



Students Ryan Bogaars (Netherlands) (left), Diego Felipe Martinez Benavides (Colombia), Rumen Rusev (Bulgaria) and Malgorzata Olesiewicz (Poland) was in the winning group. Additionally attended John Benn from Ghana via Skype when the task should be solved. Photo: Speech Bærland / ISES 2013

Did a country's energy problems at 16 hours

The students won \$ 5,000 for the UK energy solution, used the prize money on beer.

International Student Energy Summit (ISES)

- The world's energy conference for students.
- Was first held in Calgary in 2009.
- Held every two years. In 2011 it was held in Vancouver.
- Over 400 students attending the conference in Trondheim 13.-15. June. In addition, around 100 lecturers, journalists, partners and scientific personnel entered.
- The seminars take place in physics built on Gløshaugen.

The student energy ISES conference, which was held at NTNU in Trondheim last week, 30 students were given the opportunity to win \$ 5,000.

The challenge was not small. "Design and present a credible energy scenario for the UK in 2050," was the problem. The Statkraft was standing behind the competition, and the United

Kingdom was chosen because the country gets most of its energy from coal and nuclear power, which eventually have to be closed.

Hard work

The 30 students had applied to participate in the contest in advance and were divided into five teams. Most participants were international students, only one Norwegian student came through the cracks.

The winning team consisted of students from the Netherlands, Colombia, Ghana, Bulgaria and Poland. They worked intensively and put together a group of Gløshaugen for a total of 16 hours Thursday and Friday. One of the winning students could not get to the conference, and had to participate via Skype from South America.

- We were given a deadline of 25 hours to solve the task. To come up with detailed solutions for a whole country in such a short time is impossible, so we made a more general sketch. But we came up with a good solution, says Dutch Bryan Bogaars.

Windmills and carbon tax

Participants came from a variety of disciplines. In Bogaars winning group were both law students, business students and engineers. He says that the study background helped to determine the results that were presented.

- We focused a lot on the tax rules that we want to change. We proposed a carbon tax that applies to all industries, but that is relatively low. Revenues to be used for investments in renewable energy and the introduction of more environmentally friendly fuels in the transport sector, says Bogaars.

Although Bogaars engineering student at the Technical University of Delft. A large part of the energy production required the group that would come from wind power.

- We presented a scenario where 49 percent of energy comes from wind power. This was one of the things the jury was least excited about, since wind power is an unstable energy source. But we want to combine wind power with gas turbines, which can take over on days with little wind, says Bogaars.

Impressed chief

Bjorn Drangsholt, CEO of Statkraft UK, was pleased with the reports from students.

- After observing the students for two days, I have to say I think a little more optimistic about the future. These young people have really a good approach to both global climate change and the challenging energy issues that face the UK, writes Drangsholt in an e-mail adressa.no.

Spent money on beer

Friday was held gala dinner where the money winners were announced. Bogaars and the other students in the winning team received \$ 1,000 each as prize. Bogaars says that most of his prize money never left Norway.

- I promised so many that I should treat beer on them if I won, that most went along with it. Beer prices in Norway are quite stiff. I still have something left, but not a huge amount, he said.