

CHALLENGES FACING MACEDONIA¹

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The former Yugoslav Republic of Macedonia faces a number of environmental challenges within its urban environments. These include illegal land use, inadequate water supply and waste management, and growing pressures caused by transport. Many of these are the result of uncontrolled urbanisation and development in the wake of mass immigration of the rural poor to cities. Poorly developed spatial (urban) plans, weak implementation of legislative frameworks, and under-developed capacities and various institutional problems are blamed.

Macedonian municipalities bear the hallmarks of unsound urban planning, especially in the realm of urban transport, where in cities like Skopje, Gostivar and Tetovo, pedestrian zones are often not connected, bicycle paths are virtually non-existent and private automobiles are preferred. The quantity and quality of public transport services have declined, partly due to a lack of resources, partly because municipalities and the public don't see the benefits of this mode of transport or the externalities of private automobile usage. Compounding the problem is illegal land use in municipalities such as Centar, Kisela Voda, Aerodrom and the towns of Debar, Gostivar, Struga and Tetovo. Adequate water supply is absent in Prilep, Sveti Nikole and Kumanovo, while cities' wastewater is left untreated in all urban areas barring Ohrid. The only other wastewater treatment plants in the country (in Prespa and Dojran) do not function.



With respect to citizen mobility and the related impacts, Skopje, as with many other Macedonian cities, faces a steady increase in automobile use (in absolute and per capita terms) with implications for material consumption and consequent pollution. The age and poor quality of cars, lack of strong emission standards, and continued use of leaded petrol contribute to the deterioration of air quality, especially in urban areas, while congestion and mobility/access are growing problems in Skopje, Bitola, Veles and Ohrid. Public transport in Skopje will receive a boost in 2008, however, when 12 public busses will be converted to compressed natural gas with the support of the EC's Civitas Plus programme. At the same time the city will launch an integrated traffic management system as well as automatic vehicle location devices on public transport vehicles.

Many buildings are not energy efficient as this was not a priority when they were built. Buildings are often poorly insulated and heat losses are up to 30 percent in the winter season. Increasing energy prices force citizens, especially the poor, to search for alternative sources of energy. Home combustion of charcoal, timber and waste is widespread in the poorest suburban areas of Bitola, Veles, Kumanovo and eastern regions. The former Yugoslav Republic of Macedonia's energy sector meanwhile contributes some 70 percent of the country's total greenhouse gas emissions, besides emitting significant quantities of SO₂, PM_{2.5}s and O₃ in places like Bitola, owing to heavy reliance on coal and lignite-based thermal power. Other industrial hotspots include Jegunovce (home to a metallurgical plant); Veles (lead-smelting facilities); Probistip (lead and zinc mines); and Skopje (the OHIS-Skopje chemical complex). Studies have shown that children in Skopje and Veles suffer from respiratory diseases associated with air pollution.

With regard to waste, city dwellers now throw away an average of 360 kilos of waste a year, a consequence of economic transition, production growth, and increased consumption. Despite the fact there are some 25 known landfill sites around the country, almost all lack environmental safety features.

¹ Map is available online at: <https://www.cia.gov/library/publications/the-world-factbook/>

In addition, illegal dumps have become a common sight in rural areas. Waste is thrown unchecked into rivers and onto empty lots, along the sides of roads and in fields. Many municipalities are unable to cope with the changes resulting from a new economic system. Not surprisingly, establishing separate waste collection and recycling schemes were among the key concerns of Macedonian CSOs in recent SECTOR grant calls.