Despite the European Union's declared successes in the green transition, its energy systems are powered by coal and transport depends on gasoline and diesel. At the same time, public health is worsening and, all together, raising the price of climate change. The EU needs a lifestyle change that must be led by European policies, not the other way around. Such new European policies, apart from the transition itself, must ensure strong social protection as well as workers' rights. Worldwide, nine in 10 people breathe unhealthy air. But clean air is not a luxury but a basic human right. We need to address the current public health crisis by abandoning polluting fossil fuels and transitioning to renewable energy and clean transport.

More than 430,000 people die annually from the inhalation of polluted air in the European Union. Exposure to polluted air leads to serious health consequences, including respiratory infections, heart disease, heart attack, bronchitis, and cancer. Air pollution also has a negative impact on nature and biodiversity, as it causes soil acidity and eutrophication. It also damages agricultural crops, vegetation and historic buildings.

The problem of poor air quality in so many European Union countries is so serious that the European Commission has taken legal action against as many as 16 members due to too much harmful particulates in the air. In 2018, the Commission sent six members to the European Court of Justice: Hungary, Italy and Romania for its continuously high airborne particulate matter (PM10), as well as France, Germany and the United Kingdom for illicit nitrogen oxides (Nox).

Coal combustion is the primary cause of worldwide air pollution: air pollution this way kills 23,300 people in the EU, or 13,200 in the US. In China alone, 670,000 people die annually from the disease caused by the effects of coal combustion.

Coal power plants make a significant contribution to the formation of PM2.5 particles in the atmosphere, as they release sulfur dioxide (SO_2) and nitrous oxides (NOx), which react with ammonia to form PM2.5 particles. Coal power plants were responsible for 26 % of all SO_2 and 8% of all NOx emissions in Europe.

The EU has more than 250 coal-fired power plants, which generate more than a fifth of energy in the EU. The member states of the Union most dependent on coal are Poland, Germany, Bulgaria, the Czech Republic and Romania. Germany and Poland alone account for 51% of the total energy generated from coal, and are responsible for 54% of coal combustion emissions.

As many as 16 coal-fired power plants in the Western Balkans pollute as many as 250

thermal power plants from the EU, partly because they have switched off anti-pollution filters (eg in Kostolac B in Serbia and in Tuzla in BiH). Models show that more than half of premature deaths in 2016 in the EU were caused by emissions from Western Balkan power plants.

Poland is probably the dirtiest country in the EU when it comes to smog. As many as 33 of the 50 dirtiest EU cities are in this country. And before that, Poland does not even discuss abandoning coal. But the government has at least announced the allocation of € 25 billion to fight air pollution in the coming years.

Polish coal and German Dieselgate

The Polish problem becomes even more complex when we consider the social and economic cost of abandoning coal in this country. Given that its economy is heavily dependent on coal, it is necessary to put in place measures of economic and social protection for workers. The complexity of these problems means that no country can do it alone, but that the EU must take a stronger lead. While we are waiting for this, the Polish Government has announced that it will allocate € 25 billion in the coming years for the country's fight against air pollution.

The transport sector is growing faster than other sources of greenhouse gas emissions, and the number of cars globally is expected to triple by 2050. In some areas, this sector is responsible for as much as 70% of particulate emissions, while at European level this figure is 30%.

Road transport emissions have been increasing for the last twenty years, due to the increase in traffic volume and the increase in the number of diesel vehicles. The German Dieselgate scandal revealed Volkswagen's disregard for restrictions on diesel emissions in the transport sector, and such behavior was made possible by poor and insufficiently stringent legislation. European legislation on diesel propulsion is markedly flawed, compared to legislation on motor vehicle emissions.

The car industry's claims that Dieselgate is now past and that the new Euro 6 model meets all emissions standards are unfortunately not true. Many new models are not clean, especially in realistic driving conditions.

Unfortunately, the picture is no better with rail: its share in total freight transport has been declining since 2011, while pollution caused by road transport is increasing. Rail has specific costs and high logistical background requirements that do not exist in road transport, which is why many companies provide road transport services.

The EU needs green infrastructure and a strong public sector

What do we do? The energy sector requires huge investments in renewable energy sources such as sun and wind, but also leaving coal as an energy source throughout Europe by 2030. Local communities also play a major role in their networking projects, with a view to improving the supply of energy from renewable sources.

A recent study found that as many as half of EU citizens could produce their own electricity by 2050, including schools and hospitals. This could satisfy as much as 45% of local communities' demand from their own sources. But the model in which the local community owns the means of generating electricity has not yet come to fruition in southern, central and eastern Europe, largely due to a lack of legislation, despite strong interest from the community and local authorities for autonomous electricity production.

Remunicipalisation in the energy sector can bring energy resource management under common control and support the energy transition to renewables. A good example of this practice can be found in Germany, France and the United Kingdom. But much more needs to be done, e.g. the total share of renewable energy in the EU for end-user in 2017 was only 17%. The global value chain needs to be shortened in both freight and public transport. The City of Copenhagen is a good example of the development of sustainable urban transport. The daily influx of commuters into the city has caused new concerns among locals about the externalities of such travel (safety, noise, emissions). New measures have been introduced to mitigate the effects of daily commuting and to increase safety. Cycling is recognized as an affordable and most accessible form of transportation.

Freight transport must be shifted to electric railways, in a cross-border context, in order to realize flexible and cross-border rail transport across the EU. Such a network could be funded by European funds, which could be diverted to rail by suspending fossil fuel subsidies, for the construction of new pipelines and LNG terminals. The share of goods transport also needs to be reduced by favoring local production and consumption.

Transitioning the energy and transport sectors will be very costly, and will only be possible if the individual Member States, and the EU as a whole, completely reverse the austerity trend and increase emissions to preserve the fundamental human right: clean air.

Source: The climate and energy transition of the Balkans