

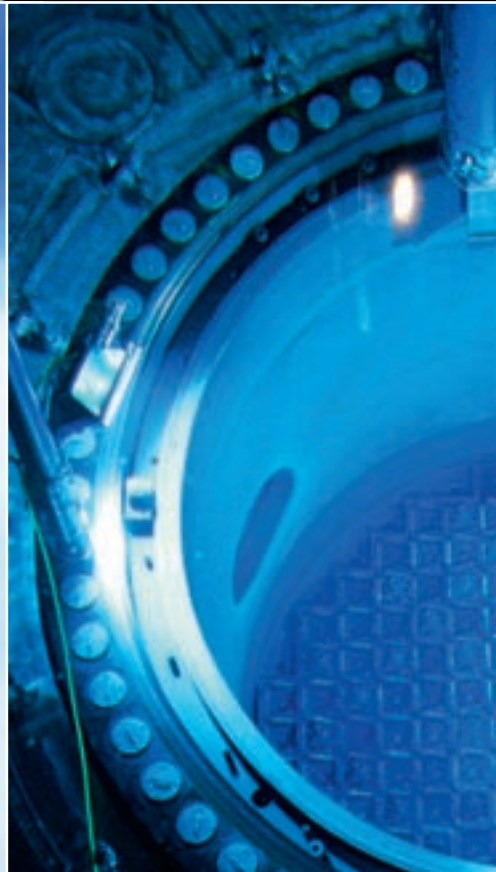
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**The challenges of investing in new energy**  
The challenge is to generate energy with acceptable environmental impact at prices customers and society are willing to pay. Vattenfall's ambition is to develop its energy generation portfolio towards low-emitting energy sources.



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**Technology as a tool for reducing emissions**  
Since the 1970s Vattenfall has been continuously investing in emission-reducing technology and has virtually eliminated emissions that have a direct effect on the environment, such as sulphur dioxide and particles. The plan now is to do the same with carbon dioxide.



## WHAT WE DO

Vattenfall is investing heavily in solutions and initiatives to shape energy systems of the future that will support sustainable development of society. The following five sections provide in-depth descriptions of Vattenfall's work and challenges related to making this change happen.



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**Coal-based power – new and improved**  
Despite all efforts on finding alternative sources of energy, coal will continue to play a major role in secure energy supply in the foreseeable future. However, it must be used as efficiently as possible and requires the introduction of new technologies to reduce CO<sub>2</sub> emissions. Vattenfall is investing to replace old coal capacity with new capacity.



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**Efficient use of nuclear fuel**  
Significant progress has been made in the use of nuclear fuel in energy generation. Today nuclear fuels are much more advanced and efficient thanks to improvements in fuel fabrication and in how fuels are used in generation. This has resulted in less mining and a decrease in the resources needed, as well as a reduced amount of waste generated.

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**A diverse Vattenfall performs better**  
Diversity is a necessity as well as opportunity to build a more profitable, effective and attractive Vattenfall. Having a diverse workforce is essential for creating an innovative performance-driven culture that supports Vattenfall's ambition to grow and lead the development of new energy technologies. Diversity also makes Vattenfall better equipped to understand different customer groups and their needs.

