



# It's official – a King will visit Samsø!

By Director of Samsø Energy Academy, Søren Hermansen



King Willem-Alexander and Queen Maxima.

It is not every day a King visits Samsø. But on March 18 that is what happens. The Dutch King Willem-Alexander and Queen Maxima are in Denmark on an official state visit representing Holland.

The royal family had seen a TV documentary shown on Dutch TV called "Power to the People", in which Samsø plays a significant part. It shows Dutch communities working much in the same way as Samsø with an engaged community ready to work towards sustainable development. The movie is great and translated into several languages, Japanese among these. H.M. Kong Willem-Alexander and H.M. Queen Maxima were so enthusiastic about the documentary they wanted to visit Samsø. Now that they will visit the island on official business, it is polite to meet with the chief of the tribe – the Mayor. To the surprise and joy of the ambassador, he found out that the mayor is a fellow countryman. Birthe

During their visit in Denmark, the royal couple will

visit Crown Prince Frederik and Crown Princess Mary. The Crown Prince couple has not officially visited Samsø before, but has decided to visit this march. The Energy Academy was part of the Crown Prince's delegation going to Fukushima three years ago in order to show Denmark's support for the victims of the tsunami and to host an energy conference in Tokyo. This resulted in an open invitation for the Crown Prince to visit Samsø to see for himself what the Japanese are so excited about. And now the time has come. The Crown Prince will show the Dutch King Samsø as an example on a sustainable energy community.

It will be quite something, the visit on March 18. We are looking forward to it - it might be a short visit, but hopefully worth the commotion.



# From black marbles to a golden crown

Samsø is well underway with the goal to become fossil free by 2030 and that has resounded outside of Denmark. Locally, Samsø is working on replacing oil-fired boilers for more sustainable energy solutions and globally, there is a demand for knowledge about how a local community develops in a more sustainable direction. Here on Samsø, we are happy to share our experiences - also with royal visitors from far and near.

## "Black marbles"

By Project Manager end Energy Advisor of Samsø Energy Academy, Michael Kristensen

At Samsø Energy Academy we have a jar filled with black marbles.

In the movie "Black Marbles" by Anders Matthesen, white and black marbles are awarded to the realtor Alex Klien, who has been in a car accident. Suddenly, he finds himself in the middle of a quiz show about his personality and personal traits. The number of good, white marbles or bad, black marbles determine wether or not he will survive. Fortunately, it is not as dramatic when it comes to the Energy Academy's jar of marbles!

On Samsø, we use the jar of black marbles to monitor how many oil-fired boilers have been replaced with renewable energy sources such as heat pumps or district heating. In 2009 when we started putting marbles in the jar, around 1/3 of the houses on Samsø were heated by oil-fired boilers, equalling 750 households. In 2011 we passed 100 replaced oil-fire boilers. So far, we have put 250 black marbles in the jar and of course, we hope some people have replaced their boilers without asking us for help.

"Michael has been a great help and we could just call and consult with him", says Birthe Kleis Poulsen and Herman Eckhardt from Permelille. They had seen an ad in the "Scrap your oil-fired boiler"-campaign running in 2011 and they wished to set up a new, environmental-friendly and cheaper heating solution.

During the campaign, seven times more applicants signed up on Samsø compared to the rest of the country. This indicates how invested the people of Samsø are in eco-friendly solutions.

Birthe and Herman had talked about the possibility of combining geo-thermal heating and solar heating. They called the Energy Service (Energitjenesten), <a href="http://www.energitjenesten.dk/">http://www.energitjenesten.dk/</a> located at the Energy Academy, to seek advice. Here, they talked to Michael Kristensen, employed as Energy Advisor in the Energy Service, to council people on energy-efficient solutions in private households.

Estimated cost and savings when replacing an oil-fired boiler. Source: bolius.dk

# District Heating:

- Price: 25.000-50.000 DKR (USD 3.500-7.200)
- Savings when replacing oil-fired boiler: 30-50 percent

#### Geothermal heat pump:

- Price: 100.000-150.000 DKR (USD 14.500-22.000)
- Savings when replacing oil-fired boiler: Up to 50 percent.

## Air to water heat pump:

- Price: 70.000-100.000 DKR (USD 10.000-14.500).
- Savings when replacing oil-fired boiler: Up to 50 percent.

It is important that the heating solution is fit for the specific household and that it correspond with the energy consumption.

Planning a meeting where we talk about the energy consumption makes us able to consider the pros and cons about different solutions and necessary investments.



The consumers should be prepared in order to ask local craftsmen the relevant questions. "Michael advised us to install air to water heat pump instead of solar heating. Our consumption was too limited for solar heating to pay off. With this solution money was left for us to re-insulate the house", Birthe and Herman say. "Also, when we were unsure about how to apply for the subsidy for replacing the boiler, Michael stopped by and helped us" Birthe says with a laughter.

By now 4 years have passed and Birthe and Herman have not regretted replacing their oil-fired boiler. "Everything works great; we had no problems heating the house or water. We worried that the heating pump would make noise, but it hasn't bothered us or our neighbors. Our worry was fortunately unfounded. We spend much less money on heating than we used to", Birthe concludes.

At the Energy Academy, a new jar and marbles have been bought and our hope is in the future to fill up this jar as well in order to reach our goal of becoming a fossil free island in 2030.

Michael Kristensen, Energy Advisor