

## Sustainable Facts & Figures

### What is climate change?

- Since 1970, a warming of the Earth's atmosphere has been observed, which can no longer be explained by natural climate fluctuations. According to the World Meteorological Organization (WMO), 2001 to 2013 was "the warmest decade ever recorded in all continents of the globe".
- The consequences: glaciers are steadily melting, while sea levels are continually rising. The ecosystem is being thrown out of balance, inevitably leading to flooding, extreme droughts and pest infestations.

### How is climate change being addressed worldwide?

- Climate change is a global problem requiring global action.
- The Kyoto Protocol that came into effect in 2005 required developed nations to cut their greenhouse gas emissions to 5.2% below 1990 levels by 2012. After a second commitment period was agreed in 2011, the UN Climate Change Conference held in Qatar in late 2012 decided to extend the Kyoto Protocol to 2020.

### How does this affect industry and industrial plants?

- Developed countries are using a combination of incentives and penalties to move their economies in a climate-friendly direction.
- Emissions trading schemes, where industries pay for their greenhouse gas emissions, are likely to drive up energy costs. This is because the EU Commission intends to raise the price of CO<sub>2</sub> certificates substantially to promote investment in clean technologies.
- All businesses will see electricity prices rise as power generators pass the costs of emission allowances on to consumers. Added to that, the uncertain supply situation has generally caused more volatility in energy prices.
- Prices of fuels like oil and gas have continually increased in recent years and are unlikely to fall significantly in the near future.
- As a consequence, businesses of all sizes in all industries need to improve their energy efficiency.

### What does this mean for CP and its pumps?

- Ever since 1948, CP has been committed to producing highly reliable and safe pumps, using both sealless magnetic drive and double mechanical seal technology.
- Back in 1999, CP already realised that industry would face the major challenge of improving sustainability and energy efficiency. Acting accordingly, the company placed strategic focus on the energy efficiency of safe pumps. This has given CP a pioneering role in energy-saving pumping systems.
- In recent years, CP has hydraulically optimised numerous pump systems using CFD modelling software, increasing pump efficiency by up to 30%.
- CP is continuously seeking ways to improve energy efficiency even more. This goes hand in hand with utmost safety and reliability because CP sees safety as a complement to, and not a substitute for, energy efficiency.



### What does this mean for CP's customers?

- More and more customers are embracing the opportunities offered by improved energy efficiency. They are taking a proactive approach rather than waiting to be forced into action by soaring electricity prices, with or without government intervention.
- Energy efficiency cannot happen overnight, but is the result of a determined effort. A good place to start is with a thorough analysis of pumps and pumping systems.
- Cleaner pumps, cleaner planet: CP firmly believes that sustainable research, thinking and action always pay off for everyone.

### Useful Links

#### [World Meteorological Organization \(WMO\)](#)

A specialised agency of the United Nations, which originated from the International Meteorological Organization, founded in 1873.

#### [United Nations Framework Convention on Climate Change \(UNFCCC\)](#)

General information on climate change and the Kyoto agreement (in effect since February 2005).

#### [The United Nations Intergovernmental Panel on Climate Change \(IPCC\)](#)

Assessments of scientific, technical and socio-economic information.