



## **Weekly Briefing**

**Macedonia Social briefing:**  
**Air Pollution Crisis in Macedonia: Sources, Public Reaction**  
**and Policy Responses**  
**Anastas Vangeli**

### **China-CEE Institute**

Kiadó: Kína-KKE Intézet Nonprofit Kft.

Szerkesztésért felelős személy: Chen Xin

Kiadásért felelős személy: Huang Ping

 1052 Budapest Petőfi Sándor utca 11.

 +36 1 5858 690

 [office@china-cee.eu](mailto:office@china-cee.eu)

 [china-cee.eu](http://china-cee.eu)

## **Context**

Recently, Macedonia has topped yet another negative list: it is the most polluted country in Europe. The city of Tetovo, located in Northwestern Macedonia not far from Skopje, having rapidly grown from merely 20.000 to 100.000 is now Europe's most polluted city. Skopje, Macedonia's capital is second.<sup>1</sup> The situation is not much better in other larger urban areas in the country, such as Bitola and Struga. Pollution is now believed to be one of the leading causes of death, and to be a major public health hazard, risk factor – and growingly, a major social, political and economic challenge. The pollution in the country has a number of sources and manifestations, and the concentration of both PM2.5 and PM10 particles are high, sometimes few times higher than what is concerned a limit by international standards. After long period of neglect, in the last few years the question of the air quality has become a hot topic in the public debate. Air pollution becomes a contentious topic, and a reason for a growing number of civic mobilizations – in the first place, on social media such as Facebook and Twitter, but also on the grassroots – and more and more ecological civic movements are being formed. Pollution is now addressed by key political actors, but so far very little is being done to curtail it, and the results are not visible.

## **Sources of pollution**

According to a study done by the Institute of Public Health of Macedonia, the largest sources of pollution are the thermal energy production plants that use coal and fossil fuels, industrial production, toxic fumes from transportation vehicles, and in particular the heating of households and offices in winter. This suggests that the air pollution in the country is a direct consequence of its socio-economic conditions, and the inadequate regulatory and policy framework to address key issues.

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<sup>1</sup> [https://www.numbeo.com/pollution/region\\_rankings.jsp?title=2016&region=150](https://www.numbeo.com/pollution/region_rankings.jsp?title=2016&region=150)

When it comes to the pollution generated by energy and industrial production, the situation on the ground shows that the air quality has rapidly worsened due to a combination of (to a lesser extent) inadequate regulation, and (to a greater extent) lack of or selective implementation with letting big producers freely break the rules. One reason for this is corruption (often for large producers it is easier to influence, co-opt or outright bribe the officials – both those who make and those who implement the laws). Another reason is the fact that in such a poor and underdeveloped country like Macedonia where there is a desperate need for growth, shutting some of the largest producers would mean accepting losses. An additional problem is caused by the fact that many of the industrial capacities are in urban, populated areas or areas that may have not always been urban, but urbanized in the meantime – which can be ascribed to inadequate urban planning. Additionally, construction works in urban areas are often carried out without the necessary supervision and they do not always obey regulations. The construction boom in Skopje under VMRO-DPMNE has led to massive destruction of the green surfaces in and surrounding the city, a lot of it has been done in the already most populated areas of the city, while the lack of regulations has enabled the usage of toxic materials and led to inadequate efforts to reduce the impact on the air quality.

On the other hand, household and office heating are most significant contributors in the emission of PM10 particles. This is certainly rooted into the economic backwardness and the low living conditions of the majority of the citizens of Macedonia. Poverty, low income but also at the same time bad policymaking and excluding the poor people from the urban planning process, meaning not providing or helping people get adequate housing and central heating has forced scores of poor people to seek pragmatic – but at the same time not necessarily adequate heating solutions in winter. As a result, a high number of poor or otherwise below average individuals had to resort to finding primitive, outdated solutions to heat their houses. Many people – even in urban areas, and even in the city of Skopje burn woods for heating (a related problem

is the deforestation in the vicinity of relatively big human settlements), but often they also burn rubber, plastic and other toxic materials that create all sorts of toxins that enter the atmosphere. In this sense, while the air pollution caused by heating using outdated and simply toxic methods is a problem for itself, it is also a consequence of the low living standards and huge inequalities.

There is also the issue with the improper management waste landfills causing waves of air pollution that are visible, smelly and highly toxic. Recently, the mayor of Skopje, Petre Shilegov of the Social Democratic Alliance for Macedonia (SDSM) claimed that in the previous term, the city administration of VMRO-DPMNE made contracts which allowed the burning of radioactive waste in a landfill near Skopje. This has caused great panic and is an issue that soon needs to be resolved. In Tetovo, the most polluted city in Europe, an unregulated landfill has bothered the residents of the city for years now, until finally it was removed from the location during the campaign in preparation for the local elections held in October 2017. A similar problem could be seen in Struga – during the summer, an illegal landfill was often set on fire, the effect being that the city was engulfed in toxic fumes.

Finally, Macedonian cities are also victims of their geography. Both Tetovo and Skopje are geographically located in basins surrounded by mountains, which entraps the pollution – there is insufficient aerial circulation that can otherwise help in diluting the toxic air. However, rather than an excuse, this perhaps should serve as an additional motive for solutions for the pollution issue to be found.

### **Public reaction and policy responses**

For many years after the change of regimes, Macedonia's public as well as the elites displayed little to no consideration for any environmental issues (which has also enabled the deterioration of the air quality to such alarming level). One particular exception had been the city of Veles, where a toxic steel mill was built in the days of former Yugoslavia, and for many years, a strong

grassroots political mobilization – but also elevating the issue to the political arena – has helped in shutting down the mill.

The second generation of environmental movements has been spawned only in recent years, with the terrifying deterioration of the air quality in the major Macedonian cities. Social networks have played an important role in the connection of different individuals and group, and in disseminating their message. Technology has also helped in terms of getting exact data on the air quality levels in real time. As a result, almost in all urban areas of Macedonia there have been public awareness campaigns and grassroots protests. This trend is increasing, and over time anti-pollution activism has become one of the major trends in the society, in particularly among the middle classes. Pollution has become a prominent topic in the media as well, while a number of civil society organizations have also gotten involved in the debate.

A particular moment for the environmental movement was the summer 2017, when a number of municipalities in southeast Macedonia (Strumica, Valandovo, Gevgelija, Novo Selo, Bogdanci, Dojran and so on), the region with most developed agriculture, had seen grassroots mobilization against the construction of open gold mines on environmental grounds (while air pollution was an important issue, with this issue, notably, the biggest challenge was water and soil pollution). Arguing that in Greece similar projects led to catastrophic environmental outcomes, the activists asked for the construction of the gold mines to stop. After a passionate publicity campaign, they managed to independently secure enough support so referendums were organized – and the majority of the referendums succeeded, even though they were held in highly contentious atmosphere. Even when the referendums failed due to low turnout, the population of these municipalities had voted against the construction of the gold mines.

The mobilizations in reaction to the deteriorating air quality in the urban areas, and the referendums against the so called “mines of death” had resulted with strong pressures on policymakers, but also in politicizing environmental

policy. In the run up to the parliamentary elections in 2016, already the large political parties started addressing environmental issues in their campaigns. This trend increased by the local elections in 2017. In particular, the incoming ruling party, SDSM had made strong commitments to the environmental movements around the country, including the people in Skopje, Tetovo, Bitola and Struga as most affected by air pollution, but SDSM also made commitments to the activists who protested the construction of gold mines in southeast Macedonia.

So far, however, little tangible measures have been done to reverse the trend. Raising the prices of diesel petrol and the car parking fees in Skopje were said to be environmental measures, however, this is taken by the public with a grain of salt. Reports from southeast Macedonia say that despite the outcomes of the referendums and the commitments made by SDSM, the “mines of death” are well under construction. Should pollution not be tackled immediately and in a resolute way, the environmental movement may grow ever more dissatisfied, and perhaps cause greater political shake up in the country.