Interreg
Danube Region

Co-funded by
the European Union

Danube Indeet

Report on infrastructure analysis

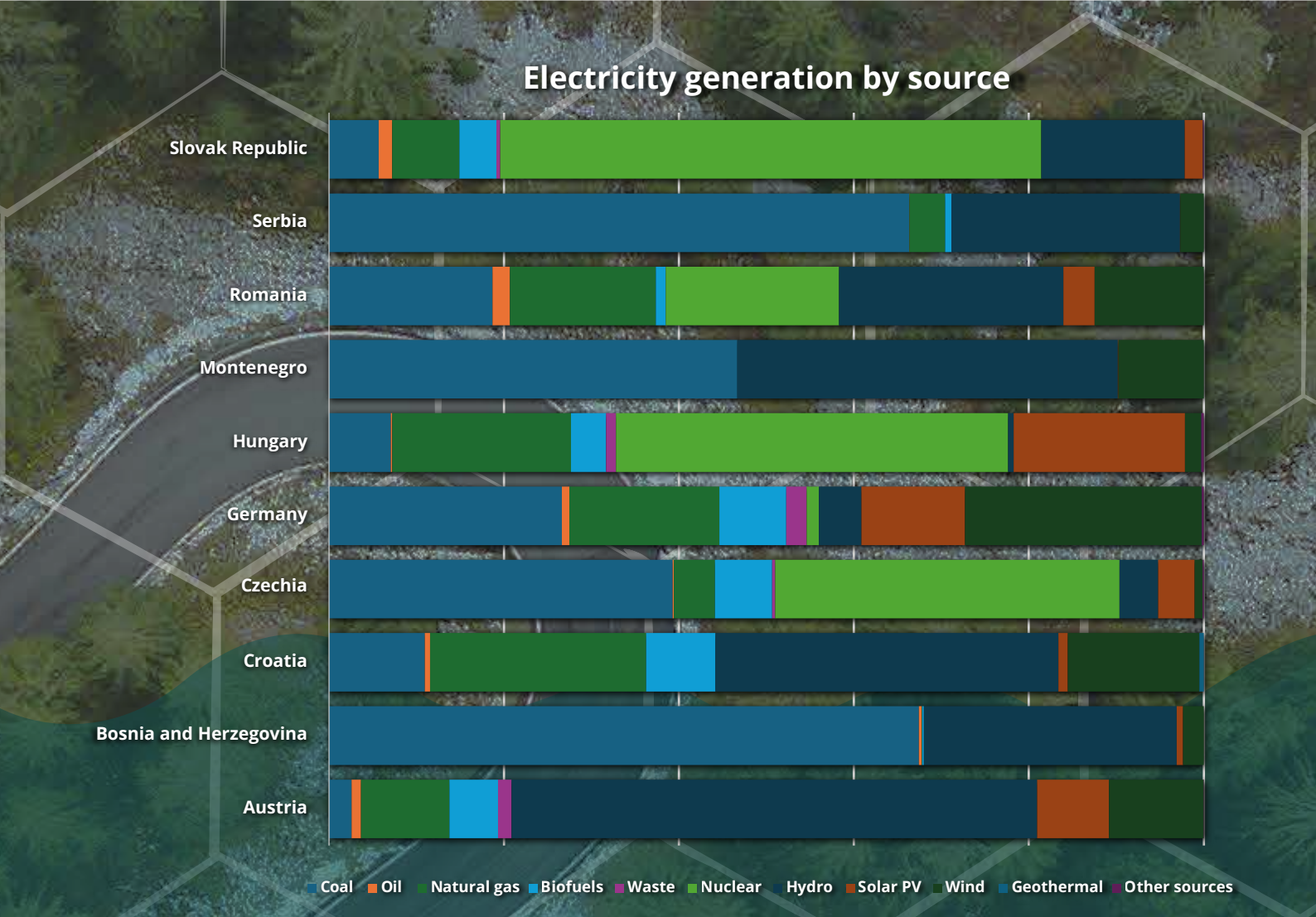
Joint summary of the national infrastructure reports

Introduction

The national analyses provide context regarding the energy landscape in the participating countries. The partnership encompasses a large area within the Danube Region spanning from Germany to Montenegro, and includes 9 countries with different geographical characteristics, economies and varying energy sectors.

Understanding the current state of affairs reveals potential development paths for each country and explains how the Danube Indeet Model might be utilized in each country. The individual reports can be found on our website, and we selected a few indicators to highlight the most important aspects of the development of the energy, hydrogen and electric mobility sectors.

Furthermore, in the frame of infrastructure analysis, the partners collected detailed technical data regarding the state of electricity, RES-capacity, EV and charging infrastructure, hydrogen, etc. to test the Danube Indeet Model, which in turn will be able to mathematically optimise green infrastructure set-up and operation.



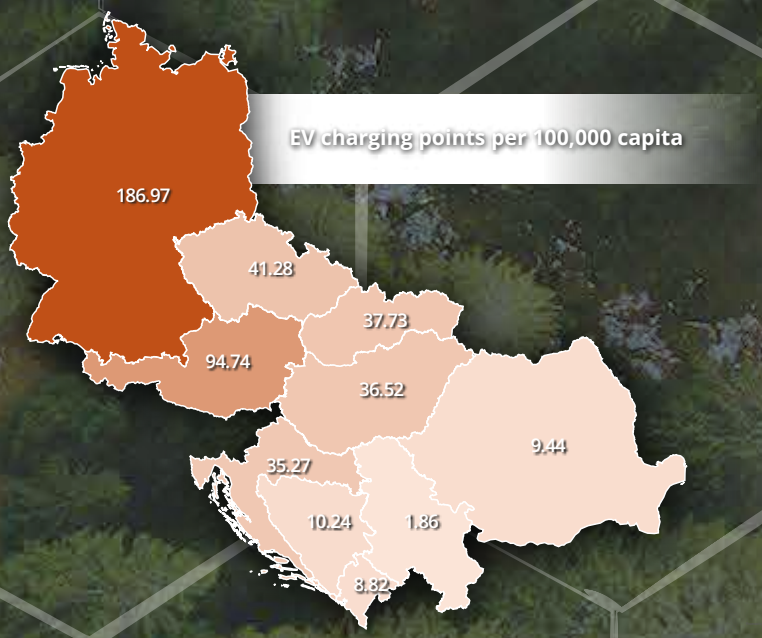
Energy mix

Electricity generation in the partner countries is vastly different. Czechia, Hungary, and the Slovak Republic operate their nuclear power plant, while Croatia co-owns the Krško Nuclear Power Plant with Slovenia which provides 15% of Croatia's electricity, however technically this source appears as imported electricity.

Another very important determining factor is the amount of hydropower each country can produce and it can greatly improve the efficiency of renewable production. Take for example Austria, where excess energy can be used to refill reservoirs in pumped storage power stations. Hydropower provides a significant portion of electricity in Austria, Montentegro, Bosnia and Herzegovina, Croatia, Romania, Serbia and the Slovak Republic.

Germany boasts the highest share of wind power in its energy mix by far, but this source proves to be very important in Austria, Croatia, Montenegro and Romania as well. The expansion of photovoltaic panels was very quick in Hungary, which reached the highest share of PV in their energy mix, followed by Germany and Austria.

EV chargers



Charging infrastructure for electric vehicles developes at different pace in the Danube Indeet partner countries. Joint efforts, such as the NEXT-E project co-financed by the European Union, are supporting creating a cohesive EV charging network across the Danube Region. The early stages of development focus on urban areas and the TEN-T core corridors.

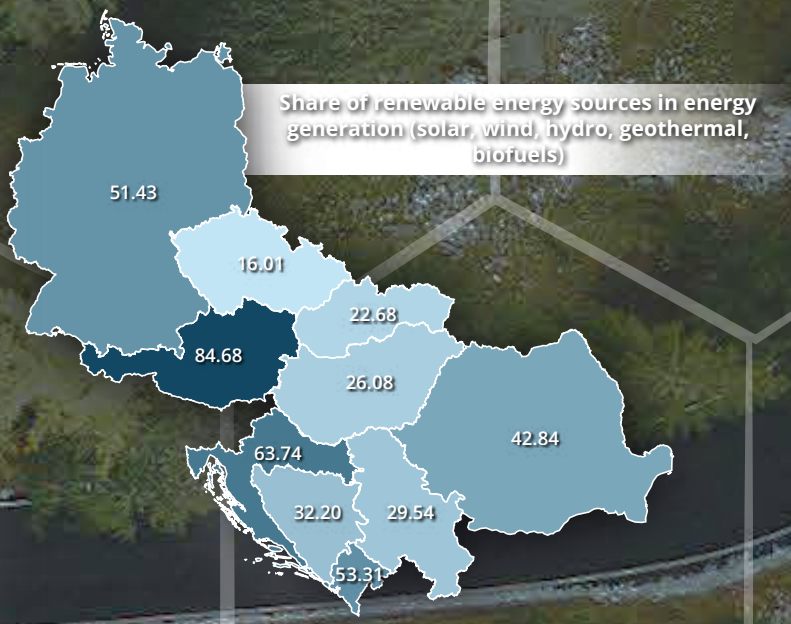
To date there is only one vehicle-to-grid charger in operation in Bábolna, Hungary as part of a local energy community.

Renewables

There is an active expansion of renewables in the Danube Indeet project area and each countries adopted strategies according to their unique resources and policy environments.

The share of modern renewables in the final energy consumption paints a different picture, where Montenegro, Austria, Bosnia and Herzegovina, Croatia, Serbia and Romania and take a definite lead.

Due to advancements in the development of RES capacities, some of the countries significantly lowered their specific emission (gCO_2/kWh).



Interreg
Danube Region

Co-funded by
the European Union

Danube Indeet

Danube Indeet

Integrated and decentralised concept rethinking energy and transport systems based on renewable energy in the Danube region

https://linktr.ee/danubeindeet

https://interreg-danube.eu/projects/danube-indeet

Project manager
Anna Kolb
anna.kolb@haw-landshut.de
Communication
Balázs Kiss
kiss.balazs@paksbusz.hu

This project is supported by the Interreg Danube Region Programme co-funded by the European Union