



How can Norway create green competitiveness?

As we said already at the press conference in June 2015, when the Government gave us this task, this question is easier to ask than it is to answer.

Nonetheless, we happily accepted the assignment. We consider it a privilege to get to provide recommendations on how an entire country can adapt to become a low emission society while also creating value and new jobs. But it is also a nearly insurmountable task for a small committee.

"It is about building the country, but building it green."

Erna Solberg. April 21, 2016

We have tried to solve this task to the best of our ability. Luckily, we have been assisted by large parts of the Norwegian society. A significant part of our work has consisted of having an extensive dialog with important industries, businesses, organizations and academia. Here, we have received several useful contributions to our work. Eleven sectors have taken on our challenge to formulate roadmaps for green competitiveness: What actions are needed from politicians and authorities, and what can industries and business do themselves, to make Norway a competitive low emission society by 2050? This is a substantial result of the committee's work, and a framework from which to build on in the future.

There is no simple recipe for how to achieve green competitiveness. Our ambition has not been to present all imaginable steps on the road towards 2030. Or to 2050. Nor have we calculated the consequences of each and every one of our recommendations. That is simply impossible in just over a year by a two person, part time committee with a small secretariat. Such a task would be too big and too complex. But we have tried to outline a space of possibilities and point out a direction, to accelerate the effort to realize the green shift and achieve green competitiveness.



Taking the climate challenge seriously is not free of cost. However, failing to act in time will be even more costly. Those countries that are best at converting the challenge of becoming a low emission society to opportunities will be the most competitive ones in the coming decades.

Norway has a good starting point. Many of our proposals are about doing things that are already done in Norway, but in smarter ways. More integrated. More effective. Removing barriers. Changing the mentality to inspire courage to take on necessary risks.

We propose 10 principles to form the basis for policy-making. By agreeing on such a set of basic principles, the political Norway would provide a broad political base for the green shift. This would give all stakeholders the necessary trust in that the direction has been set. That is crucial for taking on the task with full force.

Furthermore, we have a range of recommendations the cover all sectors, followed by recommendations addressing specific critical sectors. Some proposals concern the behaviors and personal responsibilities of individuals themselves. Such a major change cannot, and in our opinion should not, come merely through politics – top-down. The active cooperation from and the responsibilities of individuals, both in private and at work, are essential in a democratic society.

Norway was happy with the Paris Agreement. Finally, the world agreed to take action. Now, words must become practice; attitude must become action. By following the recommendations and direction of this report in the coming years, Norway will be well on its way towards green competitiveness.

The Norwegian Government's Expert Committee for Green Competitiveness. Oslo, October 28, 2016

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GREEN COMPETITIVENESS

CHANGE IS NECESSARY

- Climate change is accelerating and the Paris Agreement demands bold action. Norway is committed to a target of a minimum of 40 % reduction in greenhouse gas emissions by 2030 (compared to 1990) and to becoming a low emission society by 2050. Norway's emissions are currently higher than they were in 1990, and rapid change is required.
- Global trends impact Norway's future opportunities. The world's population is growing rapidly, becoming older, richer, and more urban. The pressure on global resources is on the rise and resource efficiency is important for future competitiveness. New technologies and new business models provide new opportunities. The prices for low emission technologies are falling, leading to a rapid growth in renewable energy. An increasing number of countries are now focused on green initiatives to compete in a carbon constrained world.
- The petroleum sector will no longer be the same growth engine for Norway's economy. Production has almost certainly passed peaked levels. A de-carbonization of the global economy will eventually reduce the demand for oil and gas. Signs of a future without oil and gas are now visible; renewable energy and electric vehicles are becoming price competitive.
- Norway needs to compensate for the expected decline in petroleum related industries with new green jobs. Green competitiveness means creating value and full employment while simultaneously reducing greenhouse gas emissions. Both new and existing occupations must transform themselves to compete in this low carbon, resource-efficient future.

THE NATIONAL STRATEGY PROCESS HAS BEGUN

- In line with our mandate, we have challenged "all of Norway" to think strategically about the transition to a low carbon society. Our basic premise is that the world takes the challenge of climate change seriously and is moving towards a low emission society. In our dialogue with representatives from Norway's main industries, businesses, organizations, and academia, we challenged them to envision their sectors in a truly low emission society. This challenge gained increasing relevance following the Paris Agreement, declining costs for renewable energy and low oil prices.
- Major segments of the business community accepted our strategic challenge. Leading companies from eleven different sectors have made "roadmaps to 2050". For most sectors, the vision is maintaining global competitiveness while achieving zero emissions by 2050. There has been cooperation across and within industries to reach consensus on a strategic plan. A national bottom-up strategy process is already underway – across the country and in many industries.
- The roadmaps create a new foundation from which to build on in the future. Some examples include:
 - The processing industry aims to double production and achieve negative emissions by 2050. This ambitious industry roadmap has moved the national discussion. Rather than focus on how the industry compares with its peers in other countries, the industry is now focused on how it can gain competitiveness by reducing its own carbon emissions. These reductions will be driven by developing new processing technologies and investing significantly in R&D.