



Energy

Roche's position

Energy is indispensable to all human activities and to life itself. We all depend upon reliable energy supplies, and we expect energy to be available at all times, and to be affordable, safe and sustainable. However, there are a number of issues and concerns related to energy. These issues and concerns, their impact on Roche and the measures Roche is taking to address them are the subject of this position paper.

At Roche we know that we must act now to ensure a sustainable energy future. Waiting until the last minute is not an option, as this is likely to necessitate more dramatic, more disruptive, more expensive change. Our focus is on improving the energy efficiency of our operations and increasing our use of energy sources and technologies with less environmental impact, because these are the ways for us to make the biggest positive difference. When reasonable, Roche invests in renewable energy technologies and purchases 'green' energy. Asking for innovative, sustainable and energy efficient technologies and products will encourage suppliers to develop and commercialise such technologies and products.

Roche expects to see a shift away from non-renewable energy. The energy industry will have to provide reliable access to a well-balanced mix of technologies and geographically dispersed energy resources. New and innovative technologies will have to be developed. All promising options should be pursued, and energy technologies selected with regard to their human, environmental and economic impact. Decentralisation and liberalisation of energy markets will help secure access to sustainable, safe, reliable and affordable energy. Liberalised and competitive markets will be vital to Roche's future business activities.

Roche prefers voluntary action. Should regulations be introduced, Roche would welcome flexible frameworks that allow sufficient time and technical, organisational and procedural freedom for change and development. For example, reasonable transition periods are vital to enable appropriate action to be taken in the course of normal capital replacement cycles. Roche also believes that appropriate frameworks are needed to support research and development, to encourage businesses to innovate and develop new technologies and to promote the utilisation of sustainable energy technologies and renewable energy.

Energy is an issue of global proportions that needs to be addressed by all of us, on a global scale. At Roche we are strongly committed to contributing to a sustainable energy future.

The global situation

Approximately 90% of the world's energy demand is currently supplied by non-renewable sources. With world consumption increasing, energy shortages are inevitable unless we step up conservation efforts and rely more heavily on alternative energy sources. The rush for limited resources has already begun, resulting in a significant rise in energy prices, and this upward trend is expected to continue. There is a marked geographical and geopolitical imbalance between the world's net energy consumers and its net energy suppliers. Countries that are net energy importers may become increasingly vulnerable to price fluctuations and supply interruptions as a result of a number of factors, including unfavourable political and regulatory developments, unilateral economic measures and political instability or conflicts in various parts of the world. Energy is a powerful weapon for advancing political interests.

From an environmental perspective, all activities involving energy production, conversion and transportation have either direct or indirect adverse impacts. Obvious examples include the destruction of natural resources and habitats, the contamination of soil and water, (hazardous) waste landfilling and air pollution. Burning fossil fuels for energy generates air pollutants like carbon oxides, sulphur dioxide, nitrogen oxides and respirable dusts, all of which have negative impacts. For example, CO₂ emissions caused by human activities are widely believed to be one contributor to global warming and climate change. For more on this topic, see our position paper on climate change ([link below](#)).

The situation at Roche

Like any company, Roche needs energy to operate. We use energy primarily to heat and cool production processes, to run machinery and equipment, to maintain controlled air environments, for comfort heating and cooling and for transportation and business travel. Energy is typically consumed as electricity, steam, hot water, cooling water, heat transfer fluids, compressed air and fuels at Roche sites, which have their own facilities for producing end-use energy forms from primary energy sources.

Energy, of course, costs money, so it makes good business sense for us to use it as efficiently as possible. But cost-efficiency is only part of the story. Energy conservation is also an important part of sustainable development at Roche because of its positive societal and environmental impacts. Sustainable development has a long history at Roche. Impressive examples include award-winning new buildings designed to high sustainability standards (e.g.  ). For more information on Roche's sustainable development efforts, see our annual reports ([link below](#)).

Each year Roche publishes an annual report that includes energy consumption data from all Group companies and sites. These data are used not only for statistical evaluations and trend analyses, but also to establish energy savings targets that are part of continuous improvement efforts. The current target for the Roche Group is a 10% increase in energy efficiency between 2005 and 2010.

All Roche companies and sites are required to implement energy conservation processes. These are coordinated efforts that control and direct the use of energy across business functions, units and departments. Furthermore, the design of new energy users, such as equipment, machinery and buildings, must comply with energy efficiency standards. This saves energy in the most economical way, by getting it right the first time instead of having to make costly retrofits at a later stage. But all Group companies and sites are also required to optimise existing plants, buildings, installations, and processes in order to meet applicable best practices. To promote the dissemination of best practices, examples of effective energy saving measures are shared via a corporate 'energy savings catalogue' (e.g. [\[link\]](#) [\[link\]](#)). Roche's energy conservation efforts result in higher resource productivity, i.e. in higher outputs per unit of resources used. This not only helps to compensate for rising energy costs, but also reduces the environmental impact of our operations and curbs depletion of non-renewable energy resources.

Roche increasingly relies on more environmentally friendly primary energy sources. Natural gas supplies most of the Group's current energy needs, with fuel oils accounting for only a small proportion of energy use. Roche successfully phased out the use of coal in 2005 ([\[link\]](#)). When circumstances permit, Roche invests in technologies using renewable energy sources such as solar and geothermal energy ([\[link\]](#)). Group purchases of renewable energy from outside suppliers ([\[link\]](#)) remain fairly limited at present owing to market and contractual constraints. More details on the Roche Group's energy consumption can be found in our annual reports (*link below*).

In our pursuit of sustainability, we make every effort to prevent our operations from adversely impacting people, the environment or our business. This means systematically analysing and evaluating all risks associated with energy-related activities and taking appropriate measures to reduce potential risks to acceptable levels. Using the same evaluation scheme, energy supply chain risks that could affect business continuity are also evaluated, and if risks are deemed unacceptable, appropriate back-up solutions are implemented.

More information

Roche Group safety and environmental protection reports (2000–2002) and sustainability reports (from 2003 on) http://www.roche.com/investors/annual_reports.htm

Position paper on greenhouse gases and climate change http://www.roche.com/sus_pos-greenh.pdf

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