CASE STUDY

COUNTRY	CITY	POPULATION	LAST REPORTED EMISSIONS	MITIGATION OBJECTIVES
ROMANIA	ALBA IULIA	66,369 (2018)	210,189 TCO_2 (2008)	-24 % IN 2020 (BASELINE: 2008)

Alba Iulia takes up the building decarbonisation challenge

The Alba Local Energy Agency (ALEA), created in 2008 with main objective to support local authorities in the Alba county, has been supporting the Alba Iulia Municipality since its establishment. The city has made remarkable progress in its sustainable development, notably in the improving its building sector. The Sustainable Energy Action Plan of the municipality, which is currently under implementation, led to several initiatives being adopted by the city, in line with its commitments upon joining the Convention of Mayors.

The 2008 Baseline Inventory revealed that more than 50% of the city's emissions came from the heating of buildings, and over 21% from transport (**figure**). While electricity accounted for only about 12% of the energy consumption of the city, the emissions related to this were higher due to the low efficiency of electricity generation and the wastage during transmission. Thus, the main areas for action identified by the city in its SEAP were the residential and public building sector, through increasing energy efficiency and increasing the share of renewables, especially locally-generated; the tertiary building sector from improved energy efficiency, building insulation and the automation of energy consumption; and the transport sector, through the promotion of public transport, and soft mobility.

Energy efficiency improvements in public infrastructure

Some of the projects that have been implemented or are in the process of being so include: the modernisation of a large part of the city's public lighting system; thermal rehabilitation of several important blocks of flats that presented really low energy efficiency; carrying out energy efficiency works on several public buildings, especially educational ones; and the acquisition of electric buses for the public transportation fleet.

Additionally, there are several large-scale initiatives that have been started this year, including: the implementation of a renewable energy project aimed to supply solar energy to Municipal Olympic Pool; the installation of PV panels on the roofs of 6 public educational buildings; the installation of heat pumps to supply an important elderly home with thermal energy; the launch of a study to identify the energy poverty levels in the social housing area and to find innovative solutions; the renovation of the building of most important college in the city (the HCC National College) into an Nearly Zero Energy (nZEB) one.

The commitment of the city in attaining its targets for sustainable development also extends to its public investment policy, where the share of financing for "green" projects implementation will reach almost 50% from entire investment sum in the next period.

Preparing to adapt to climate risks

Alba Iulia is also working on upgrading its adaptation plan for climate change. The ALEA, supporting around 15 other municipalities in Romania, has also set up ANERGO – the Alba Energy Observatory. ANERGO supports these cities, including Alba Iulia, in collecting and compiling energy and climate data. The Local Climate Risk Analysis, developed through ANERGO, includes an assessment of the main types of environmental and climate phenomena that can negatively impact one or more municipal sectors, which can cause material damage or endanger parts of the infrastructure built on the territory of the local authority. Those areas of interest are targeted according to the methodology of the Covenant of Mayors.

GHG EMISSIONS (TCO_2E) OF ALBA LULIA IN 2008

Source: Alba Iulia PAED, 2019