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What can policy do for the Middle Norrland Region

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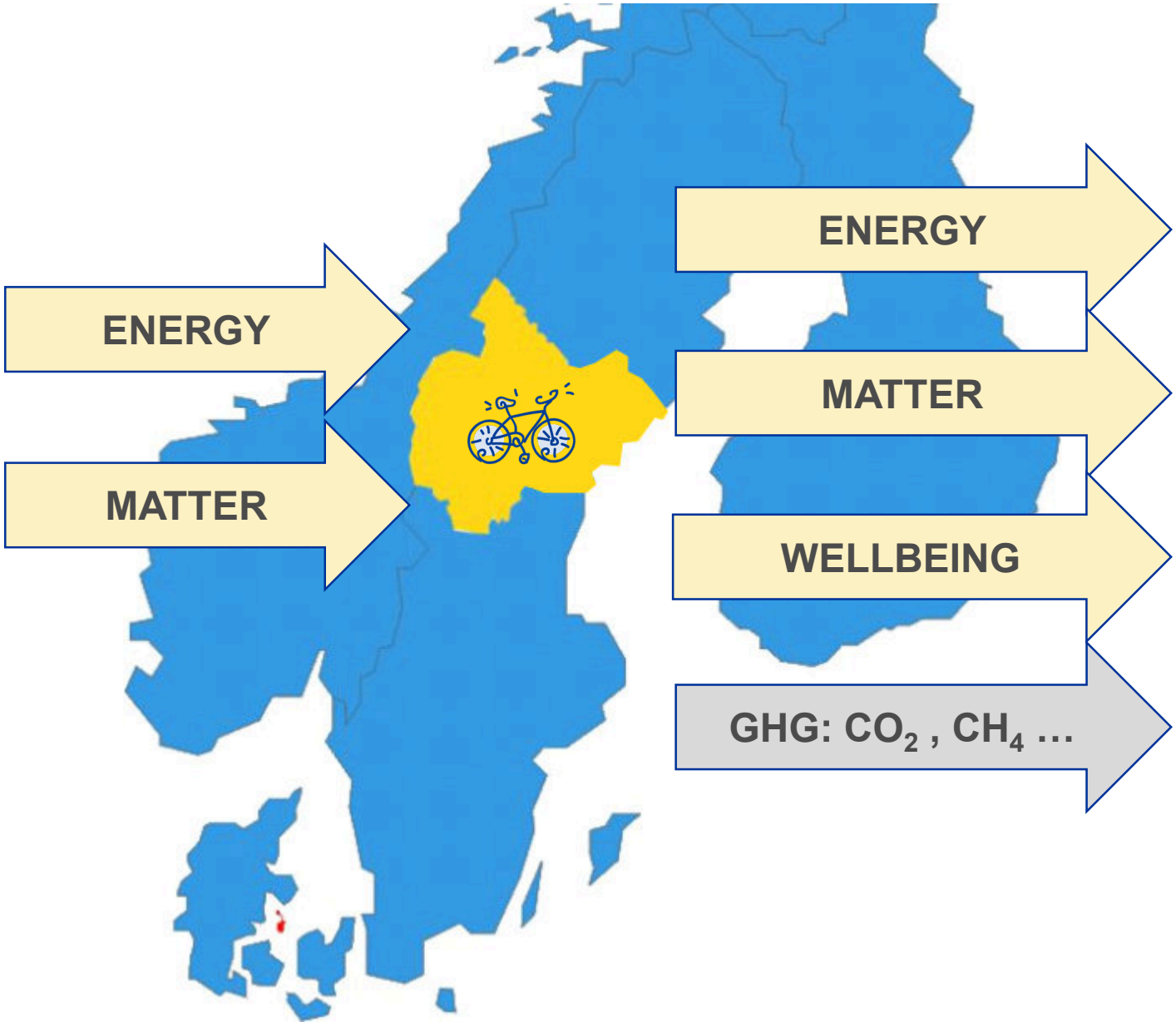
Interreg Sverige-Norge
Europeiska regionala utvecklingsfonden
EUROPEISKA UNIONEN

An engineering view of a Region as a Machine



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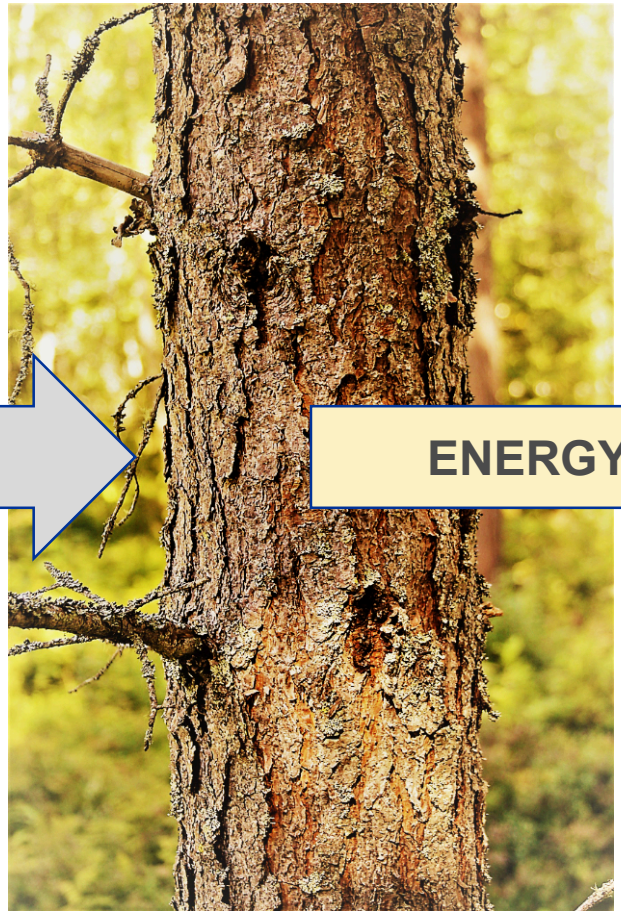
The difference between Man and Tree…

ENERGY

CO_2



ENERGY

And trees probably have no perception of its existence…

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“Buy land, they aren't making it anymore”
Mark Twain
1 km²
Increase climate sustainability (reduce global warming):
Convert as much energy as possible per km² with a minimum of GHG-emissions (Green House Gases)
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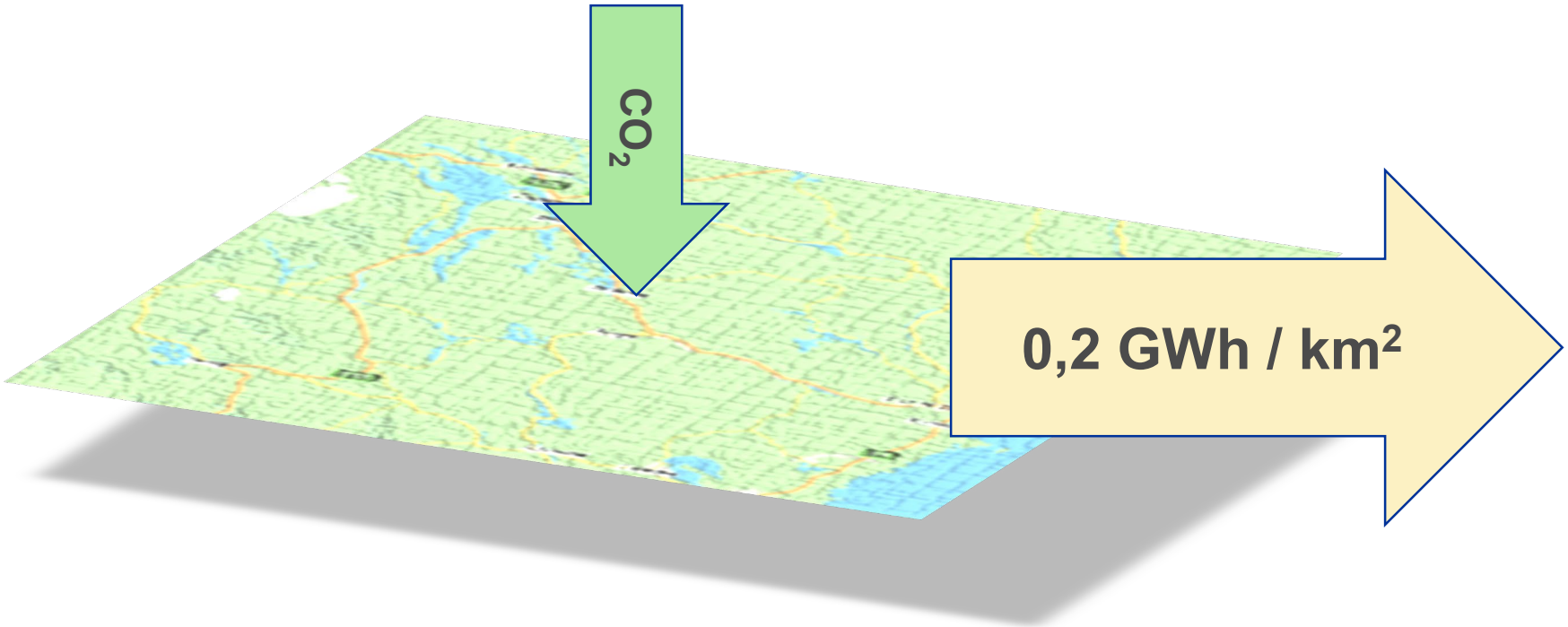
Rosenlund
Skönsberg
Medborgargatan
Ortviksvägen
Heffners allé
SUNDSVALL
Håkanstå
Nacksta
Sallyhillsvägen
Sallyhill
Södermalm
Södra allén
Bergsgatan
Landsvägsallén
Sidsjö
Sömacksta
E14
E14/86
E4
Västra vägen

Output from Mid Norrland Region



This output per km² corresponds to for example:

- Heat and electricity for 10 small houses
- 20.000 liter petrol
- 30 ton hay

Forest land

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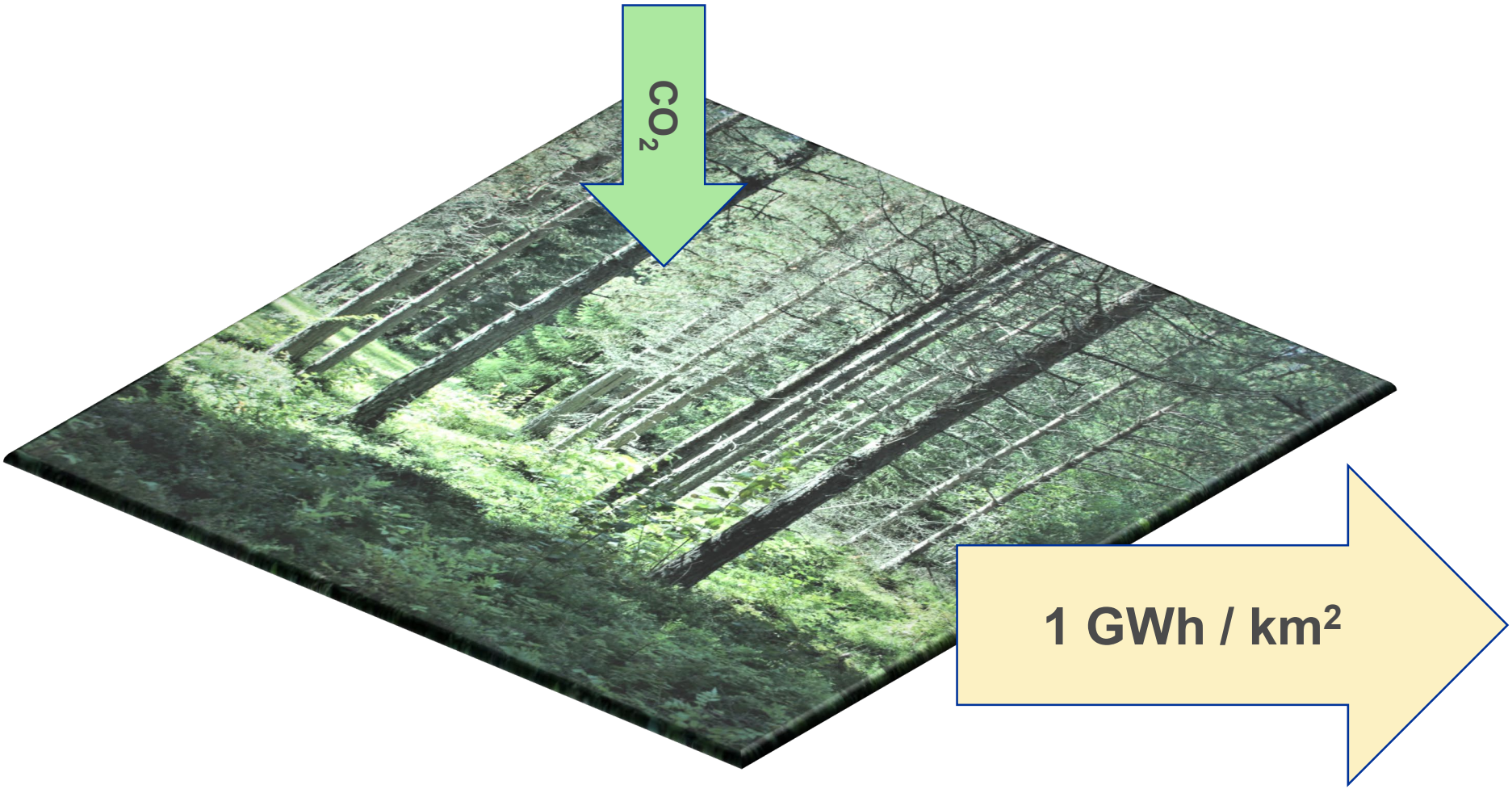
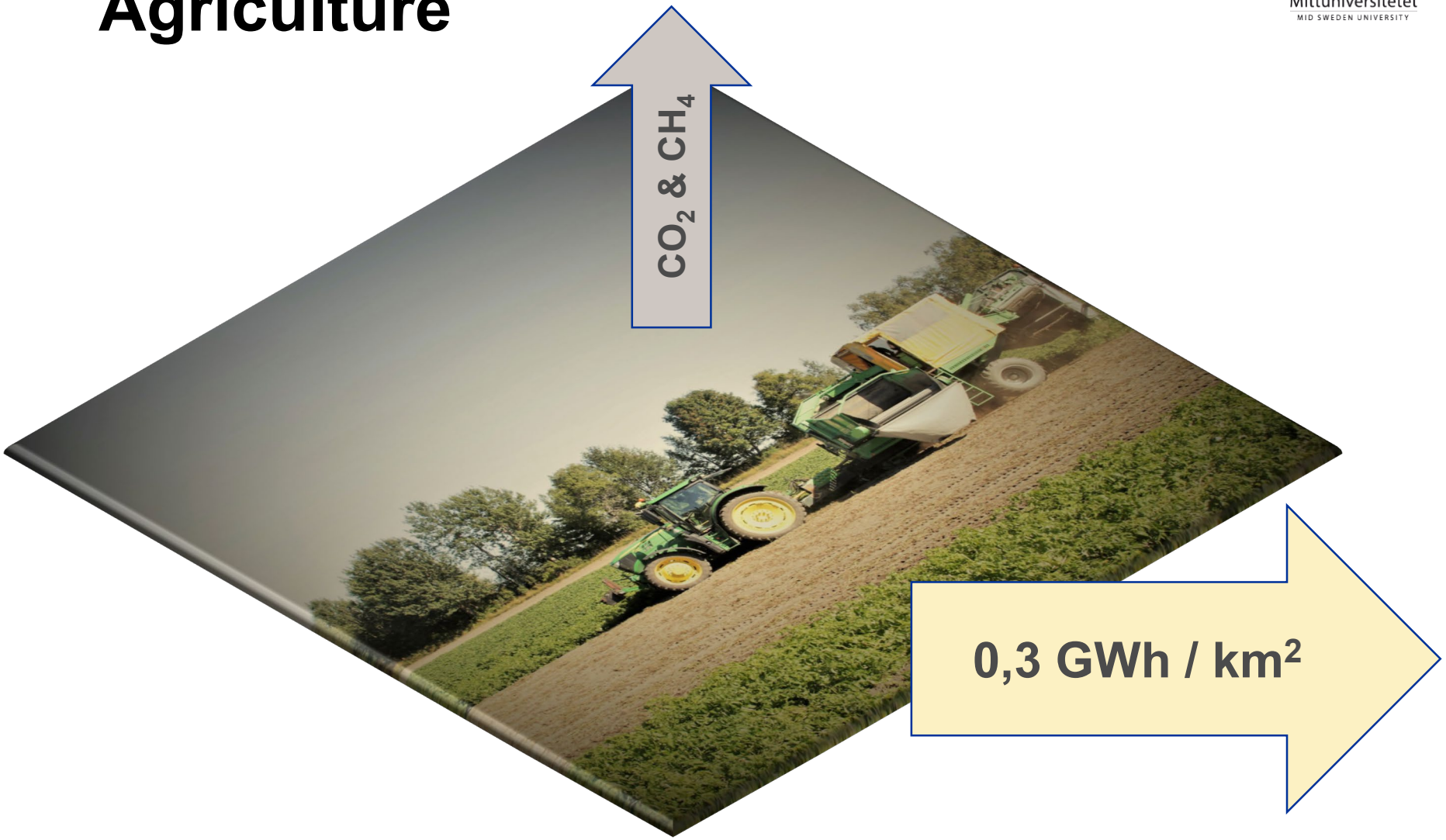


Agriculture



Hydro Power

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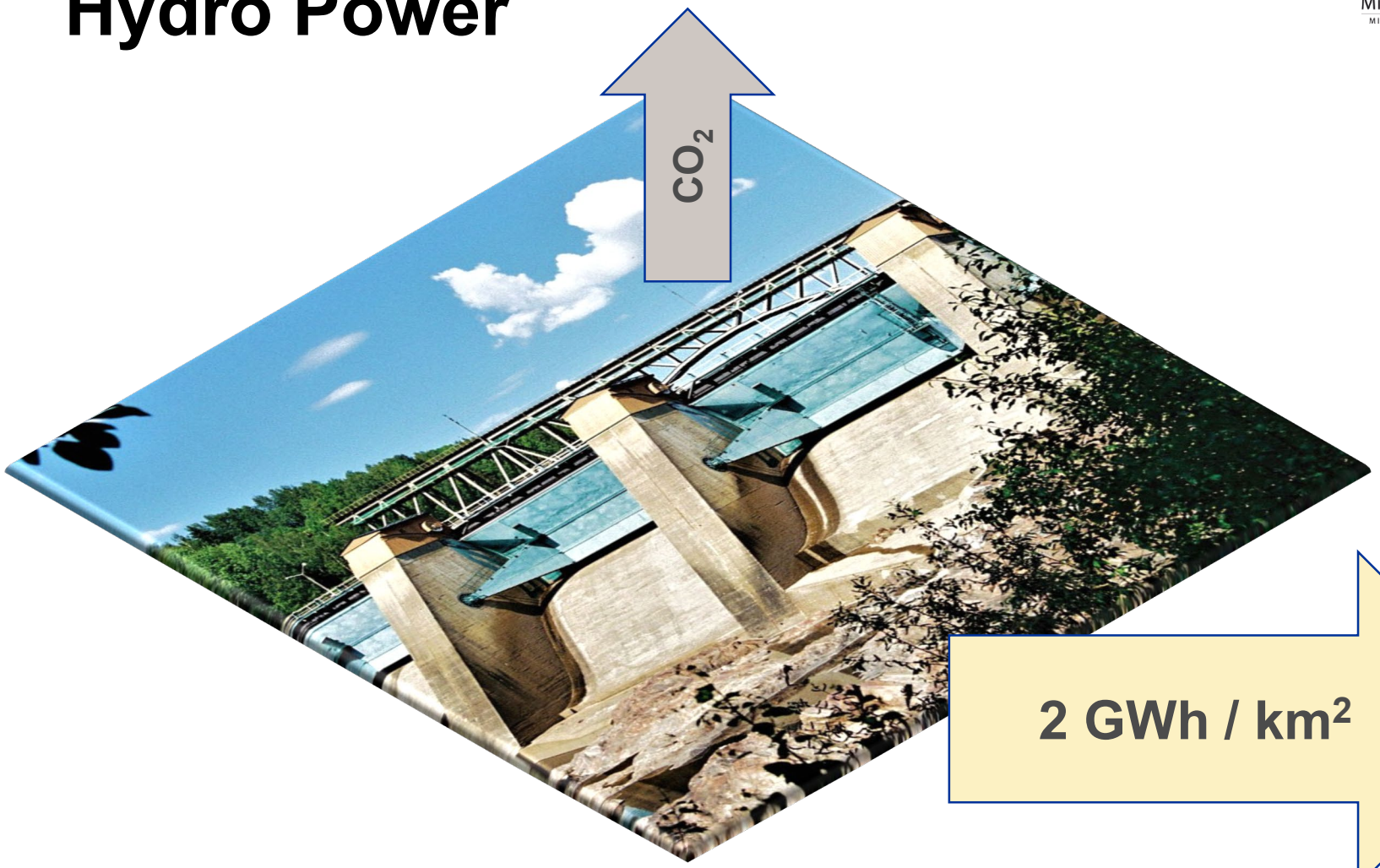


2 GWh / km²

Wind Power

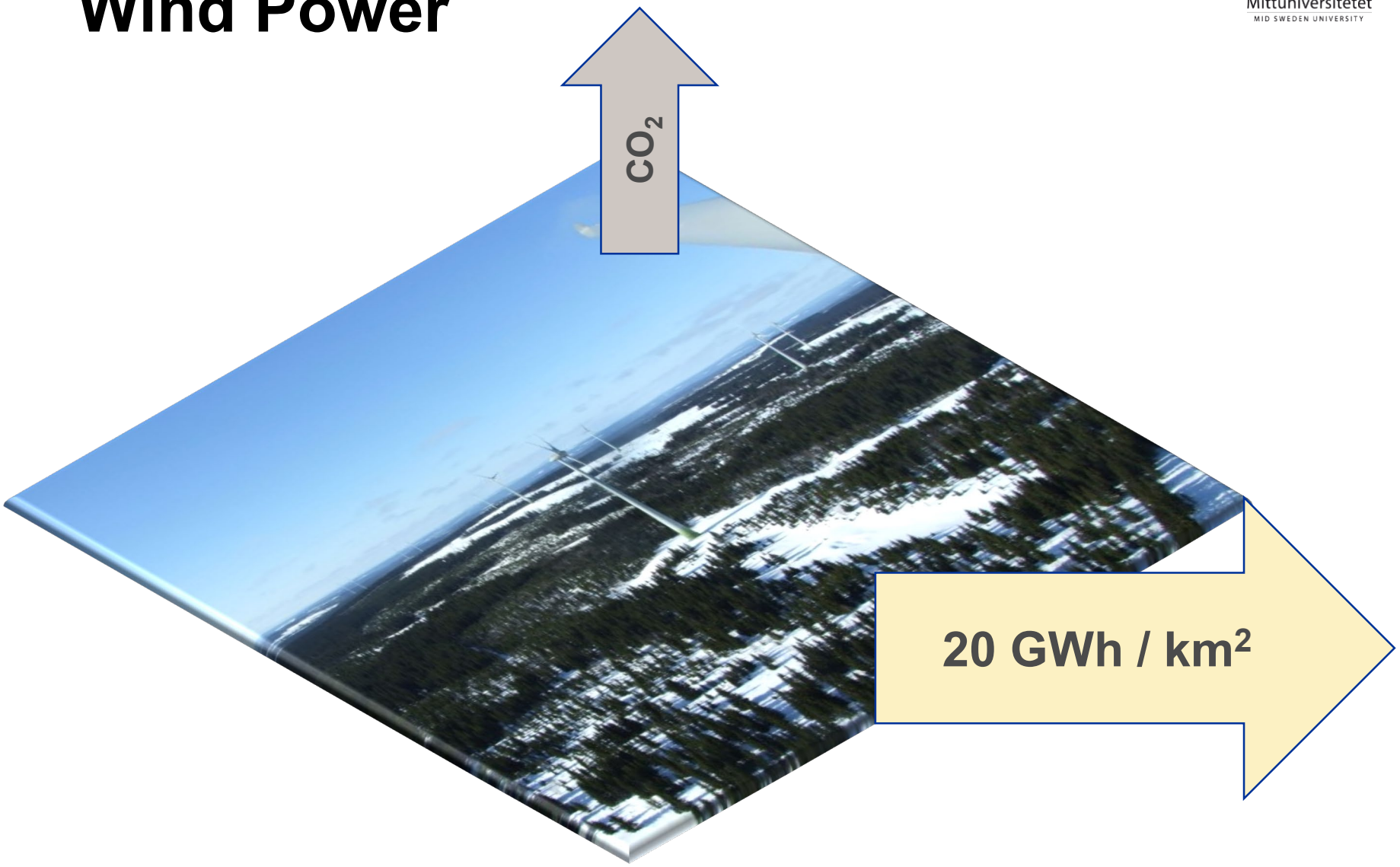
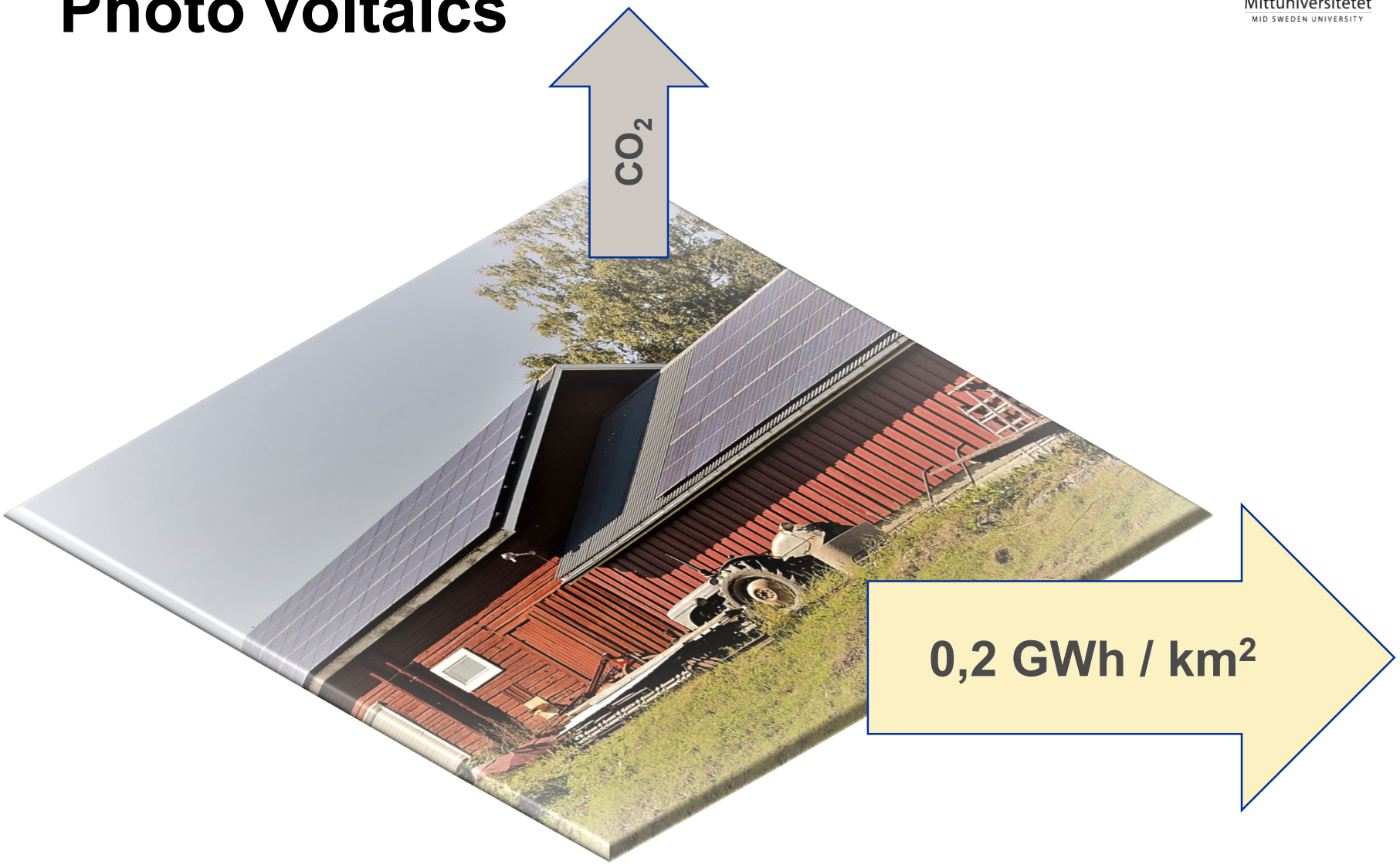
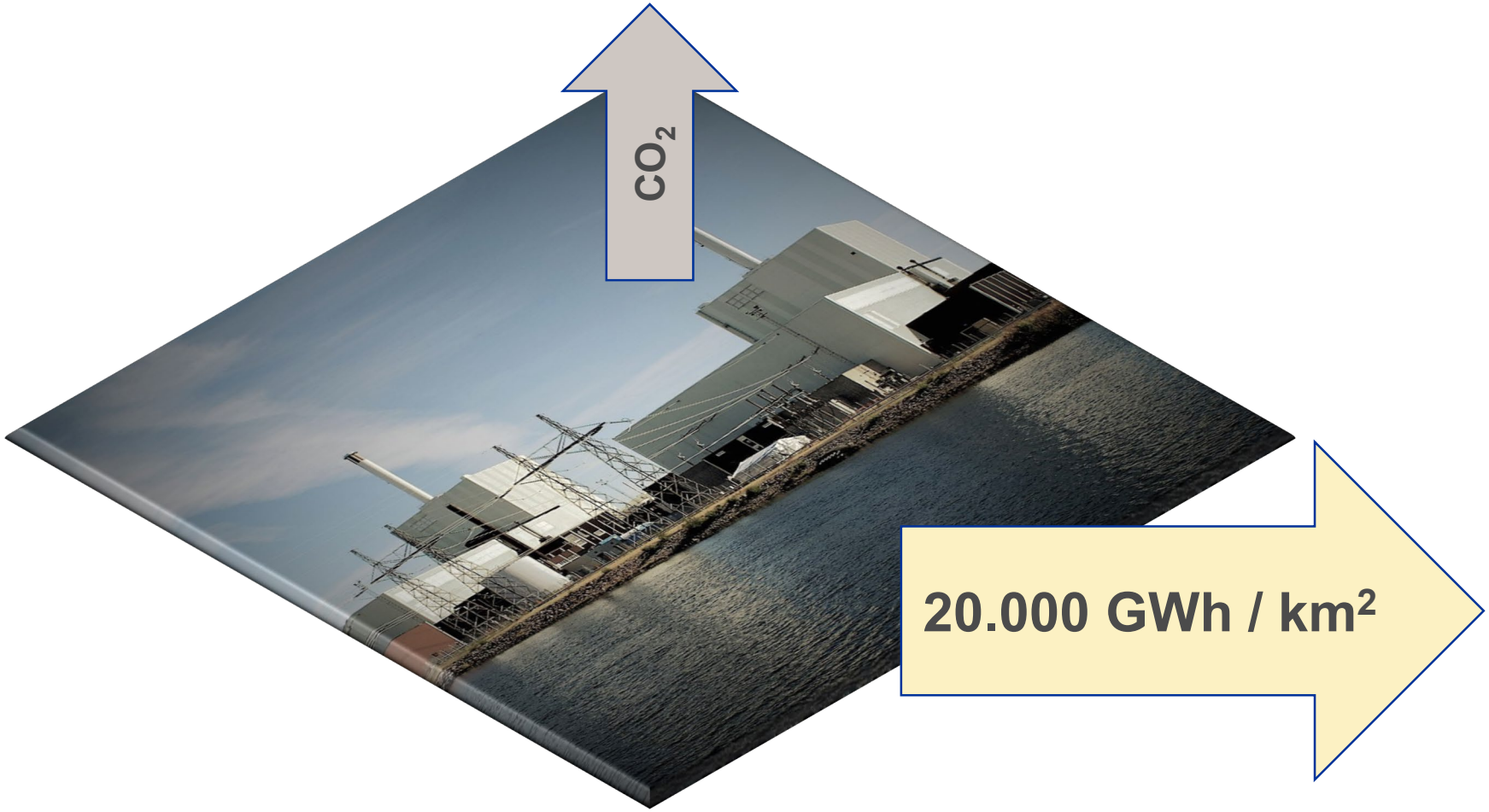


Photo voltaics



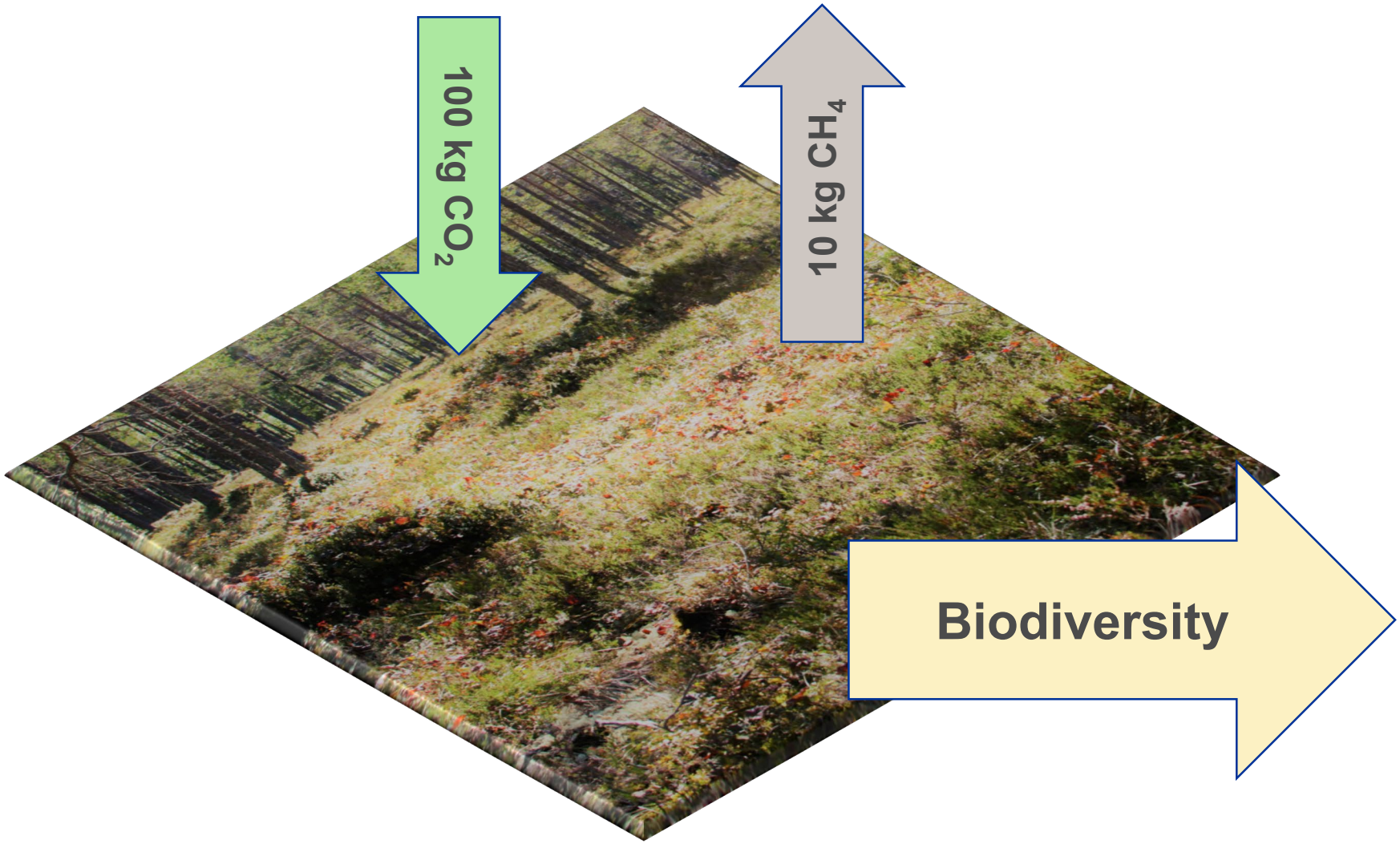
The same installation in Palermo or Malaga would double the output to 0,4 GWh

Nuclear Power (Not in the region)



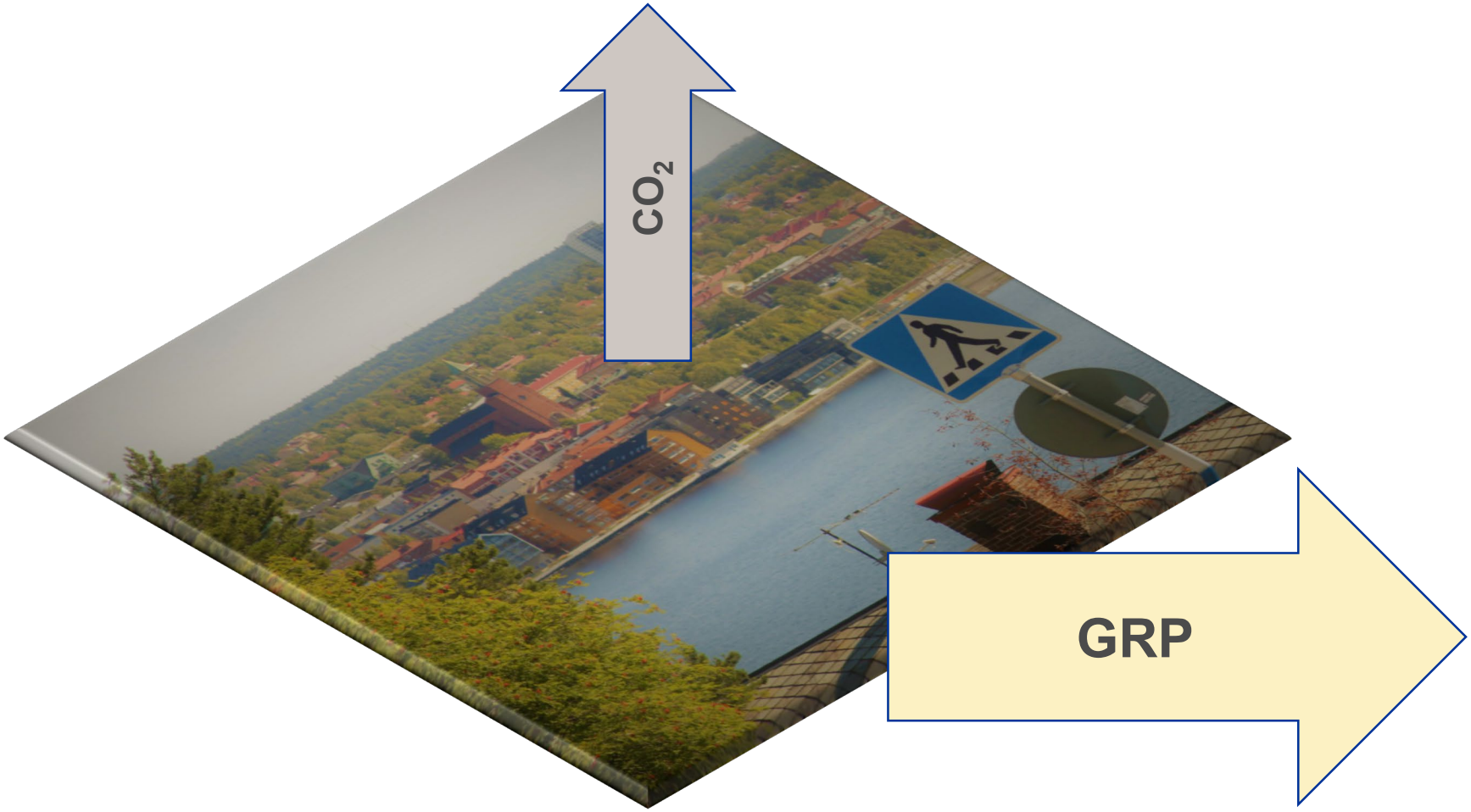
As you all know there are some disadvantages to take into consideration…

Wetland, mires



Carbon sinks, but in total contributing to warming due to methane emissions

The town and the city



Humans are part of the ecosystem and has the power to optimze regional use of land

Today's EU ETS (Emission Trading System) covers 45% of EU's GHG emissions. Will the ETS be sufficient? Should we discuss also a payment system for uptake of CO_2? Can we find more efficient systems to regulate atmospheric GHG than economic systems?

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Thank you for thinking…

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