

INTRODUCTION

All over the planet, McDonald's and Coca-Cola sell hundreds of billions of burgers, milkshakes and soft drinks to hundreds of millions of people. They are so successful that they are the most recognised brands in the world. Increased profit is the driving force for an ever-expanding share of the world's stomachs.

At the same time millions of people are showing a growing concern for the increasing environmental devastation of the planet and the responsibility of multinational companies in causing this problem.

The planet is facing a climate crisis due to the increasing use of greenhouse gases. The need to abandon fossil fuels for clean energy sources is becoming an accepted reality. Hydrofluorocarbons (HFCs), one of the most powerful greenhouse gases ever invented by humankind, are thousands of times more powerful than carbon dioxide, the main greenhouse gas. Despite the availability of alternatives, HFCs are the refrigerant gas that McDonald's and Coca-Cola use to chill billions of drinks and other food products worldwide. Their global HFC use is intensifying the global climate crisis.

The worlds of profit and planet are set to collide at the Sydney 2000 Olympic Games, even though a basic principle of the Olympic Movement is to preserve and protect the environment.

A central component of the Sydney Olympic bid was a set of official Environmental Guidelines. They are the yardstick against which the success of the Green Games will be judged by the world.

In this report, Greenpeace reveals that leading Olympic sponsors McDonald's and Coca-Cola are planning to contravene the official Environmental Guidelines in Sydney in September 2000 by using HFCs throughout the site. This is despite promises to the world community by Australian Games organisers that the Sydney Games would be HFC free. This report also includes, by the way of contrast, developments in Unilever, another of the sponsors, to meet the HFC challenge.

McDonald's and Coca-Cola are exploiting their sponsorship of the Olympic Games to increase sales and profits. Increased sales result in further global HFC pollution.

Greenpeace is asking Coca-Cola and McDonald's to use the opportunity of the first Green Games to announce a worldwide phase out of HFCs, to be completed by the 2004 Athens Summer Games.

EXECUTIVE SUMMARY

OLYMPIC IDEALS

The International Olympic Committee (IOC) has placed the environment as the third dimension of Olympism, the first and second being sport and culture.

At the centennial Olympic Congress in 1994, the principles and values that should lead the Olympic Movement towards the third Millennium were evoked. This included: "The necessity of respecting the environment must figure among the Fundamental Principles of the Olympic Charter."¹

The Olympics could not happen without the corporate sponsors, known as The Olympic Partners (TOP). Corporate sponsors are synonymous with the Olympic Movement and its ideals – they provide 30% of the entire Olympic Movement's revenue. McDonald's and Coca-Cola are two of the 11 leading TOP sponsors. TOP Partners are the "worldwide supporters of the Olympic Movement"² whose objective, as set by the IOC President, is "to promote Olympism and Olympic ideals."³

THE SYDNEY 2000 GREEN GAMES

The 2000 Olympic Games were awarded to Sydney partly because of the environmental credentials of the bid. A central component of the Sydney bid to the international community was an agreed set of green guidelines - the official Environmental Guidelines for the Summer Olympic Games. These Guidelines are seen by the IOC as "a spirit of goodwill to further the fundamental principles of the Olympic Charter."⁴

The Environmental Guidelines for the Summer Olympic Games call for the "use of CFC, HFC and HCFC-free refrigerants and processes."⁵

According to the Sydney Organising Committee for the Olympic Games (SOCOG), the success of the Green Games "will be determined by the extent to which everyone involved in the Sydney 2000 Games embraces the environmental vision created by the Environmental Guidelines and integrates it into the way we do business."⁶

HFCs- POTENT GLOBAL WARMING GASES

HFCs are chemicals invented as a substitute for CFCs and HCFCs - ozone-destroying gases that are being phased out worldwide. HFCs are mainly used in the refrigeration and air conditioning industry.

HFC are one of the most potent global warming gases ever invented. They are manufactured by the same companies that made CFCs. On average over 20 years, one tonne of HFC cause 3300 times more climate change destruction than one tonne of carbon dioxide.

In 1997 the United Nations Kyoto Protocol on Climate Change was extended to include HFCs, identifying them as potent greenhouse gases whose emissions must be reduced by industrialised countries. According to United Nations projections for the year 2040, the global HFC market could reach 1.35 million tonnes per year – the equivalent of 15% of current fossil fuel emissions.

In Denmark the Government will phase out HFCs by 2006 and has banned HFCs for commercial refrigeration equipment from 2003. The UK Government policy is to phase out HFCs as quickly as possible. The Australian environment department, Environment Australia, states that HFCs "pose an issue for Australia's efforts to meet our international emissions commitments."⁷

HFCs also cause climate change and toxic pollution when manufactured, have dangerous health impacts and decompose in the atmosphere into the persistent toxin trifluoroacetic acid (TFA).

GREENFREEZE SOLUTIONS

Natural refrigeration gases and systems - known as Greenfreeze - can be used instead of HFCs. There is a wide range of commercially available, cost effective Greenfreeze systems that are available for supermarkets, pubs, restaurants, offices, in ice cream and drinks chillers, and freezer cabinets and air conditioning.

In 1992 Greenpeace began a successful campaign to introduce Greenfreeze hydrocarbon technology into mass production for domestic fridges. Since then about 45 million Greenfreeze refrigerators have been manufactured and the annual production of Greenfreeze fridges is now 12-15 million. In contrast, McDonald's has two Greenfreeze restaurants in the UK, and Coca-Cola has 100 Greenfreeze systems in use, at the Olympics site.

Greenfreeze has been backed by a wide number of businesses, politicians and institutions like the UN and World Bank, and portrayed as an exemplar of tangible progress between business and the environment. Companies such as the UK food chain Iceland and international furniture group Ikea have recently announced a corporate wide conversion to Greenfreeze technology.

GREEN CORPORATE RHETORIC VERSUS REALITY

McDonald's "believes it has a special responsibility to protect our environment for future generations... whose quality of life tomorrow will be affected by our stewardship of the environment today."⁸

Coca-Cola states that: "Our commitment to the environment is based on the principle that we shall conduct our business in ways that protect and preserve our environment."⁹

These responsibilities and principles are virtually ignored because of the systematic use by both companies of HFC refrigeration technology to sell hundreds of billions of products.

Both companies operate behind a wall of secrecy. Both have refused to disclose any basic information on the number of refrigeration systems they own and operate, the amount of HFC pollution they are creating now and will in the future, and both have refused to set deadlines to convert to environmentally safe refrigeration alternatives.

MCDONALD'S

As a food retailer with more than 25,000 restaurants in 118 countries, providing 40 million meals a day, McDonald's is heavily reliant on refrigeration to conduct its business. Its current policy is to use HFCs within its refrigeration systems.

McDonald's opens new restaurants at a rate of 1500 every year, an average of 30 every week. It has built only two restaurants that run on Greenfreeze instead of HFCs, both in London's Millennium Dome - a paltry 0.00008% of its stores worldwide.

During the Sydney Games, McDonald's will operate seven restaurants, employ 1100 staff, and is hoping to break world sales records. The largest restaurant at Olympic Park seats 5000 people and will sell up to 25,000 burgers every day. The Olympic Games restaurants will be McDonald's "biggest single project"¹⁰ and are set to use HFCs.

To increase profit, McDonald's is marketing itself throughout 120 countries as a sponsor of the Olympics ideals. Yet it is undermining the environmental ideals of the Olympics by increasing global HFC pollution.

COCA COLA

In 1998 Coca-Cola sold about 380 billion drinks, a rate of 721,461 every minute. Its products "account for 2% of the world's daily fluid intake."¹¹

The 1996 Atlanta Summer Games were known as the Coca-Cola Olympics. Coca-Cola invested US\$350 million in the 1996 Games for sponsorships, advertising and marketing.

Worldwide, Coca-Cola has millions of refrigeration units, and its official policy is to use HFCs. Greenpeace estimates that even in the most conservative scenario Coca-Cola has 14 million refrigeration units worldwide, most of them using HFCs.

Only Coca-Cola's drinks will be sold at all Olympic Games staged between now and 2008. Coca-Cola is the 'Official Soft Drink', PowerAde is the 'Official Sports Drink' and Mount Franklin the 'Official Water'.¹²

Coca-Cola expects to sell more than 11 million drinks during the 2000 Olympic and Paralympic Games. Of the 1800 pieces of Coca-Cola refrigeration equipment at the Games, only 100 will be Greenfreeze fridges. This means 94% or 10.34 million of Coca-Cola's drinks at the Sydney Olympics will be cooled by global warming HFC refrigeration. And with an estimated 14 million refrigeration units worldwide using HFCs, the application of Greenfreeze by Coca-Cola worldwide is virtually undetectable statistically.

UNILEVER

Unilever is the world's biggest ice cream company, making such well-known brands as Magnum. A Unilever product is bought 150 million times a day.

In 1997, as part of the Kyoto Protocol discussion to limit HFCs, Unilever collaborated with Greenpeace to announce a large-scale trial and deployment of Greenfreeze hydrocarbon refrigerants, inside ice cream freezer cabinets. These trials

involve refrigeration equipment across a range of different countries and operating conditions.

Through continuing dialogue with Streets (the Unilever company) in Australia and Unilever in the UK, the current

situation is that Unilever has made sufficient progress to enable it to make a policy transition towards Greenfreeze and away from HFCs. At the time of writing, Unilever is yet to announce a transition to Greenfreeze refrigeration publicly.

GREENPEACE DEMANDS

Greenpeace is calling on the Olympic sponsors to:

- commit to 100% Greenfreeze technology at the Sydney Olympic Games, and all future Olympic Games;
- abandon their corporate refrigeration policy of HFC use;
- specify all new equipment to be Greenfreeze and implement progressive Greenfreeze retrofitting programmes; and
- abandon all CFC/HCFC/HFC use by the 2004 Athens Summer Olympics.

¹. The Olympic Movement and the environment. IOC (undated)

². www.olympic.org/ioc/e/facts/marketing.

³. www.olympic.org/ioc/e/facts/marketing.

⁴. Turning Green Into Gold: making an environmental vision a reality, SOCOG Environment Report, July 1999, The Context, p10

⁵. Environmental Guidelines for the Summer Olympic Games, Sept. 1993

⁶. Turning Green Into Gold: making an environmental vision a reality, SOCOG Environment Report, July 1999, The Strategy, p19.

⁷. Environment Management strategy for synthetic gas use in Montreal Protocol industries. Draft Environment Australia. December 1999.

⁸. "Our commitment to the environment" www.mcdonalds.com/community/environ.

⁹. www.cocacola.com/environment/main.html.

¹⁰. Athletes on a roll for the Sydney Olympics. Daily Telegraph. 3rd Feb. 2000.

¹¹. CNNfn Industry Watch-Company Overview (cnni.w.newsreal.com)

¹². www.olympics.com/eng/sponsors/index.html.

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THE GREEN OLYMPICS

“The International Olympic Committee (IOC) is resolved to ensure that the environment becomes the third dimension of Olympism, the first and second being sport and culture.”

- IOC PRESIDENT JUAN ANTONIO SAMARANCH, 1986

INTRODUCTION

When the IOC announced that environment would become the third dimension of Olympism, alongside sport and culture, a new era of Olympic responsibility was born for the Olympic Movement, beyond sport and the staging of the Games. The IOC President Juan Antonio Samaranch remarked that: “The environmental policy that the IOC strives to implement is based on the Olympic Movement’s duty toward society and the well being of humanity.”¹

Following the UN Earth Summit in Brazil in 1992, the IOC proclaimed that: “The components of the Olympic Movement thereby undertook to contribute, to the best of their abilities, to making the Earth a safe, hospitable home for present and future generations.”²

At the centennial Olympic Congress, The Congress of Unity in Paris in 1994, the principles and values that should lead the Olympic Movement towards the third Millennium were evoked. This included: “The necessity of respecting the environment must figure among the Fundamental Principles of the Olympic Charter.”³

OLYMPIC CORPORATE SPONSORS

“THE OLYMPICS COULD NOT HAPPEN WITHOUT THE OLYMPIC SPONSORS, KNOWN AS TOP (THE OLYMPIC PARTNERS)”
-IOC⁴

Corporate sponsors are synonymous with the Olympic Movement and its ideals – they provide 30% of the entire Olympic Movement’s revenue. McDonald’s and Coca-Cola are two of the 11 leading TOP sponsors. “The Olympic Movement is proud to have McDonald’s as a Partner. Without the support of companies such as McDonald’s, it would not be possible to stage the Games as we know them today,” said Juan Antonio Samaranch, President of the International Olympic Committee (IOC). TOP Partners are the “worldwide supporters of the Olympic Movement”. As such, one of their objectives set by the IOC President is for “partners to promote Olympism and Olympic ideals.”⁵

THE SYDNEY 2000 GREEN GAMES

“... THE OLYMPIC GAMES IN THE YEAR 2000 WERE AWARDED TO THE CITY OF SYDNEY, AUSTRALIA, PARTLY BECAUSE OF THE CONSIDERATION THEY GAVE TO ENVIRONMENTAL MATTERS”.

JUAN ANTONIO SAMARANCH, PRESIDENT OF THE IOC⁶

In 1992, Greenpeace helped put the Green Games ideals into practise when an open and anonymous contest for the best Sydney Olympic athlete’s village design was announced. The city planned to locate Games venues on industrial wasteland and include the clean up and regeneration of the land as a positive legacy. More than 100 architects and designers, including Greenpeace, submitted plans anonymously. The Greenpeace Olympic Village was car-free, powered by the

sun, used land wisely, allowed only non-toxic and eco-friendly materials and showcased cutting-edge green technologies from around the world.

The Greenpeace design was among the five final winners and the proposal became part of the official Sydney bid in Monte Carlo in 1993 when the city won the right to host the 2000 Olympics from the IOC.

A central component of Sydney's bid to the international community was an agreed set of green guidelines - the official Environmental Guidelines for the Summer Olympic Games. These Guidelines were seen by the IOC as "a spirit of goodwill to further the fundamental principles of the Olympic Charter".⁷

The Environmental Guidelines for the Summer Olympic Games are very precise with regard to refrigeration. They call for the 'use of CFC-, HFC- and HCFC-free refrigerants and processes'.⁸

The Olympic Co-ordination Authority (OCA) is responsible for much of the infrastructure, venue operations and Olympics overlay at Sydney. With less than 200 days to the start of the Games, there is still a significant amount of refrigeration equipment to be installed at the site, including sponsors' equipment. The OCA is bound by the Environmental Guidelines. In a recent environmental assessment of the OCA, Maurice Strong's Earth Council recommend that the "OCA should continue to make the most of its opportunity in the remaining months to avoid ozone depleting and greenhouse gas refrigerants. In the Games fit-out and overlay period, the OCA should make the most of its position to ensure that suppliers, sponsors, caterers respect this fundamental environmental commitment."⁹

CORPORATE SPONSORS AT THE SYDNEY OLYMPICS

"THE EXTENT TO WHICH WE WILL SUCCEED WILL BE DETERMINED BY THE EXTENT TO WHICH EVERYONE INVOLVED IN THE SYDNEY 2000 GAMES EMBRACES THE ENVIRONMENTAL VISION CREATED (BY THE ENVIRONMENTAL GUIDELINES) AND INTEGRATES IT INTO THE WAY WE DO BUSINESS."
SOCOG ENVIRONMENT REPORT, 1999¹⁰

While organisers of the Sydney Games are expected to make the environment their priority, there is a clear and publicly expressed expectation upon the Games' corporate sponsors to achieve environment excellence throughout their operations. SOCOG states¹¹ that; "... Sponsors, merchandisers and spectators can play a role in minimising or avoiding adverse environmental effects from sports activities in all operations and at all levels, including the Olympic Games." "SOCOG's Team Millennium Partners, supporters, providers and Licensees also play an important role in working towards a 'Green Games' through the goods and services they provide."¹² The IOC reinforces the wider needs for the sponsors, telling Greenpeace "I know the organisers of the Games are implementing or facilitating a set of [environmental] policies and actions which will provide long term legacies for the community, for sponsors".¹³

The IOC President has further underlined the importance of the environment as a central part of Olympism. He informed Greenpeace that the IOC's wish is "that there be as much legacy as possible from each Olympic Games and the wish that our environmental efforts keeps progressing and expanding. Sydney will provide a wonderful platform on which we can build into the new Millennium."¹⁴

GREEN GAMES POST 2000

The IOC has made it a stated intention that all Olympic Games be "as environmentally responsible as possible",¹⁵ and that the Sydney 2000 Games have set a benchmark of environment excellence that all future bidding cities must work to meet or beat.

Of the nine cities currently bidding for the 2008 Games, at least five are incorporating environment into their plans and several are seeking input from Australian consultants with experience of the Sydney Games.¹⁶ Athens, host of the 2004 Games has announced plans to poach SOCOG staff to help its own preparations once the Sydney Games are over, and some Australian companies are bidding for work on Athens Games facilities.¹⁷

2

FROM CFCs TO HFCs: OUT OF THE OZONE HOLE FRYING PAN AND INTO THE CLIMATE CHANGE FIRE

**The Danish Ministry of Environment and Energy has put
HFCs on its “List of undesirable products due
to their effects on man and/or the environment.”¹⁸**

**The goal is to phase out all use of HFC refrigerants in the Danish
industry within the next nine years (by 2006).¹⁹**

- SVEN AUKEN DANISH ENERGY AND ENVIRONMENT MINISTER 1996

When scientists discovered a hole in the ozone layer in the early 1980s, the world responded by taking steps to ban the group of chlorinated gases deemed most responsible for the damage—CFCs.

By the late 1980s the United Nations Montreal Protocol on Substances that Deplete the Ozone Layer had been signed by more than 160 countries and phase out dates for ozone depleting substances, including CFCs (phased out 1996), had been agreed.

The global refrigeration sector, as one of the largest users of CFC gases, needed an alternative. The chemical companies who manufactured CFCs offered more polluting gases as alternatives:- HCFCs another, although less damaging, ozone depleting gas, and HFCs a potent climate change gas, despite the fact that a range of commercially and technically proven natural alternatives already existed.

But before long HCFCs were also the target of Montreal Protocol phase out dates - a production freeze on HCFCs

from January 1996 and a total phase out (99.5%) in industrial countries by 2020.

The main concern of the chemical companies was to protect profits and market share by producing other patented gases, thus retaining the former CFC market and ensuring other greener alternatives were not used. The refrigeration industry mostly listened to the chemical companies and has in many cases perceived HFCs to be the permanent replacement to CFCs and HCFCs.

Although HFCs satisfied the requirements of the Montreal Protocol, concern over the impacts of global climate change increased throughout the 1990s. By 1997 the death knell sounded for HFCs as well. In that year the United Nations Kyoto Protocol on Climate Change was extended to include HFCs, identifying them as potent greenhouse gases whose emissions must be reduced by industrialised countries.

HFCs are one of the most potent global warming gases ever

invented by humanity. On average over 20 years, one tonne of HFC cause 3300 times more climate change destruction than one tonne of carbon dioxide.²⁰

Because HFCs are such a potent global warming gas, various steps are already being taken by some governments to regulate and eliminate HFC uses. HFCs have no future, just like CFCs and HCFCs.

In Denmark the Government plans to phase out HFCs by 2006 and has called on Europe to follow suit. The Danish regulation bans HFCs for all commercial refrigeration equipment by 2003 for smaller sizes and 2006 for larger sizes over 600 litres net volume. In Denmark about 400,000 commercial refrigerators and freezers are produced every year.²¹

The UK Environment Minister Michael Meacher said “We do not wish to give the point of view that HFCs are there for a long time. The Government policy is that we want to phase out HFCs as quickly as possible.”²² The UK Government published its Draft Programme on Climate Change²³ which states that “HFCs are not a sustainable technology in the long term” and that “HFC emissions will not be allowed to rise unchecked.”

Other countries such as Japan, the USA and a number of European countries have taken specific measures to restrict HFC use, while the European Union has commissioned economic evaluations into reducing HFC emissions.

Australia’s Environment department, Environment Australia, states that “it is likely that some current and future HFC use as a substitute for CFCs and HCFCs will be no longer justifiable with the advent of more environmentally superior alternatives.”²⁴ It also notes that HFCs “pose an issue for Australia’s efforts to meet our international emissions commitments.”²⁵

Levels of HFC pollution above the planet have already exploded in the 1990s. Analysis for the European Union notes there are “rapidly increasing accumulation rates observed in the atmosphere”²⁶. Australian and British scientists have been measuring HFC pollution in the atmosphere over Tasmania and Ireland. Between 1992-1995 the concentration of HFC 134a - the most common HFC gas - grew exponentially at 200% per year.²⁷

In Europe alone, 1998 HFC consumption and use was 52,000 tonnes, the equivalent of 80 million tonnes of carbon dioxide (CO₂) – and is predicted to treble to 250 million tonnes equivalent by the time of the 2012 Olympic Games.²⁸

According to the UN Intergovernmental Panel on Climate Change (IPCC) projections for the year 2040, the global HFC market could reach 1.35 million tonnes per year – the equivalent of 15% of current fossil fuel emissions.²⁹

HFCs are mainly used in the refrigeration and air conditioning industry. The major growth sector for HFC 134a (the most commonly used HFC, accounting for 80% of all HFCs) is the refrigeration and air-conditioning industry,³⁰ and in the next 15 years the United Nations predicts that consumption of HFC 134a could increase by 250%.³¹

Much of the damage HFCs cause is from leakages and servicing of equipment to replace leaking gases - all refrigeration systems leak to some degree and a significant percentage of HFC consumption is to constantly replace gases that escaped to the atmosphere. In the UK, it has been calculated³² that of all the country’s total greenhouse gas emissions to be reduced under the Kyoto Protocol requirements by 2010, HFC leakages alone could account for up to 4% of the total reduction required.

7 MORE REASONS TO AVOID HFCs

- HFCs also cause climate change in their manufacture. This is as a result of fugitive emissions and energy used in the manufacturing process. This compares unfavourably with other alternatives; for example the total process related CO₂ from the manufacture of HFC-134a is more than 160 times greater than that required to manufacture isobutane, another refrigerant alternative.³³
- HFC manufacture is directly linked to the production of organochlorines, a highly toxic class of chemicals that are global environmental contaminants with widespread and long term environmental effects. Approximately 10% of total HFC-134a production weight is toxic waste.
- There have been earlier studies, as well as anecdotal reports, of negative health impacts from fluorocarbons such as HFC-134a and HCFC-123. A 1999 Swedish study, The Environmental Health of Cooling Technicians, gives cause for further concern. The study surveyed 704 technicians who are regularly exposed to HFCs while converting equipment from CFC and HCFCs to HFCs. Some 567 technicians or 82% responded. Skin rashes, breathing problems, heart palpitations, dizziness, stiff joints and headaches were among the symptoms reported.³⁴
- Virtually all refrigeration systems leak, but HFCs are

more prone to leakage because of their smaller molecular structure, thereby further increasing their climate change impact.

- HFC-134a decomposes in the atmosphere into trifluoroacetic acid (TFA). TFA is a persistent toxin, resistant to abiotic degradation processes such as photolysis and hydrolysis and is virtually unmetabolizable by most plants and animals. Large scale emissions of HFC-134a and other fluorocarbons, such as HCFC 123, which decompose in similar manner, pose a potential toxic time bomb.
- The use of HFC-134a in domestic refrigeration requires the application of synthetic ester oil as the lubricant. Ester oil is extremely sensitive to contamination from water vapour and other impurities. This makes home repairs very difficult even under the best circumstances,

and even more so under most conditions prevalent in developing countries. In fact, HFC-134a may well prove to be a technological nightmare for the service sector of these countries. Independent technicians, who represent the vast majority of the service sector, may especially have great difficulty in working with ester oil. In contrast, hydrocarbon refrigerators[See next chapter] use mineral oil for the lubricant and present no great difficulties in servicing.

- Compared with natural refrigerants, HFCs are expensive, costing two to three times more than hydrocarbons. Additional costs are incurred because conventional refrigerator lubricants will not dissolve in HFCs. HFC-134a, for example, needs synthetic ester oil, a patented oil that is several dollars per litre more expensive than commonly used mineral oils.

3

GREENFREEZE NATURAL REFRIGERATION SOLUTIONS

[Greenfreeze is] “attractive to industry”

-BUSINESS HORIZONS

INTRODUCTION

There is a range of natural refrigeration gases and systems that can be used instead of HFCs. The main ones are ammonia, hydrocarbons, air, water and carbon dioxide, and are not only in widespread use today, but were originally used for global refrigeration needs before the invention of CFCs in the 1930s. In addition, there is a variety of different refrigeration technologies, such as absorption systems. Greenpeace refers to natural refrigerants as ‘Greenfreeze’, and during the 1990s has campaigned to ensure the widespread commercial uptake of them all, particularly hydrocarbons as they have strong commercial and technical benefits.

In 1992 Greenpeace brought together scientists who had been researching the use of hydrocarbons as refrigerants and an East German domestic refrigerator manufacturer. It was a meeting that was to create a revolution in refrigeration technology.

Formerly East German’s leading household appliance manufacturer, DKK Scharfenstein was suffering severe economic problems in the reunified Germany when Greenpeace commissioned the company to produce the world’s first ozone and climate benign refrigerators running on hydrocarbons.

The company was within days of being shut down when agreement was reached that the German Government would inject funds into the failing fridge factory allowing it to begin producing hydrocarbon fridges.

These Greenfreeze hydrocarbon fridges used a mixture of the hydrocarbons propane and butane for the refrigerant, replacing the ozone-destroying and global warming chemicals otherwise used. To ensure a fridge is 100% Greenfreeze, fluorocarbons also need to be eliminated from the insulation, and hydrocarbons can also be used for blowing the insulation foam in the cabinet walls.

Propane and butane are natural gases and therefore cannot be patented. Propane was used in refrigerators in the 1920s and in later Greenfreeze fridges either propane or butane is used in a pure form. The energy efficiency of Greenfreeze hydrocarbon refrigerators is typically better than if cooled with either CFCs or HFC-134a.

Greenfreeze hydrocarbon refrigerators use mineral oil for lubricant and, unlike HFC-134a technology, present no great difficulties in servicing. There are significant costs associated with HFC-134a technology as it requires a dust-free assem-

bly environment to prevent contamination of the synthetic lubricant.

At first, major refrigerator manufacturers rejected the idea of Greenfreeze, launching an anti-hydrocarbon scare campaign. But Greenpeace launched its own Greenfreeze marketing campaign and within a few months had gathered 70,000 pre-orders for Greenfreeze refrigerators. This overwhelming public support for Greenfreeze secured the investment needed to get the new fridges rolling off the production line, salvaging DKK Scharfenstein and the jobs of its workers in the process.

Soon the same manufacturers that had warned Greenfreeze was unsafe were forced to recognise the market value of a truly environmentally friendly refrigerator and abandoned the use of HFCs. The Environment Ministries of Britain, Denmark and the Netherlands bought Greenfreeze refrigerators. In 1993 the four biggest German fridge producers, Bosch, Siemens, Liebherr and Miele, switched to Greenfreeze, producing about four million Greenfreeze fridges a year. By 1996, 90% of the domestic refrigerators produced in Germany were hydrocarbon. Greenpeace also catalysed the introduction of Greenfreeze production in Latin America, Indonesia, India and China, where more than half of the 10-12 million domestic fridges sold are now Greenfreeze.

In 1996, the European Union passed a regulation that would only allow the official Ecolabel to be displayed on all domestic refrigerators that do not use chemicals such as HFCs that contribute to climate change. Greenfreeze hydrocarbon refrigeration does qualify for the Ecolabel.

All major European domestic fridge companies - e.g. Bosch, Siemens, Electrolux, Liebherr, Miele, AEG, Whirlpool, Candy, Thompson, Vestfrost - now manufacture Greenfreeze refrigerators as standard, with a huge variety of sizes and models. Worldwide there are about 20 Greenfreeze manufacturers.

At the Sydney 2000 Olympic Games 60 refrigerators in corporate suites and backstage at the SuperDome will be Greenfreeze hydrocarbons.

Since 1992, about 45 million Greenfreeze refrigerators have been manufactured in the world, and the annual production of Greenfreeze refrigerators is now 12-15 million.³⁵

Hydrocarbon refrigeration has also successfully expanded into larger commercial systems for supermarkets, pubs,

restaurants, offices, in chiller and freezer cabinets and air conditioning, and today there is commercially available hydrocarbon refrigeration technology for a wide range of uses. One business catalogue lists almost 100 different commercially available Greenfreeze refrigeration systems for purchase.³⁶

HYDROCARBON SAFETY STANDARDS

While hydrocarbons are flammable, their flammability can be mitigated through adequate safety measures in production and product design, safe deployment of equipment, responsible training and appropriate regulatory regimes. Companies with a vested interest in the use of HFCs frequently oppose any regulatory standards to be set for hydrocarbons, thereby ensuring that proper regulatory regimes do not come into force, and Greenfreeze is frozen out of the marketplace.

Agreed regulatory standards for hydrocarbons as refrigerant exist in Australia and New Zealand (AS/NZS 1677) and the UK (BS4434), allowing for a wide use of these gases in different refrigeration systems and end use categories—for example air conditioning, commercial cabinets and freezers. European and International standards and regulations are currently under development and being discussed within various standards committees and working groups.

GREENFREEZE - A NATURAL PARTNERSHIP BETWEEN BUSINESS AND INDUSTRY

Despite persistent opposition from HFC vested interests, the Greenpeace campaign to introduce Greenfreeze technology has been backed by a growing number of businesses, politicians and institutions, and been portrayed as an exemplar of tangible progress between business and the environment. In other words, deploying Greenfreeze instead of HFCs is a highly sensible and pragmatic action for the environment that can be easily achieved today by companies.

The first German Greenfreeze fridges were awarded the GS (Geprüfte Sicherheit) mark of safety by the German standards authority, the German Blue Angel eco label, a 1 million DM environmental prize from the German Finance Minister, received the Ozone Award from the United Nations and the European Union Eco Label for all domestic fridges. Greenfreeze technology has been backed and implemented worldwide in dozens of countries, from Europe to Latin America, Indonesia, India and China. It is supported by the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the

World Bank, the Global Environment Facility (GEF) Montreal Protocol Multilateral Fund, German and Swiss Government aid agencies, and accepted as the only refrigeration standard for the Sydney 2000 Summer Olympic Games by the International Olympic Committee (IOC) and the Sydney Olympics 2000 Bid Limited. Companies such as the UK food chain Iceland and international furniture group Ikea have recently announced a corporate wide conversion to Greenfreeze technology.

John Elkington of Sustainability, a global consultancy advising many leading multinational companies comments that: "Even the biggest companies realise that there are limits to what they can achieve alone. Some NGOs are targeting particular companies as strategic partners in shaking up markets. Greenpeace showed how this could work with its Greenfreeze campaign."³⁷

The Greenfreeze story has been analysed by business professors in the US publication *Business Horizons*³⁸, which commented that Greenfreeze was "attractive to industry" and was evidence of "entrepreneurial innovations that address envi-

ronmental problems and simultaneously enhance corporate competitiveness".

At the 1998 business conference on Partnership and Leadership; Building alliances for a sustainable future, the lead meta-themes describes Greenfreeze as a case where "Greenpeace catalysed industry-wide adoption of the technology... and illustrates the emerging pragmatic role environmental NGOs are taking to advocate technological solutions."³⁹

The US Worldwatch Institute commented that: "It's a compelling reminder that in an age of sophisticated technologies that have produced unacceptable dangers along with their touted benefits, simple alternatives can sometimes work extremely well."⁴⁰

In terms of the economic impact, Greenfreeze is cheaper than HFCs. Analysis in the European Union has demonstrated that "the abatement of emissions of HFCs... can significantly reduce the total costs of compliance with the Kyoto Protocol... and that a failure to control these emissions could be expensive"⁴¹

4

MCDONALD'S FAST FOOD FRYING THE PLANET

“...as a global leader we have a responsibility to be an environmental leader as well. We are constantly taking steps that move us closer to doing all we can to preserve and protect our earth for you and your family.”⁴²

- MCDONALD'S AND THE ENVIRONMENT LEAFLET

OVERVIEW

McDonald's is the world's largest franchised food organisation; every day about 40 million people eat at McDonald's.

As a TOP sponsor, McDonald's pays in the region of US\$40-50 million just as the “entry fee”; this excludes any marketing and promotion budgets that can be far greater than the initial IOC sponsorship.⁴³ Globally in 1997 McDonald's spent US \$2 billion on advertising.⁴⁴

At the 1996 Atlanta Olympic Games, five McDonald's restaurants served around 680,000 food items over 33 days.⁴⁵

During the Sydney Games, McDonald's will operate seven main restaurants located in the Olympic Village, the Main Press Centre, the International Broadcast Centre and Sydney Olympic Park.⁴⁶ The seven restaurants will employ 1,100 staff and the main 5,000 seater restaurant alone expects to sell up to 25,000 hamburgers a day. McDonald's chiefs said it hopes the Sydney Games would “break world sales records” and “would be the biggest single project by the company”.⁴⁷

Based on the previous Games it is estimated that McDonald's will be serving close to one million food items at Sydney 2000.

In Australia alone, McDonald's has allocated an additional US \$3.75 million advertising budget⁴⁸ for promotions on the 2000 Olympic Games. McDonald's brand and strategy director, Mr Andrew Hipsley, said Olympic sponsorship will provide McDonald's with marketing opportunities in more than 120 countries.⁴⁹

As a food retailer with more than 25,000 outlets in 118 countries,⁵⁰ Olympic sponsor McDonald's is heavily reliant on refrigeration to conduct its business. For example, 5% of all Coca-Cola sold in the US is from McDonald's stores.⁵¹ McDonald's current company policy is to use HFCs, within its refrigeration systems. McDonald's is increasing restaurants at a rate of 1500 every year.⁵² McDonald's has so far built only two restaurants that run on Greenfreeze instead of HFCs, both in the Millennium Dome in the UK, a paltry 0.00008% of its total stores.

MCDONALD'S ENVIRONMENTAL RHETORIC VS. REALITY

WHAT MCDONALD'S SAYS

"McDonald's is always looking for ways to make a difference for our environment."⁵³

WHAT MCDONALD'S DOES

McDonald's has failed to introduce environmentally safe refrigeration to its worldwide operations. In 1992, Greenpeace - an organisation whose core business is NOT dependent on refrigeration - was able to create a revolution in domestic refrigeration by bringing together scientists and an East German refrigerator manufacturer to build Greenfreeze fridges. If Greenpeace can create a revolution in domestic refrigeration, then McDonald's - a global giant whose core business IS dependent on refrigeration - can create a revolution in commercial refrigeration.

WHAT MCDONALD'S SAYS

"We care about this issue (refrigeration)... We are in the process of developing guiding principles, and setting an action plan with our suppliers, seeking further environmental advancements with refrigerants."⁵⁴

WHAT MCDONALD'S DOES

This is all talk and little action. Meanwhile, McDonald's HFC pollution continues to increase. While McDonald's develops "guiding principles", 30 more McDonald's HFC restaurants are completed each week; fuelling the rise of global HFC emissions and exacerbating the trend for an alarming rise in global temperatures.

WHAT MCDONALD'S SAYS

"McDonald's believes it has a special responsibility to protect our environment for future generations... whose quality of life tomorrow will be affected by our stewardship of the environment today."⁵⁵

WHAT MCDONALD'S DOES

Far from protecting our environment for tomorrow, McDonald's has a company policy of taking action today that will lead to further climate damage tomorrow. The HFC gases leaking from many thousands of McDonald's refrigeration systems today will continue to pollute the environment for many years after they have been released. Only with immediate action can McDonald's begin to offset the damage caused to tomorrow's environment by adopting non-HFC, Greenfreeze refrigeration today.

WHAT MCDONALD'S SAYS

"We realize that in today's world, a business leader must be an environmental leader as well... we will lead, both in word and in deed."⁵⁶

WHAT MCDONALD'S DOES

McDonald's is a global leader in HFC pollution. Environmental leadership can only be attained by banning the use of HFCs, as other companies and Governments have already demonstrated. McDonald's has such enormous purchasing power that the adoption of Greenfreeze refrigeration technologies could create a revolution in commercial refrigeration. McDonald's is strong in word but weak in deed and until McDonald's leads through deed, its boldly worded environmental statements can only be considered hollow PR rhetoric.

WHAT MCDONALD'S SAYS

"We understand that a commitment to a strong environmental policy begins with leadership at the top of an organization."⁵⁷

WHAT MCDONALD'S DOES

Despite a number of meetings with Greenpeace, communication between Greenpeace and the leadership of the McDonald's organisation has failed to elicit any change in McDonald's climate damaging policy of using HFCs. McDonald's is living up to its traditional reputation as "one of America's most secretive companies"⁵⁸ and has refused to disclose any basic information on the number of refrigeration systems it owns and operates, the amount of HFC pollution it is creating now and in the future, and refused to set deadlines to convert to environmentally benign refrigeration alternatives. Dialogue has had no impact in stemming the rising toll of McDonald's HFC pollution.

WHAT MCDONALD'S SAYS

"...our determination is to analyze every aspect of our business in terms of its impact on the environment, and to take actions beyond what is expected..."⁵⁹

WHAT MCDONALD'S DOES

Yet McDonald's will not expose its business practice to independent analysis, refusing to disclose any data even the levels of resources and spending it has committed to the research and development of non-HFC technologies. Any basic expectation for taking action would be to eliminate the use of HFCs and convert to Greenfreeze technologies.

MCDONALD'S – CONCLUSION

McDonald's is a vast corporation that in 1998 sold almost \$US36 billion worth of product in its 25,000 outlets worldwide. McDonald's core business is heavily dependent on highly damaging HFC refrigeration technologies. The billions of chilled drinks, ice creams and other cold food products sold comes at the expense of further climate change.

By using HFCs not only is McDonald's contributing to one of the most serious threats facing the planet today, but it is ignoring its commitment and responsibilities as a sponsor of the world's first Green Games.

At the same time as marketing itself as sponsor of the Olympic ideals throughout 120 countries, McDonald's also contributes to the rising levels of climate change gas emissions in each.

During its first decade, in the late 1950's, McDonald's spent more than US\$3 million on perfecting its French fries, and completely changed the entire potato supply chain which had to change to suit McDonald's very precise needs.⁶⁰ Yet

nearly a decade since the Sydney Olympic Environmental Guidelines were formally established, McDonald's has failed to specify alternatives to climate destructive refrigeration, despite mounting concern over the threat of climate change and the deleterious impact caused by HFCs.

As a global sponsor McDonald's exploits its association with the Olympic Games to increase profits, which increases HFC pollution. McDonald's self-professed "environmental conscience"⁶¹ seems to have disappeared in the race to cash in on the Olympics at the expense of the planet.

By persisting with HFC refrigeration McDonald's is daily causing environmental damage and making a mockery of the Olympic Movement's ideals to respect the environment and make the Earth a safe, hospitable home for present and future generations.

With its enormous buying power and persistent claims to environmental responsibility McDonald's should live up to the Olympic ideals, and support the world's first Green Games.

GREENPEACE IS CALLING ON MCDONALD'S TO:

- commit to 100% Greenfreeze technology at the Sydney Olympics Games, and all future Olympic Games;
- abandon its corporate refrigeration policy of HFC use;
- specify all new equipment to be Greenfreeze and implement progressive Greenfreeze retrofitting programmes; and
- abandon all CFC/HCFC/HFC use by the 2004 Athens Summer Olympics.

5

COCA-COLA

ICE COLD COKE – BOILING HOT PLANET

“Our commitment to the environment is based on the principle that we shall conduct our business in ways that protect and preserve our environment.”⁶²

– COCA-COLA COMPANY ENVIRONMENTAL STATEMENT

OVERVIEW

Coca-Cola is the world’s biggest known brand and the largest soft drinks and juice company. Coca-Cola commands 51% of the global soft drink market⁶³ and operates in nearly 200 countries and has a market value of US\$165 billion.⁶⁴

In 1998 the company sold 379.2 billion drinks, a rate of 721,461 every minute.⁶⁵ The company notes that its products “account for a mere 2% of the world’s daily fluid intake”.⁶⁶

Coca-Cola is the “Olympic Movement’s longest continuous corporate partner”⁶⁷ and is the biggest official corporate sponsor of the Olympic Games. The 1996 Atlanta Summer Games were known as “The Coca-Cola Olympics”⁶⁸ Coca-Cola invested US\$350 million in the 1996 Games for sponsorships, advertising and marketing and created a 12 acre complex called Coca-Cola Olympic City. In 1996 Coca-Cola offered the IOC US\$500 million to act as an official sponsor of the Olympics until 2028. In the end the deal was signed until 2008.

For the Sydney 2000 Olympic Games, Coca-Cola’s advertising expenditure in Australia alone has been increased 50% to US \$28 million.⁶⁹

Coca-Cola expects to sell in more than 10 million servings of its product during the 2000 Olympic Games⁷⁰ and more than one million servings at the 2000 Paralympics⁷¹. These millions of Coca-Cola products will be chilled inside 1800 pieces of refrigeration installed specifically for use by Coca-Cola. Coca-Cola has the capacity to serve over 20,000 drinks per hour in the main dining room in the athlete’s village. Due to a deal signed in 1996, Coca-Cola products are the only drinks to be sold at all Olympic Games staged between now and 2008,⁷² giving the company a cold drinks monopoly at the Sydney 2000 Games. Coca-Cola is the ‘Official Soft Drink’, Powerade is the ‘Official Sports Drink’ and Mount Franklin the ‘Official Water’.⁷³

Coca Cola has untold millions of refrigeration units. It has ‘14 million retailer customers’⁷⁴ which means that even on the most conservative estimate Coca Cola has at minimum

COCA-COLA ENVIRONMENTAL RHETORIC VS. REALITY

14 million refrigeration units, most of which are using HFCs.

WHAT COCA-COLA SAYS

“At the core of the Coca-Cola Environmental Management System is a simple overarching principle: we shall conduct our business in ways that protect and preserve the environment.”⁷⁵

WHAT COCA-COLA DOES

By choosing HFC refrigeration and ignoring available Greenfreeze alternatives Coca-Cola conducts its business in a way that directly contributes to global climate change - one of the most serious environmental threats facing the planet today. Coca-Cola's environmental principles fail to operate in practice.

WHAT COCA-COLA SAYS

“The Coca-Cola Company is dedicated to environmental excellence.”⁷⁶

WHAT COCA-COLA DOES

Far from a dedication to environmental excellence, Coca-Cola is dedicated to using environmentally destructive HFC gases in its refrigeration equipment. By investing a small percentage of its vast annual profits - over \$US 13 billion in 1998 - in the development of existing Greenfreeze refrigeration technology, Coca-Cola could create a viable market for Greenfreeze commercial refrigeration. Greenpeace estimates that Coca-Cola has at minimum 14 million retail customers worldwide using refrigerated equipment.

WHAT COCA-COLA SAYS

“While our environmental impact is small, we are committed to managing that impact in a positive manner.”⁷⁷

WHAT COCA-COLA DOES

In the absence of any verifiable data, this statement cannot be substantiated. Coca-Cola has chosen to hide its HFC pollution by keeping the figures secret, despite repeated requests for the information. Greenpeace estimates that as the world largest soft drinks and juice company with at minimum 14 million refrigeration units⁷⁸, Coca-Cola is a massive user of climate damaging HFCs. Greenpeace estimates that Coca-Cola is the world's largest HFC commercial refrigeration polluter. Greenpeace estimates that thousands of Coca-Cola refrigerated equipment, virtually all using polluting HFCs, are installed every week, worldwide.

Far from being small, the climate change impact of HFCs is so potent that some governments want to ban them completely. HFCs are targeted by the United Nations Kyoto Protocol on Climate Change as a potent greenhouse gas whose emissions must be restricted by industrial countries. On average, HFCs have 3300 times the global warming potential (GWP) of carbon dioxide (CO₂).⁷⁹

WHAT COCA-COLA SAYS

“We minimize the environmental impacts of our operations, products and packages through research and the application of new technology.”⁸⁰

WHAT COCA-COLA DOES

Coca-Cola has refused to divulge to Greenpeace the extent of its research into non-HFC, Greenfreeze technology. The company does have a small Danish testing programme for hydrocarbon refrigeration and Greenpeace is informed that some other Greenfreeze alternatives are being looked at. Coca-Cola has refused to provide any publicly verifiable data, targets, timetables or goals to indicate the validity of these programmes or their impact on current company policy and operations. The total absence of any data or progress on implementing Greenfreeze is indicative that Coca-Cola's testing programme is merely a PR exercise if not deployed commercially. Coca-Cola is ignoring, not applying Greenfreeze technology.

WHAT COCA-COLA SAYS

“One of Coca-Cola's strengths is its long-term view.”⁸¹ “I have no doubt that the Coca-Cola system will be here 100 years from now.” M. Douglas Ivester, Coca-Cola CEO⁸²

WHAT COCA-COLA DOES

While the long-term view for Coca-Cola may be profitable, the long-term view for the planet from climate change is less optimistic. Current scientific projections predicts that over the next 100 years global temperatures will rise at a larger and faster rate than any other temperature change in the past 10,000 years. Scientists predict this will lead to more frequent and intense storms, droughts and floods; loss of coral reefs; retreating glaciers; melting ice caps; a spread of pests and diseases; and major loss of coastal lands due to rising sea levels. Coca-Cola's use of HFCs at the 2000 Olympics and throughout its operations will directly contribute to these catastrophic climate changes.

WHAT COCA-COLA SAYS

“...the world will always get thirsty...”⁸³

WHAT COCA-COLA DOES

In fact, scientists predict that the world will get even thirstier as global temperatures rise creating substantial decreases in the world's water resources. Arid regions of the world will become even drier. Overall, scientists predict that three billion people will suffer increased water stress due to increased climate change. The world will always get thirsty while greenhouse gases like HFCs continue to be used by companies like Coca-Cola.

WHAT COCA-COLA SAYS

“We encourage and participate in responsible discussion of environmental concerns.”⁸⁴

WHAT COCA-COLA DOES

Coca-Cola has virtually ignored the mounting environmental concern over climate change and HFCs. Meetings and interactions with Coca-Cola have been largely a dialogue of the deaf, company policies and actions have not changed, except for a token 100 Greenfreeze fridges to be installed at the Olympic site, along with 1700 HFC fridges. Questions remain unanswered, data is withheld and so discussion is mostly unproductive.

The new Coca-Cola CEO, Australian Doug Daft recently told shareholders that “I see a diligent company that prides itself on its long-standing ability to listen, learn and understand the nuances of the world”. For a company heavily dependent on environmentally destructive HFC refrigeration, this diligence excludes global climate change.⁸⁵

WHAT COCA-COLA SAYS

We have set a high standard for ourselves -to achieve a level of environmental performance which goes beyond that required by the regulation in every country in which we operate.⁸⁶

WHAT COCA-COLA DOES

The emerging regulatory regime from Governments and some sectors of the business community is unequivocal- to restrict, eliminate and ban outright the use of HFCs. Coca-Cola is doing the exact opposite and phasing in HFCs on a global scale. Also, Coca-Cola has cited the lack of fully agreed regulatory standards and regimes for Greenfreeze refrigerants as an excuse not to implement them. Many HFC vested interests are actively opposing the implementation of proper standards and regulations for Greenfreeze refrigeration in order to hinder their commercial use.

COCA-COLA – CONCLUSION

Coca-Cola's official policy is to use HFCs in its millions of fridges. Its drinks are designed to be sold chilled, so refrigeration is at the heart of its business. It is not just the legendary formula for Coke that is a well guarded secret, so is the extent of Coca-Colas' climate change pollution from HFCs.

Despite numerous meetings and exchanges of information with Greenpeace, there has only been one firm change and commitment - to deploy 100 Greenfreeze Coca-Cola fridges at the Sydney Olympics site. This leaves 94% of the other Coca-Cola machines at the Olympic site running on HFCs and the rest of Coca-Cola's 14 million refrigeration units firmly in support of HFCs. The application of Greenfreeze by Coca-Cola is virtually undetectable statistically.

Given that the Sydney Olympics Environmental Guidelines, which ban the use of HFC refrigerants and processes, were laid down almost a decade ago, Coca-Cola's failure to properly implement Greenfreeze refrigeration at the 2000 Games is a major slap in the face to the Green Games it sponsors. Since 1992, Greenpeace has helped to introduce about 45 million Greenfreeze fridges, Coca-Cola has announced it will introduce precisely 100.

With its vast global reach and enormous spending power, Coca-Cola could create a market for Greenfreeze refrigeration technology and this could be done at a stroke by changing its supplier specifications. And in the process it could live up to its own environmental policy of “dedication to environmental excellence”.

Coca-Cola's global HFC pollution across millions of refrigeration systems represents a consistent abuse of Olympic ideals as it conflicts with the Fundamental Principles of the Olympic Charter to respect the environment and make the Earth a safe, hospitable home for present and future generations.

The Olympics is an enticing money-making exercise for Coca-Cola to increase global profits, at the expense of further climate change pollution from potent HFCs. Coca-Cola is sponsoring the first Olympic Green Games, designed to be HFC free, yet the outcome is that it will increase its already huge global HFC pollution practices.

Coca-Cola's chief marketing officer, Charlie Frenette, quoted in Beverage Digest, described as “a reasonable and responsible goal” plans to double the size of the business within the next ten years.⁸⁷ Yet with Coca-Cola's current commitment

to HFCs, this would mean not only a double profit for Coca-Cola, but a double dose of climate changing pollution from HFCs for the planet by the time of the Olympic Summer Games in 2008.

As the Olympics year begins, Coca-Cola can put its environment rhetoric into action, demonstrate leadership and switch to Greenfreeze in time for the 2000 Games and create a progressive timetable to eliminate all use of HFCs across its global operations.

**GREENPEACE IS CALLING ON
COCA-COLA TO:**

- commit to 100% Greenfreeze technology at the Sydney Olympics site and all future Olympic Games;
- abandon its corporate refrigeration policy of HFC use;
- specify all new equipment to be Greenfreeze; and
- abandon all CFC/HCFC/HFC use by the 2004 Athens Summer Olympics.

6

UNILEVER

COLD ICE-CREAM, MELTING ATTITUDES

**“We have a responsibility to use our influence
in the markets to promote good environmental practice.”**

– UNILEVER ENVIRONMENT REPORT 1998⁸⁸

OVERVIEW

Unilever spends some US\$5.6 billion to market more than 1000 brands,⁸⁹ in 150 countries. Foods - margarine, tea, ice-cream, culinary products and frozen foods – comprise half of Unilever’s business⁹⁰, making the corporation heavily reliant on refrigeration in order to survive. Unilever is the world’s biggest ice cream company, making such well known brands as Magnum. A Unilever product is bought 150 million times a day.⁹¹

In 1998 Unilever had a turnover of US\$44,895 million, made a profit of \$4,896 million. In the same year its global ice-cream turnover rose 4%.⁹²

Unilever spends US\$876 million a year on research and development.⁹³ Unilever is proud of its strong commitment to research and development, boasting in its 1998 Annual Review: “Our research and development teams are based in six state-of-the-art laboratories, complemented by a network of 71 innovation centres.”⁹⁴ In the same Annual Review, Unilever hailed the use of “ground-breaking manufacturing processes”⁹⁵ to develop an ice cream snack, Winner Taco.

This required a patent for a ground-breaking process that softens and folds the Taco wafers.

Unilever’s aims are to “...develop innovative products and processes which reduce levels of environmental impact...” and “Our policy is always to use the best available technology in our equipment.”⁹⁶

Unilever is an Olympic sponsor though its Australian-owned ice cream company Streets. It has taken a different approach than Coca-Cola and McDonald’s.

In 1997, as part of the Kyoto Protocol discussion to limit HFCs, Unilever collaborated with Greenpeace to announce a large-scale trial and deployment of Greenfreeze hydrocarbon refrigerants, inside ice cream freezer cabinets⁹⁷. These trials involve refrigeration equipment across a range of different countries and operating conditions.

Through continuing dialogue with Streets in Australia and Unilever in the UK, Greenpeace is aware that Unilever has now made sufficient progress to enable it to make a policy

transition towards Greenfreeze and away from HFCs. Unilever informed Greenpeace that “on the specific issue of the use of hydrocarbons in cabinets, Unilever has again been proactive... From the technical point of view the Greenfreeze technology appears to have significant advantages, our technical staff are enthusiastic.”⁹⁸

At the time of writing, Unilever is yet to formally announce a transition to Greenfreeze refrigeration publicly.

A decision by Unilever to adopt Greenfreeze hydrocarbon refrigerants and abandon HFCs across its global operations would show environmental leadership, and the Sydney Green Games, where HFCs are officially banned, would provide a major public opportunity to make this transition a publicly laudable reality. The Sydney 2000 Olympic Games provide Unilever with the opportunity to live up to its own environment policy and meet ‘...the needs of customers and consumers in an environmentally sound and sustainable manner...’⁹⁹

GREENPEACE IS CALLING ON UNILEVER TO:

- commit to 100% Greenfreeze technology at the Sydney Olympics site, and all future Olympic Games;
- abandon its corporate refrigeration policy of HFC use;
- specify all new equipment to be Greenfreeze and implement progressive Greenfreeze retrofitting programmes; and
- abandon all CFC/HCFC/HFC use by the 2004 Athens Summer Olympics.

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- ⁹³ *Annual Review 1998*, Technology and Innovation, p26
- ⁹⁴ *Annual Review 1998*, Technology and Innovation, p26
- ⁹⁵ *Annual Review 1998*, Technology and Innovation, p26
- ⁹⁶ *Greenpeace Welcomes Climate Friendly Refrigeration Project*, Unilever spokesperson quoted in press release, December 1997.
- ⁹⁷ *Environment Report 1998*, p13
- ⁹⁸ Letter to Greenpeace Australia 25 January 2000. Alexander Kemner Director Unilever
- ⁹⁹ *Environment Report 1998*, p6

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