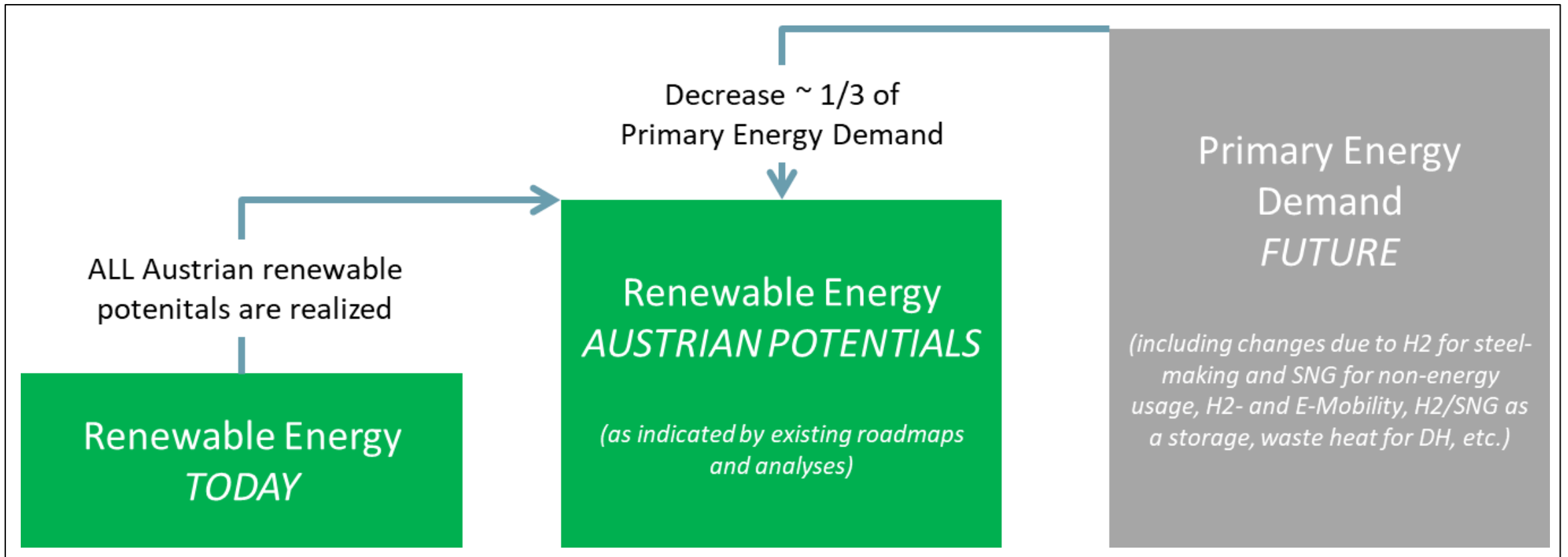




# **Exergy Scarcity and Imports**

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# Renewables4Industry



# Exergy Scarcity

- **Energy demand today**
  - is covered almost exclusively by oil, gas, power, bioenergy
- **Future RES supply**
  - includes solar thermal, geo thermal, more biomass
  - Hypothetically, a fully-electrified industry would use the whole national power production potential
- **High-quality energy (= exergy) is scarce**
  - We shall not use high-value energy carriers for low-quality applications

# Imports

- **Today, Austria imports two thirds of its energy used**
  - For a renewable energy system, we expect demand to exceed national supply
  - We expect other (European) countries to face similar challenges
  
- ➔ **Import demand & import market creation**
  - Build up diversified import routes
  - Enable certified energy carriers
  - Especially for power, hydrogen/SNG, bioenergy