



1997

Greenpeace pioneers Greenfreeze technology

Greenpeace pioneers a refrigeration technology that is neither ozone-depleting nor climate-killing – and the world adopts it.

THE THREAT

Until the early 1990s virtually all domestic refrigerators used ozone-depleting chemicals as refrigerants. When the hole in the earth's ozone layer was discovered, these chemicals – known as CFCs – were banned. Unfortunately the alternatives that were then adapted - HFCs - while less damaging to the ozone layer, turned out to be harmful in a different way. They are powerful greenhouse gases that contribute massively to climate change.

THE GREENPEACE WAY

Greenpeace felt that there had to be an alternative and started looking. In 1992 it found a medical institute in Dortmund, Germany, that had come up with a suitable mix of butane and propane that was neither ozone-depleting, nor climate-killing. Immediately, Greenpeace set out to find an industrial partner. DKK, a company that had been producing refrigerators for 50 years and was the leading household appliance manufacturer in the former East Germany, was prepared to take a financial risk and started building a prototype. Greenfreeze was born. The industry claimed there was no market for such a product, so Greenpeace went to the public: within a matter of weeks, 70,000 people had pre-ordered. In 1993 the first Greenfreeze fridge rolled off the assembly lines in Germany.

UNITED NATIONS UNEP OZONE AWARD

The industry changed quickly and even joined the Greenpeace campaign to spread the technology. Today, around 35 million domestic Greenfreeze refrigerators are produced worldwide, roughly a third of all fridges produced annually. The technology pioneered by Greenpeace is now being produced by all the major European, Chinese, Japanese and Indian manufacturers. Major European companies, including Siemens, Liebherr and Miele are marketing Greenfreeze. So far the technology has spared the planet 450,000,000 tonnes of CO₂ – more than the combined annual emissions of The Netherlands, Austria and Greece. Big industry users, most notably Coca-Cola, McDonald's and Unilever, have also started switching over to HFC-free technologies. In 1997 Greenpeace was awarded the United Nations UNEP Ozone Award for the development of Greenfreeze.

NEXT BIG STEP

Greenfreeze was part of a much broader campaign on F-Gases, which Greenpeace has been working on for 20 years. The campaign, which included efforts to bring the issue to the public in a catchy video, catalysed a groundbreaking commitment when in 2010 the 400 companies of the Consumer Goods Forum of the US agreed to climate-friendly refrigeration from 2015. This year will see the campaign's next big step: SolarChill, another Greenpeace-developed technology, will bring the benefits of refrigeration to people without reliable supplies of electricity, allowing vaccine storage for example. Advanced in cooperation with the World Health Organization (WHO), UNICEF and many others, SolarChill aims to show, just like Greenfreeze did before, the triumph of "can do" over "can't do".

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