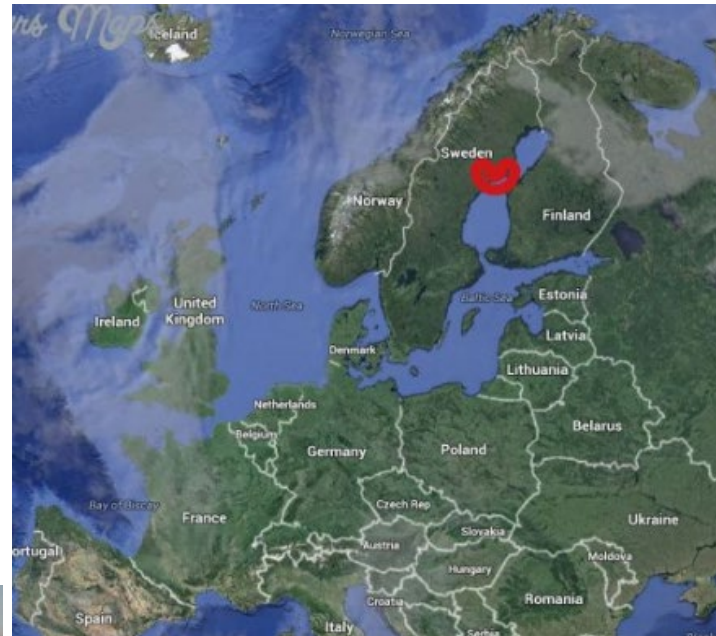


# City of Umeå



The **climate is subarctic**, with long winters and short, yet fairly warm summers. Because of the Gulf Stream the winters are mild considering the latitude. The average temperature in January is -8 C and in July 16 C.

# Umeå Green Transition

**Starting point-** Umeå city strives to be climate neutral by 2030, the whole region by 2040.

**Expectations-** recover and transform CO<sub>2</sub>-emissions to new products.

**Value chains improvements-** optimize values by synergies in mobility and energy value chains.

**Green Transition through P2X-**

⇒ **Production of e-methanol** at Umeå Eco Industrial Park.

⇒ **Maritime and Aviation** customers demands.



# Power-2- eMeOH

**e-Methanol production.** Using CO<sub>2</sub> from Biomass incineration and green electric energy.

**Yield:** (per annum)

input 140 000 ton CO<sub>2</sub>, 30MW steam and 150MW of power(renewable)

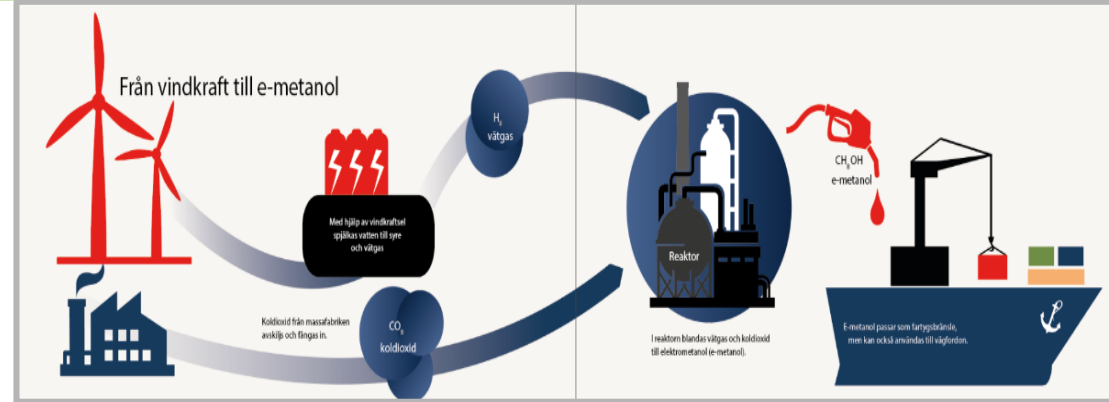
- ⇒ 90 MW heating energy
- ⇒ 130 000 tonnes eMeOH

## District Heating

- ⇒ Supplying ~80% of all buildings in Umeå with heating
- ⇒ Produces ~1/5:th of the Umeå power consumption
- ⇒ Uses local, regional renewable fuels

## Umeå Eco Industrial Park

- ⇒ Epicenter of the circular economy in northern Sweden



# World leading hub of green innovations



UMEÅ  
KOMMUN

 UMEÅ ENERGI