International dimensions of air pollution law

Transboundary air pollution has long been addressed by international law. Indeed, the pollutants released into the atmosphere are transported by winds over greater or lesser distances and can cause damage to the neighbouring State. The air thus gave rise to the first major jurisprudential precedent in this area: the Trail smelter case between the United States and Canada, then dominated by the British Crown. This zinc and lead smelter was established in 1886 at Trail, British Columbia, about seven miles as the crow flies from the American border and operated until 1906 by American interests. Acquired by a Canadian company, the *Consolidated mining smelting company of Canada limited*, the smelter had grown and prospered, becoming one of the first industries in the region. Correspondingly, polluting emissions into the atmosphere, particularly sulphur dioxide, had increased significantly to the point of damaging crops of neighbouring American farmers. In this case, the arbitral tribunal established the fundamental principle of non-damageable use of the territory, which was taken up shortly afterwards by the International Court of Justice and has since become a principle of customary law.

The mobility of the atmosphere, which carries pollutants over long distances, has revealed the narrowness of the international responsibility framework. Therefore, the only solution was to cooperate to reduce emissions. The discovery in the 1970s of the acidification of Scandinavian lakes and the decline of forests, particularly in Germany and France, raised the necessary awareness. In response to concern about "acid rain", the Geneva Convention on Long-range Transboundary Air Pollution was signed on 13 November 1979 under the auspices of the *United Nations Economic Commission for Europe* (UNECE), which provided a particularly suitable forum for discussion of regional environmental issues (figure). The Geneva Convention has provided the framework for an impressive mechanism to combat transboundary air pollution, since the Convention now has eight protocols. This rather exceptional dynamism reflects the evolution of concerns and scientific knowledge of ecological issues (acidification, eutrophication, photochemical pollution, contamination, climate change) and explains its extension to an increasing number of pollutants (SO2, NOx, VOC - and through the latter two, ozone - heavy metals, persistent organic pollutants (POPs), ammonia and, from 2020, particles).

As regional strategies are inherently of limited effectiveness in protecting an environment free from all borders, the fight against certain air pollutants of particular concern because of their characteristics (toxicity, persistence, propensity for bioaccumulation and biomagnification) and their total ubiquity, is gradually being organized within a global framework, such as the Stockholm Convention on persistent organic pollutants (2001) or the Minamata Convention on Mercury (2013).

Figure 1. Planisphere showing in green colour the signatories of the Geneva Convention on Long-Range Transboundary Air Pollution (13 November 1979)
[Source : By AndrewRT (self-made based on Image:BlankMap-World6.svg)[Public domain], via Wikimedia Commons]