Just transition for health protection

Why disease prevention and zero pollution need to be at the heart of energy investments
About

• Lead author and research: Vlatka Matkovic, HEAL
• Responsible editor: Genon K. Jensen, HEAL
• Editorial team: Anne Stauffer, Elke Zander, HEAL
• Design: JQ&ROS Visual Communications (jqrosvisual.eu)

HEAL would like to thank Katie Treadwell, WWF, for her input.

Published in December 2020.

Any reproduction in full or in parts must mention the title and credit.

This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CCBY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo)

Disclaimer:

HEAL gratefully acknowledges the financial support of the European Union (EU) and the European Climate Foundation for the production of this publication. The responsibility for the content lies with the authors and the views expressed in this publication do not necessarily reflect the views of the EU institutions and funders. The Executive Agency for Small and Medium-Sized Enterprises (EASME) and the funders are not responsible for any use that may be made of the information contained in this publication.

HEAL’s EU Transparency Register Number: 00723343929-96
1. Just Transition in the political spotlight

For over a century, Europe’s economy and prosperity has been based on the production and consumption of fossil fuels, with dire consequences to the climate and natural environment, and with a high health burden and costs from pollution.

But the landscape is changing, with the rise of green technologies in the market, and with the growing realisation that we need to urgently decarbonise our energy systems in order to tackle global warming. The 2015 landmark Paris Agreement includes a global commitment to limiting global warming to well below 2°C with efforts to limit it to 1.5°C. As a follow up to the Paris Agreement, considerations on the transition of carbon-intensive regions have intensified.

Some regions have more carbon-intensive activities than others, especially those with coal mining and power generation, or those with carbon-intensive industries. These regions need a higher need of support to shed their coal and carbon addiction.

Coal is still mined in 31 regions across 11 EU countries, with coal activities providing jobs to about 230,000 people. In 2019, around 18% of the European power generation mix was based on coal, with Germany, Poland and Bulgaria producing the most coal energy.

HEAL believes a Just Transition must include the health perspective, in order to shift the economy towards a climate-neutral and health promoting future, while leaving no one behind. It must also provide targeted support to the most affected regions to alleviate the socio-economic impact of the transition but not lose sight of the health side of investments.

▶ Map of Just Transition Fund territorial eligibility – Preliminary Commission analysis, European Semester 2020, Annex D
The EU’s Just Transition framework

As part of the EU Green Deal, the European Commission has established a Just Transition Mechanism (JTM), to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind. The aim is to mobilise at least €100 billion over the period 2021-2027 for carbon-intensive industries through grants and loans as part of 3 pillars: Just Transition Fund, InvestEU Just Transition Scheme, and European Investment Bank Loans.

The Just Transition Fund foresees the granting of public money to EU member states, which in turn provide it to carbon-intensive regions. The details of the Fund are still being finalised but so far there have been disappointing and counterproductive developments. EU member states have reduced the fund to €17.5 billion (from the initial proposal of €40 billion), and the European Parliament has failed to exclude financing for fossil gas, and to tie the awarding of funds to obligatory coal phase out plans.

The need to consider the health impacts and cost of fossil fuels in Just Transition

The production and burning of fossil fuels (oil, coal, gas) results in the release of hazardous air pollution and drives climate change with disastrous consequences all over the world. Air pollution and climate change are interlinked and have manyfold impacts on human health, in the short and long term.

In the long run, climate change is considered the greatest threat to health of the 21st century. Climate change threatens the essentials of good health, and is expected to cost between USD 2-4 billion/year by 2030 in direct health damage. Health impacts from climate change include the increased frequency and severity of extreme weather events (heatwaves also with increased air pollution, floods, droughts), an increase in vector-borne disease, or the introduction of invasive alien plants and a prolonged allergy season.

Globally, air pollution is currently the top environmental threat to people’s health, leading to around 7 million premature deaths each year, according to the World Health Organization.
Health costs of pollution absent in Just Transition considerations

Europe’s reliance on coal for power generation has come with high health and environmental costs, the so-called externalities. These are costs relating to pollution, which have to be paid by individuals and society as a whole, not by the polluters, the coal plant operators or the fossil fuel industry.

HEAL and others estimated that the use of coal power adds a financial burden to the European population of up to 63.2 billion EUR annually\(^1\). Subsequent studies have come to similar conclusions, showcasing especially that the health impacts from pollution are not limited to the coal-intensive regions but impacts people in areas across the continent. Air pollution, from fossil fuelled power plants and other sources, knows no borders, it is transboundary. For example, air pollution from the coal power plants in the Western Balkan region mainly impact people in the European Union, which in turn bears the majority of the resulting health costs amounting to EUR 3.1-5.8 billion.

It is important to note that health impact analyses are an underestimate, because they do not include all health conditions related to exposure to air pollution emitted by coal power plants.

**Health damage INCLUDED in analyses of fossil fuels pollution**

- Premature deaths
- Respiratory hospital admissions
- Medication use
- New cases of chronic bronchitis and lower respiratory problems
- Cardiovascular hospital admissions
- Days of restricted activity including lost working days

**Health damage LEFT OUT from analyses of fossil fuels pollution**

- Accidents and illnesses of workers
- Days of restricted activity including lost working days
- Coal mining and waste disposal
- Hindered cognitive development in children
- Impaired lung function
- Lung cancer
- Strokes
- Chronic obstructive pulmonary disease (COPD)
- Preterm delivery
- Low birth weight
- Mercury pollution
- Indirect health costs
But despite the numerous and heavy health impacts of decades of coal dependency, health considerations are completely absent in Just Transition debates.

This includes also the health damage to coal miners accidents at work or illnesses such as lung cancer and workers in coal power generation or carbon intensive industries is not systematically included either.

Tackling pollution has gained in prominence for the EU policy-makers’ agenda, as part of a Green Deal commitment to advance on zero pollution. This includes the launch of an action plan on zero pollution in air, water and soil in 2021.

HEAL considers that the zero pollution ambition and commitment needs to be linked to Just Transition deliberations, with the following principles:

**ZERO HARM**
from pollution and protection of those most vulnerable

**ZERO MONEY**
for pollution, ending direct or indirect public financing of polluting processes and adopting a comprehensive climate and environmental conditionality for budgetary decisions

**ZERO DELAY**
in stopping pollution, a short timeline to ban and phase-out toxic substances and transform polluting economies and ways of life and ensure projects deliver on climate neutral EU, good air quality and 100% non toxic material cycles
Two crucial players:
achieving a healthy and just transition in Poland and Germany

### Poland: No coal phase out date set

Poland generates about 2/3 of all energy from coal and the country is also home to Europe’s largest and most polluting coal power plant which causes the greatest health damage across Europe - Belchatow.

- **2,596** premature deaths
- **1,106** chronic bronchitis (adults only)
- **2,093** hospital admissions
- **776,559** lost working days
- **42,402** asthma attacks in children
- **7.5 billion €** annual health costs from Polish coal power plants

Polish coal power plants are among the top national polluters in the EU. In 2016 alone, hard coal and lignite plants led to 2,596 premature deaths, 42,402 days with asthma symptoms in children and estimated health costs of 7.5 billion EUR.

The health cost of coal plants accumulate, and chronic exposure can worsen health impacts. Thus, coal power plants have high health costs over their lifetime running and through the life cycle, which are currently not considered. A focus on the mere cost of energy transition in the country (estimates range from 140 to 900 billion EUR) is one-sided. A more comprehensive cost and benefit analysis is urgently needed.

Although the Polish government in its latest climate and energy strategy has foreseen a decline of the share of coal in the energy system, decision-makers did not include a clear phase out date. In line with the Paris Agreement, this would have to be 2030. In addition, it has become clear that companies and the government are eager to take the fossil gas detour: recently, for the first time, the plan to build a new coal block, in Ostrolenka, was changed to gas instead.

In a country as coal reliant as Poland, the magnitude of a climate and health friendly energy transition will be significant and much bigger than in other countries, which is also reflected in the amount the country is set to receive from the Just Transition Fund, 3.5 billion EUR. But it also means that the transition has to be advanced without any delay.
Coal power generation in the EU’s second coal addict country, Germany, leads to the second highest health costs from coal power in the EU.

Germany's 2038 coal phase out date is too slow and unambitious, it is not in line with the Paris Agreement, and it would lead to continuous high health impacts given that a significant share of lignite coal plants would be allowed to continue operating after 2030.

According to an estimate, health costs through coal power generation until the phase out date would lead to 26,000 premature deaths between 2022 and 2038 and social costs related to the associated healthcare, reduced economic productivity and welfare losses amount to an estimated present value of €73billion (This is if the government would not require significant investments into pollution control technologies as foreseen by the latest EU Best Available Technology Requirements (BAT).

As Germany is set to receive the second biggest amount of just transition funds, 2.3 billion EUR, it should invest this money into a healthy energy future for the former coal regions, and not prolonging the fossil fuel addiction through a switch to gas combustion.

Under the government’s coal phase out trajectory, significant lignite coal blocks would still be running from 2030 - 2038 in the coal regions Lusatia and Rhineland, which would lead to significant health harm. This includes blocks of Niederaussem and Neurath, which have already caused significant harm.

There is significant lignite capacity in Germany that would run until 2038. It is therefore crucial that all coal plants install the latest filter technology available, as a minimum step to reduce health harm.

According to a CAN-Europe analysis, two thirds of EU Just Transition Funding is set to go to countries which have not yet committed to a coal phase out by 2030.

No plans for coal transition: 7 countries do not plan to phase-out coal by 2030: Bulgaria, Croatia, Czechia, Germany, Poland, Romania & Slovenia. Total installed coal capacity across all 7 countries falls by just 42% in the next decade. 52GW of coal is expected to be operational after 2030, nearly all (~90%) of which is in Czechia, Germany and Poland.

Plans to swap coal for gas transition: 4 countries plan to phase-out coal by 2030 but with a significant increase in fossil gas: Greece, Hungary, Ireland & Italy.

Fossil-free transition: 7 countries are on track to phase-out coal by 2030 without a significant increase in fossil gas: Denmark, Finland, France, the Netherlands, Portugal, Slovakia & Spain.
5. Recommendations for a healthy and just energy transition

To EU and national policy-makers

- **Conduct a health impact assessment for all Just Transition deliberations and decisions.** This means that every project is assessed for its potential effects, damages and benefits for the health of a population. Thus, financing under Just Transition should have clear health promoting effects and improve people’s health, both in the country concerned and beyond.

- **Take into account all health impacts, costs and benefits of Just Transition financing.** This will make it possible to first identify and then prioritise those measures that will provide for the greatest health benefit, for workers in Just Transition and the wider population. Benefits of such a framework include: reduced energy poverty, improved quality of life and living conditions, reduced exposure to health harming indoor and outdoor air pollution, less exposure to hazardous chemicals and a slowing of climate change.

- **Link any release of Just Transition Funds to a commitment to set a date for phasing out coal power generation by 2030.**

- **Set countries, economies and people on a truly healthy and sustainable path, by applying a zero pollution conditionality.** This means excluding investments that do not move us from a polluting to a healthy, sustainable and green economy, nor investments in fossil gas.

- **Do not provide support for fossil fuel gas financing.** Fossil fuel gas is not a bridge technology, and the burning of gas also leads to air pollution and health impacts. Investments in gas will lock in air pollution for another 50 years to come, when the focus should be on reaching zero pollution as fast as possible.

To the health sector

Doctors, nurses, patients and health groups have a unique role to play and can add a long neglected perspective to the debate about Just Transition and Europe’s climate and energy future.

- **Increase health and medical organisational and individual capacity to engage** in debates on Just Transition, climate and energy, as well as recovery, through communication and providing evidence, e.g. in public consultations.

- **Highlight the evidence and materials of the World Health Organization (WHO),** including the Manifesto for a Healthy Recovery from COVID-19.

- **Highlight the true costs of the production and use of fossil fuels,** especially in energy generation, in economic and public health deliberations and decisions, and work towards increasing the public understanding of how public health will benefit from ending investments into all fossil fuels.

- **As a health stakeholder, participate and provide input to public consultations related to Just Transition, climate and energy policies and plans, as well as recovery measures,** to support those measures and financing that will boost health and lead Europe to zero pollution.
Sources

1. In focus: Towards a just and clean energy transition | European Commission (europa.eu)
3. https://www.who.int/news-room/air-pollution#:~:text=WHO%20estimates%20that%20around%207,deaths%20in%20the%20same%20period
6. Download Database (xlsx) (beyond-coal.eu)
7. https://beyond-coal.eu/2020/06/03/78905/
8. Germany-Power-Plant-health-impacts.pdf (energyandcleanair.org)
9. Coal: CAN report on Just Transition funding
The Health and Environment Alliance (HEAL) is the leading not-for-profit organisation addressing how the environment affects human health in the European Union (EU) and beyond. HEAL works to shape laws and policies that promote planetary and human health and protect those most affected by pollution, and raise awareness on the benefits of environmental action for health.

HEAL’s over 90 member organisations include international, European, national and local groups of health professionals, not-for-profit health insurers, patients, citizens, women, youth, and environmental experts representing over 200 million people across the 53 countries of the WHO European Region.

As an alliance, HEAL brings independent and expert evidence from the health community to EU and global decision-making processes to inspire disease prevention and to promote a toxic-free, low-carbon, fair and healthy future.

HEAL’s EU Transparency Register Number: 00723343929-96
Contact: info@env-health.org