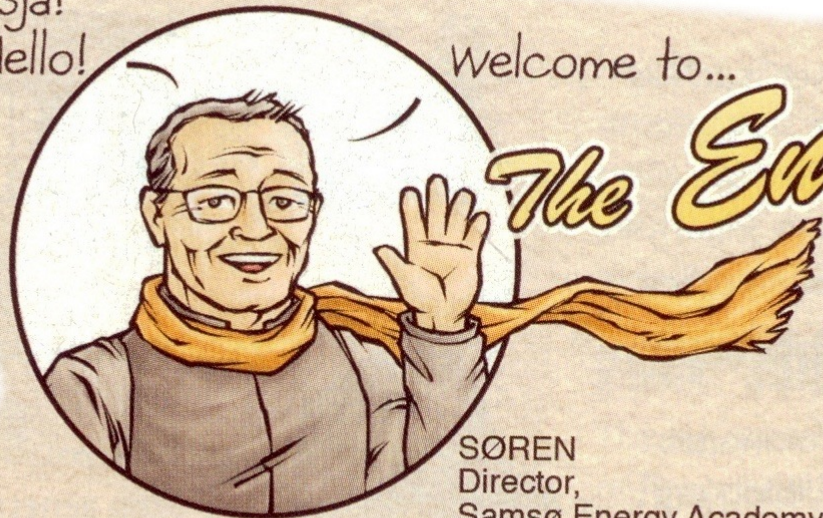


Hesja!
Hello!



Welcome to...

The Energy Island!

SØREN
Director,
Samsø Energy Academy

In 1997, we pledged to give up fossil fuels
and convert to 100% renewable energy
by 2008.



SAMSØ ISLAND

Country: Denmark

Population: over 4000

Area: 114 square kilometres

Location: about 20 kilometres off
Denmark's main peninsula

LEGEND



Heating
Plant



Wind
Turbine

communities

=

commons

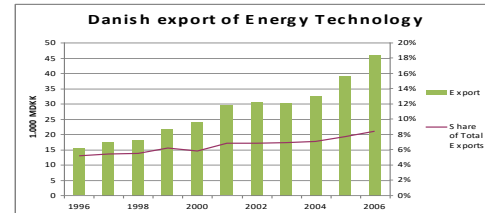
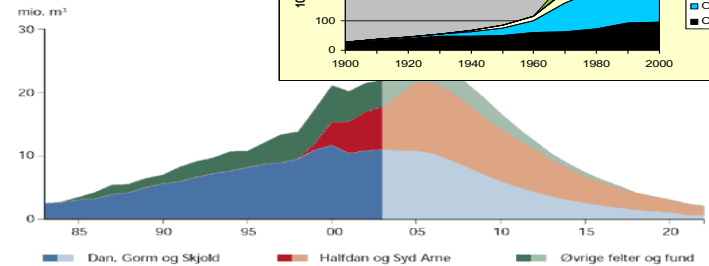
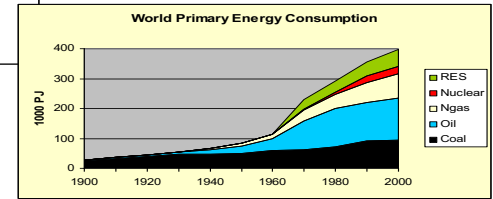
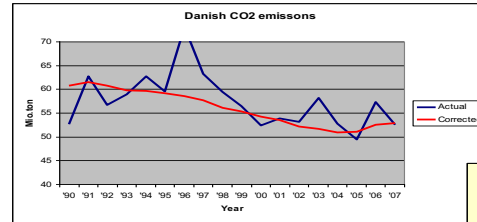
+

communities

+

3 Challenges

- Climate Change
- Security of supply
(Fossil fuels)
- Industry, economy
and jobs



SAMSO: THE ENERGY SELF-SUFFICIENT ISLAND

The first island to become completely energy self-sufficient in 10 years?

11 ONSHORE WIND TURBINES

1 turbine generates enough electricity to power **630 houses**.

The turbines transmit electricity to the mainland when more electricity than the island can consume is generated.



OFFSHORE WIND TURBINES

10 103m high offshore wind turbines constructed in 2003 produce more energy than the island uses for transport



3 x STRAW FIRED PLANTS

-  Tranebjerg
Heats **263** households
-  Ballen / Brundy
Heats **232** households
-  Onsbjerg
Heats **76** households

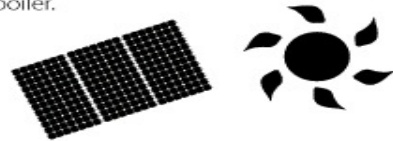


SAMSO: ISLAND FACTS

Area:	114 km ²
Population:	4,000
Investment:	DKK 368 million

SOLAR PLANT

One of the heating plants receives heat from **2500 m²** of solar panels. This is combined with a **900 KW** wood chip fired boiler.



EXCESS ENERGY

Excess electricity produced from offshore wind farms is invested in new energy projects.

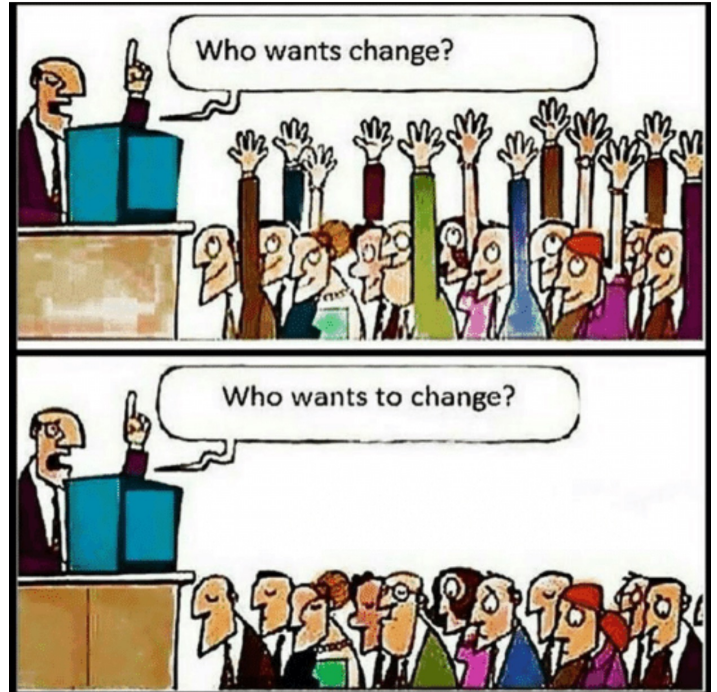


11 1MW onshore wind turbines

generate 28,000 MWh, that's more electricity than the island's total consumption and the equivalent of 690,000 gallons of oil.



Finding purpose – funding development



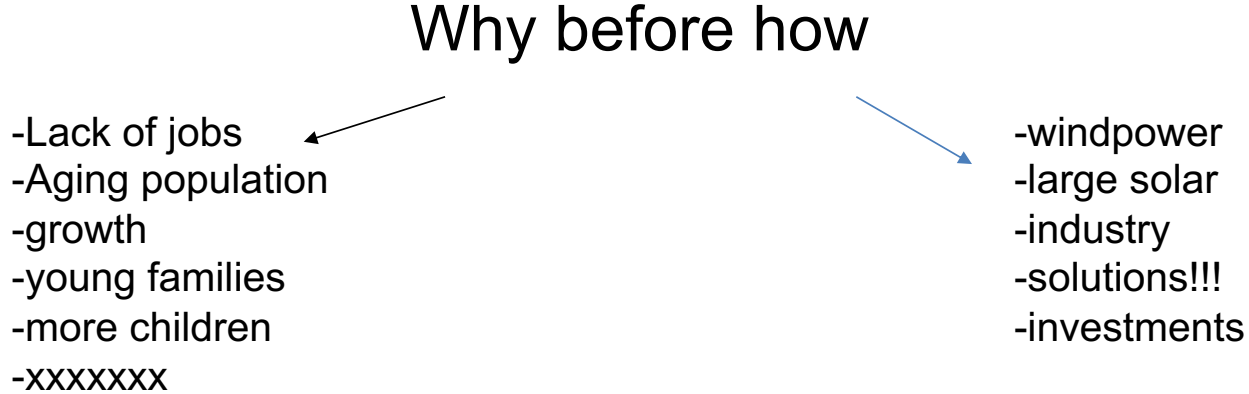
practice

Action

FC

Purpose - plan

Why before how

- 
- Lack of jobs
 - Aging population
 - growth
 - young families
 - more children
 - xxxxxxx

- windpower
- large solar
- industry
- solutions!!!
- investments









**An experiment
does not have
to be perfect
– experiments
can open the way
for something
radically new.**

common ground

different reason







Biomass from farm waste









ZOE
AY 43 068

ZOE
AY 43 105

ZOE
AY 43 099



SAMSØ



 CleanCharge

Samsø gets the world's first biogas-ferry



09-10-2013 12:00:00



Samsø will be free of fossil fuels by 2030. The municipality has decided that the island's new ferry, SamsøFærgeren, will be the first in the world to sail on biogas. It is part of the municipality's plan to be free of fossil fuels by 2030. Already in 2007, the island was self-sufficient in renewable energy.

"The special thing about it is that it will be the EU's first gas ferrv. Initially, we'll be supplied on the gas from tank, and it becomes the world's first biogas ferry,



INTRO

HERE — THE SIGNIFICANCE OF PLACE

**A strong,
sustainable
and robust
community
must share
locality, activity
and mentality!**



