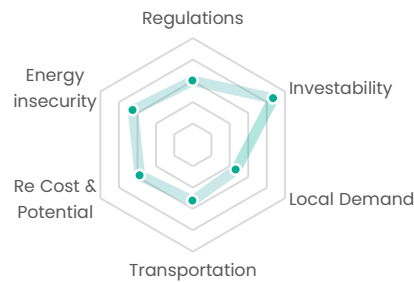
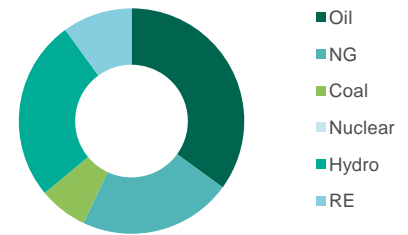


GDP - USD (bn):	429
GDP per capita - USD:	48,105
Land area ('000 km2):	83
Population density (per km ²):	107
Grid emissions factor (gCO ₂ /kWh):	142

Hydrogen Drivers Matrix



Primary Energy Mix



3.0 Regulatory commitment

- 2040 net zero target
- 2030 100% renewable grid target
- Hydrogen roadmap, targets and funding not yet announced

2.6 Transportation

- Land-locked and denied shipping-based imports
- Actively developing overland import infrastructure

4.4 "Investability"

- AA+ rated by S&P
- 27th in WB Ease of Doing Business

2.9 RE cost and potential

- Strong hydropower resources
- Good onshore wind resources

2.3 Local demand potential

- Some steel manufacturing and oil refining
- Lower potential than peers in power sector given clean grid

3.2 Energy insecurity

- 64% net energy import

Developing European overland hydrogen import for 2040 net zero

While a number of hydrogen initiatives have sprung up on the ground in Austria, the country has yet to release a hydrogen strategy and so the exact scale and trajectory of its hydrogen ambitions is still unknown. Like many European peers, Austria's energy supply is heavily reliant on imported oil and gas, and green hydrogen is a path to energy independence in addition to decarbonisation. The country has very ambitious climate goals, including a carbon neutrality target of 2040, and one of the lowest-carbon grids in Europe that is 80% renewable-powered (predominantly hydro). A newly instituted Renewable Expansion Law (EAG) is further mandating 100% renewable electricity by 2030. Significant wind potential remains to power a domestic green hydrogen market. Blue hydrogen production is unlikely in the near term given CO₂ storage has been banned since 2011 due to safety concerns¹.

Hydrogen demand will come from transportation, the largest contributor of carbon emissions, as well as a number of refineries, steel and chemical plants. In its "Mobility Master Plan 2030" published 2021, Austria contemplates the end of new combustion engine cars and light and heavy commercial vehicles by 2030, although this target is as yet non-binding. Its National Energy and Climate Plan (NECP) indicates an intention to introduce a tax advantage for biogas and hydrogen by 2030. There are a number of salt formations in the Salzburg region that could also be explored for hydrogen storage.

Green Hydrogen @ Blue Danube IPCEI

VERBUND, Austria's largest renewable energy producer, is developing the Green Hydrogen @ Blue Danube IPCEI, where Phase I will start with 180MW/27ktpa of green hydrogen production in Bavaria-Austria, to be expanded in Phase 2 to 1.5GW/80ktpa in southeastern Europe. The hydrogen is to be transported in the form of LOHC via the Danube river for consumption in Austria and Germany.

RAG Austria H2 storage & import studies

RAG Austria, the largest gas storage company in Austria, is developing a number of technology-leading hydrogen storage initiatives including: "H2EU+Store", seasonal storage infrastructure in Austria and Germany plus transmission infrastructure in Central Europe to facilitate import of renewable hydrogen from Ukraine; "Underground Sun Storage 2030", a technical feasibility study for the storage of green hydrogen in a former gas reservoir; and "USC-FlexStore", a technical feasibility study for seasonal storage of methanised green hydrogen at depths of over 1,000m.

Numerous hydrogen pilots underway

A number of pilot hydrogen plants across diverse industries are under development including: H2Future, a 6MW PEM electrolyser at the Voestalpine Limz steel plant; a 10MW electrolyser at the OMV Schwechat Refinery; in 2019 Zillertal (Tirol), the rail operator in the mountainous regions, ordered five hydrogen-powered trains.

¹ Law re-evaluated every 5 years.