

Wind/solar power

Electricity

Periods with
low electricity
consumption

Periods with
high electricity
consumption

Water
electrolysis

Hydrogen
storage

Combustion
and
electricity
production

District heating

Biomass and waste

Gasification

Catalytic
conversion
of $H_2/CO/CO_2$

CO_2

Methane

Methane
storage

Natural gas grid

Pyrolysis

Upgrading of
pyrolysis oil

Liquid fuel chemicals
(e.g. Methanol, DME,
liquid hydrocarbons)

Liquid-fuels / chemicals

