreement to start.

Wielkopolska Wschodnia is likely to be the first region where coal will be phased out. The mining permits run for 5-6 more years and could at a maximum be extended up to 10. This makes energy transition a very urgent challenge. In 2019, ZE PAK had about 5,500 employees and is therefore the biggest employer in the region. With only a few other labour sectors, Wielkopolska Wschodnia is an economic monoculture. In case of a crisis, there is a danger transition could impact the entire local economy, e.g. through the loss of jobs, stability and opportunities. Statistics show that the eastern part of the Wielkopolska Voivodeship is relatively weak, with a high unemployment and low entrepreneurship rate. Many young people leave the region after school for university and work in other big cities like Poznań. Interestingly earnings and pensions are still relatively high – many people benefit from the coal industry with high salaries.

The coal industry outcompetes other branches: young employees want to earn as much as their parents or grandparents working in the energy sector in the past. Fear of uncertainty in the future is high. People are afraid of change, they are afraid about their future lives, work places, and the future of their children. People still remember 'good times' when the energy sector was public and strong, helping to develop the city. The energy sector has provided many of the buildings in the city – like cultural centres, cinemas, schools and clubs – leaving a historical legacy. People are grateful for those times and they wish it to last.

In 2018 local activists started to talk about a just transition and the future after coal. They were calling for preparations for the future. They also participated in the *Coal Regions in Transition Platform* in Brussels from the beginning and convinced local politicians to join the process. In 2019, the Regional Development Agency (RDA) in Konin started to work on a just transition process, taking local political leadership of this and inviting others to work together. The RDA and the city of Konin are building visions for a green future with green jobs, hydrogen solutions, eco-transportation and economic development. Challenges lie in social aspects, such as local identity and post-industrial heritage, and it is these that Agata was keen to discuss with researchers working across the Social Sciences and Humanities (SSH) in her Fellowship.

“ I hope my participation in the Energy-SHIFTS policy fellowship scheme will be very helpful for me, since I am working on the social dimensions of the energy transition. As a local actor contributing to a just energy transition, I also have a lot of local knowledge to share and hope that it can be inspiring for other participants and researchers. ”

Agata Kuźmińska

Policy challenges

Based on the policy context above, Agata prepared the following SSH-related questions to stimulate discussion with her matched Policy Associates. These were sent to Associates prior to conversations.

- How can we strengthen and ensure a sense of security for local communities in (pre/post) transition processes?
- How can we use the cultural heritage of coal mining to shape the new socio-economic future of the region?



Matched Policy Associates

Given the challenge addressed by Agata, four associates were chosen through an application process through the Energy-SHIFTS website portal, based on their interest in the 'Human Capital' thematic category, to add to the thematic discussion. They were:

Dimitra Koumparou - Postdoctoral Researcher, Laboratory of Technology and Policy of Energy and Environment, Hellenic Open University, Patras, Greece. Dimitra gave key insight in how studies on fighting energy poverty, and facilitating access to clean, affordable and secure energy social services can benefit the case study. Her background lies in Anthropology Urban/Rural Sociology, Sustainability, Climate Change and Energy Societies studies

Laura Norris - Research Associate, School of Geography and Planning, Cardiff, UK. Laura provided reflections on how local actors create new economic development pathways through the evolution of the region's industrial heritage. An Economic Geographer, she has a background in sustainable energy transitions, regional economic development and spatial inequalities. Laura's research focuses on how regional characteristics impact new technology trajectories, paying particular attention to less-developed regions.

Aneta Podkalicka - Lecturer, School of Media, Film and Journalism Monash University, Melbourne, Australia and upcoming Visiting Fellow, Department of Interdisciplinary Studies of Culture, NTNU: Norwegian University of Science and Technology, Trondheim, Norway. Aneta provided interesting comparative cases to international transition cases through her background from Australian and European energy and environmental studies, through her background in Media Studies.

Laura Patricia Oviedo Toral - PhD Researcher, Institute for Technology Assessment and Systems Analysis, Karlsruhe Institute of Technology, Germany. Laura is an expert in how societal concerns need time and cultural adaptation to their own particular background and frame conditions. Her work links to research across Development, Environmental Social Science, and Social Policy and she has a background in Environmental Engineering as well as Finance. In her PhD research, she is assessing how a solar energy system in rural Mixteca could be successful, focusing on societal drivers and constraints.

Discussion points and SSH insights

Agata met with all four of her matched Policy Associates for a joint call on 3 February 2020 to introduce her policy context and challenges to them; following this she prepared a short briefing document together with the Energy-SHIFTS team, which Associates then added written responses to. Agata then had a one-to-one virtual meeting with each of her Policy Associates. Towards the end of the Fellowship process she participated in an online workshop on 9 June 2020 with Associates from across the 'Human Capital' thematic category. In this section we share four key areas of discussion during these exchanges.

Strategies to phase out coal: where to start?

Agata and her Policy Associates first discussed the status of the energy transition in Poland. The 2030 EU climate and energy framework defines a target of 32% share for energy consumption coming from renewable energies sources¹. To fulfil this target, EU members have to implement support policies that allow the transition from the long-life carbon intensive system into a sustainable system. Despite the significant reduction of mining capacity, Poland remains by far the largest hard coal producer in Europe². For this reason, the country's economic growth depends on developments in the energy sector. The Polish government have formulated the country's Energy Strategy in order to achieve the goals of increasing the Polish population's standard of living and quality of life by means of further economic growth³ which requires balancing energy demands with energy sources. At the same time, Poland is obliged to comply with the EU climate protection commitments. A logical outcome is to transition to renewable energy sources that promise sustainable energy development. Agata and the Associates discussed several other locations for inspiration, such as the UK, Germany and even Australian counterparts.

Inspiration for a post-coal industry

During the discussions Agata and her Associates imagined how mining sites could be turned into new business models after phasing out coal. A good example of how to use mining heritage and develop tourism in post-mining regions in Lusatia, Germany was discussed. This region is carrying out the decisive and highly innovative transformation of a mining region into a region focused on tourism, recreation and promotion of its mining heritage. The transformation of Bad Schlemma, formerly a uranium mining site into a spa and the establishment of a regional event center in the brown coal district of Halle-Leipzig is generally regarded as another positive case⁴. People often take advantage of the cultural potential related to mining to make use of its cultural potential, mining sites are often reformed to museums. For example, the Mining Adventure Museum (Abenteuer Erzberg), welcomes thousands of visitors every year.

One of these discussions also highlighted similarities between the case study region and Wales. Wales has focused on ensuring a sense of security for local communities and utilised the industrial history to shape the new socio-economic future of the region. Wales was formerly a principal coal mining region in the EU, where decline was brought about rapidly following highly contested UK government decisions. This resulted in a range of regional development issues that continue to influence socio-economic activities. Much of Wales receives Convergence Funding to support regional development. In North Wales, a nuclear power plant is being decommissioned which provides new well paid jobs (the process takes decades).

Vulnerable groups and identities

The European Green Deal promises that Europe will be climate neutral by 2050. This new setting should be considered to reallocate investments and labour in various economic sectors. As it concerns the decarbonisation

1 European Commission. (2020, April 18). 2030 climate & energy framework. Retrieved from https://ec.europa.eu/clima/policies/strategies/2030_en

2 Euracoal - Poland. (2020, April 10). Retrieved from European Association for Coal and Lignite: <https://euracoal.eu/info/country-profiles/poland/>

3 J. Paska, M. S. (2009). Current status and perspectives of renewable energy sources in Poland. *Renewable and Sustainable Energy Reviews*, 13(1), 142-154. Retrieved from <https://doi.org/10.1016/j.rser.2007.06.013>

4 Harfst, J., & Wirth, P. (2011). Structural Change in Former Mining Regions: Problems, Potentials and Capacities in Multi-Level-Governance Systems. *Procedia Social and Behavioral Sciences Comparative Designs*, 14. [doi:10.1016/j.sbspro.2011.03.033](https://doi.org/10.1016/j.sbspro.2011.03.033)

process, it will impact the most vulnerable segments of society. For this reason, just transition mechanism should help local communities and generate the necessary investments to EU coal regions⁵.

Additionally it was discussed that coal mining has a long history of technological progress in Poland. Mining is not an isolated technological feature, but it bears high social potency and political prowess. Mining for example impacts the economic, social and political structure including urbanization, education, political movements (workers association) and social security system⁶. Substantial time and effort will have to be dedicated to gaining insight into how communities' past organisation of social life (energy, education, housing, health system) was in accordance to the mining activity historically and at present.

Rapid industrialization

In discussion with one of the Associates, several socio-cultural aspects stood out in the presented account of the specificity of the Wielkopolska Wschodnia and its recent efforts to put the region on the map in public discussions about a 'just green transition' at the regional, national and European levels. The history of the rapid industrial development of the region and its capital city Konin in the post-war Poland, accompanied by the significant growth of population drawn from across Poland, seems to lead to the population sharing a limited prior rooted or place-based identity. Also, there is a significant grassroots activity/youth activism for promoting the region and inter-sector collaboration to support just energy transition. The topography of the region with the presence of extensive post-open-cut mining areas and, architecturally, the dominance of 50-70-year old communist-style block of flats is a stark backdrop to this transition. Broader socio-economic contexts, whereby small-and middle-sized cities in Poland are reportedly being left behind compared to a few large Polish cities, and a design of a formal transition strategy led by the Regional Development Agency (RDA) for the EU's 'Green Deal'/'Just Transition Fund' scheme to be completed by the end of 2020 was seen as key elements to securing a sustainable future.

Translations to policy impacts

Agata is looking to now develop learnings from the Energy-SHIFTS Fellowship in two ways:

1. Translation of Fellowship resources into Polish

Agata is exploring translating the policy insight documents generated during the Fellowships (including this report and potentially the detailed responses from Associates) into Polish, in order to facilitate broader national outreach with these materials. Of particular use are the positive case study examples from other regions, as well as the variety of important socio-cultural issues raised during discussions. From her perspective of being embedded in the Wielkopolska Wschodnia region, she was able to gain valuable insights from other regions (not necessarily related to coal) that were or are undergoing transformation.

2. Development of work stream around cultural activities and care for local identity

The most valuable effect of the Fellowship programme for Agata has been establishing contact with researchers representing different disciplines. Thanks to this, it was possible to challenge existing points of view with other experiences. Cooperation within the programme has inspired her in the Green Future Institute Foundation's continuing activities in the region, and in particular she is now looking to develop new written resources with conclusions and applications in the fields of cultural activities and care for local identity.

⁵ European Commission. (2020, April 18). 2030 climate & energy framework. Retrieved from https://ec.europa.eu/clima/policies/strategies/2030_en

⁶ CEEweb for Biodiversity. (2017). How to financially support the transition of coal regions in Europe with a view to the SDGs. Retrieved from <http://www.ceeweb.org/wp-content/uploads/2015/03/Transition-of-coal-regions.pdf>

Reflections from Associates

Associates were asked to reflect on their virtual meeting with Agata, and what they learnt from them about on-the-ground energy policy challenges. Here we share some of their reflections, which demonstrate how interactions with a new 'live' policy challenge can help to deepen understandings of research applications.

*"It was interesting to note **the similarities in the challenges experienced by peripheral regions that have a strong history in fossil fuels as a source of growth**, with the dominant rhetoric of politicians focusing on the same metrics."*

*"'No one left behind' [in energy transitions] is a difficult endeavour and maybe **trust is key answer**"*

*"[A] main challenge is translating and **adapting literature solutions into a real life context**, mainly because societal concerns need time and cultural adaptation to [their] own particular background and frame conditions."*