

Earth Facts

as presented with the 120 photographs at the Perth exhibition

In Australia, for every dollar invested, less than one cent is invested in socially and environmentally responsible funds. (ACF)

The illegal international commerce of endangered species generates between 5 and 10 billion US\$ each year and is one of the major causes of the disappearance of species. (WWF)

The 1989 ratification of the Montreal Protocol has helped reduce production of CFCs – gaseous compounds that deplete the ozone layer – by one tenth in 10 years. (UNFCCC)

Bottled water costs up to 1,000 times more than tap water.

In the past fifty years, 25% of world fisheries have been seriously depleted. (UNFAO, 2006).

Organic farming currently covers 26 million hectares of cultivated land, or a bit less than 2% of all the agricultural surface cultivated in the world (3.5% in Europe). (AGENCE)

The arctic ice floe is 40% thinner than in 1960. (IGBP / WCPR, 2001)

Worldwide consumption of organic products grows by between 10% and 20% each year. (Organic Monitor, 2005)

Recycling 1 tonne of plastic saves 750 kg of oil. (Jean-Benoit Durand)

Arid areas account for more than 40% of the earth's land surface and are inhabited by one third of the world's population. (UNCCD, 2005)

80% of the world's wealth is owned by 15% of the inhabitants of the richest countries. (UN Johannesburg Summit 2002)

Worldwide, 1 in 4 mammals, 1 in 8 birds, 1 in 3 fish and 2 in 5 amphibians are threatened by extinction. (IUCN, 2002)

Fair trade has improved living standards for almost 1 million farmers and their families (around 6 million people) in the developing world. (Max Havelaar)

Over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period in human history. (Millennium Ecosystem Assessment 2005, UN)

In 2025 two thirds of the world's population will suffer from a lack of water unless large-scale action is taken. (UNESCO / UNEP, 1999)

The world's annual budget for military spending is US\$1000 billion (A\$1300 billion); the budget for development aid is US\$60 billion (A\$78 billion). (SIPRI / OECD, 2003)

90% of the energy consumed in the world comes from non-renewable resources. (IEA)

Every year, 10 million hectares of arable land is lost to desertification and is therefore rendered unusable - this is roughly the equivalent to the surface areas of Belgium and the Netherlands combined, or the state of Tasmania. (French Scientific Committee for Desertification)

One in 5 adults worldwide cannot read or write. 98% are from developing countries and two thirds are women. (UN)

1.7 million living species are known. 10 to 100 million remain to be discovered. (UNESCO, 2005)

Oceans are a primary food source for 3.5 billion people (half of the world's population). In 20 years, this number could reach 7 billion people. (UNEP)

Certain species that were nearly extinct, such as the grouper in the Mediterranean Sea or the Prjevalski's Horse in Mongolia, have been spared extinction thanks to the strict protection of their natural environment or to their reintegration into their environment of origin.

Each inhabitant of a developing country generates on average, 450kg of garbage per year. Each Australian generates an average of 620 kg of garbage per year. (UNEP / ABS)

Every year, plastic waste kills 1 million birds, 100,000 marine mammals and an incalculable number of fish. (UNEP, 2004)

In Europe, the production of solar electricity has increased 30% per year over the last decade. (www.europa.eu.int)

104 million bicycles are made every year, compared to 44 million automobiles. (Worldwatch Institute)

World population: 1800: 1 billion, 2005: 6,5 billion, 2050: 9 billion? (UN, 24th of February 2005)

Life expectancy was 46 years in 1950. It now exceeds 66 years. (World Fact Book)

Every year, 3.6 million hectares of plants are replanted, or are the result of natural expansion. (FAO)

55% of the revenue generated by international tourism goes towards airline companies, travel agencies, hotels, and international companies. Not to the populations of the visited countries. (World Bank)

Australia is one of the highest users of water per capita in the world, despite being the driest inhabited continent. (CSIRO)

Between 600, 000 and 800, 000 people are sold each year, earning their traffickers US\$12 billion (A\$16 billion) in revenue. (United States Department of State)

In Europe, 13 million m² of solar panels supply the energy equal to that which would be created with 500 000 tonnes of oil. (www.europa.eu.int)



Earth from Above

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By 2050, the increase in the average world temperature could cause the disappearance of 25% of living species. ('Nature' magazine, January 2004)

70% of the world's fresh water is used for agriculture, 22% for industry, and 8% for domestic purposes. (UNESCO)

Women's labour accounts for two thirds of subsistence agriculture in developing countries, yet they often have no rights over the land. (UN)

In a period of 20 years, 25% of the world's coral reefs have disappeared, and about 55% are endangered. (Millennium Ecosystem Assessment, 2005)

A fifth of the world's population has no access to drinking water. (UN)

Planting a tree reduces the pollution of groundwater, helps fight erosion, and helps reconstitute chemically damaged soils and the storage of CO₂.

From the 1980s to the 1990s, the number of people affected by natural catastrophes increased by 50%, creating a 10-fold rise in related costs. (CRED / Red Cross / UNEP)

By recycling 670 aluminium cans, it is possible to produce one bicycle. (Jean-Benoit Durand)

More than 80% of ocean pollution is caused by human activities that take place on land. (UNEP, 2004)

Global reserves of fresh water: 1950: 17,000 m³ per inhabitant, 2005: 6,000 m³ per inhabitant, 2025: 4,800 m³ per inhabitant? (UNESCO, 2006)

The average amount of gasoline consumed per inhabitant per year is 31 litres in sub-Saharan Africa, 50 litres in Asia, 427 litres in Western Europe, and 1,637 litres in North America. (French Secretary for Sustainable Development, 2003)

The surface area of the Aral sea, formerly the 4th largest water reservoir on the planet, has decreased by two thirds. (UNESCO)

There were more than 37,000 international non-governmental organizations (NGOs) operating in 2000. (UNDP Report 2002)

A single nuclear reactor produces approximately 20 tonnes of waste per year. The 443 reactors throughout the world produce 10,000 tonnes of waste annually. (IAEA)

Agricultural waste contains a significant amount of wasted energy that, if harnessed, could supply over a quarter of Australia's energy. (BCSE / WWF)

Although Australia is famous for its marsupials, almost half of them are either extinct or threatened with extinction. (ACF)

During the 20th century, the average global temperature increased by 0.6°C. This figure is likely to continue to rise by between 1.8°C and 4°C during the 21st century and by close to 10°C in the polar regions. (IUCN, 2002 / IPCC, 2001)



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Worldwide fresh water consumption multiplied by 6 during the 20th century, while the population tripled during the same period. (UNEP)

Over 70% of the planet's surface is covered by water. (UNEP, 2004)

Many wetlands, important reservoirs for biodiversity and water, have been protected since 1971 under the RAMSAR convention. (www.ramsar.org)

It takes 1.8 tonnes of material to produce a personal computer. (UNU)

Micro-credit – which allows the most impoverished to fund their projects – is helping 60 million people worldwide. Every year, 5% escape the poverty trap. (Grameen Bank)

Seven million tonnes of fish and marine mammals are unnecessarily fished every year. (FAO)

On average, 40 litres of water are consumed per person per day. A Madagascan farmer consumes 10 litres, a Parisian 240 litres, and an American 600 litres. (CNRS 2004)

It takes 1,500 litres of water to produce 1 kg of cereal and 15,000 litres to produce 1 kg of beef. (FAO)

In developing countries, 90% of wastewater is returned untreated into rivers and streams. (WWF)

Every year 200,000 hectares, or the equivalent of two million ¼ acre suburban household blocks, of Australia's native forests are logged. (ACF)

Since the Rio Earth Summit in 1992, industrial carbon dioxide emissions have declined, but emissions from transport have increased by 75%. (UN, 2004)

The Global Agro-Food sector spends US\$40 billion (A\$52 billion) on publicity every year. (The Atlas of Food, Millestone & Lang)

One third of the world's surface land suffers from desertification. (UNEP)

Every minute a woman dies of complications resulting from pregnancy or child birth. 99% of these deaths occur in developing countries. (UNICEF 2002)

Since the industrial revolution, the concentration of CO₂ in the air has increased by 31%, while methane concentrations have doubled. (IPCC)

Over a quarter of Australia's river systems are close to, or have exceeded, sustainable extraction limits. (ACF)

Around 5% of ocean pollution is caused by oil slicks, about 25% by tanker discharges, and more than 70% is waste introduced by streams, rivers, and estuaries. (IFREMER / CEDRE)

Despite the fact that coral reefs cover less than 0.5% of the ocean floor, it is estimated that more than 90% of marine species are either directly or indirectly dependent on them. (UNEP, 2004)



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The World Heritage List contains 851 properties, which are considered to have outstanding universal value. (UNESCO)

Pesticides kill almost 20,000 agricultural workers each year. (WHO & The Atlas of Food, Millestone & Lang)

A single sheet of recycled paper saves 15g of wood, 1 litre of water and 2.5 Wh of electricity. (Jean-Benoit Durand)

80% of primary forests of the world were destroyed during the 20th century. (UICN)

Since European settlement, half of Australia's forests and three quarters of its rainforests have been cleared, plus over 90% of old growth forests have been logged. (ACF)

Every week, two breeds of pets become extinct in the world.

More than 70% of fishing zones are exploited beyond their capacity of renewal. (UNEP, 2004)

Half of the world's population lives in urban areas. This proportion should continue to increase by 2 % per year until 2015. (UN)

The degradation of an ecosystem is the first cause of a species extinction. (UNEP)

Over half the world's population lives in regions that are prone to earthquakes, floods, droughts, landslides, cyclones or volcanic eruptions. (World Bank, 2005)

40% of the world's energy demand is met by oil. (French Ministry of Foreign Affairs)

Over the past 50 years there have been more than 500 conflicts over water. Seven have involved violence. (UN, 2006)

In 30 years, the world has lost 30% of its natural resources. (UICN / WWF)

If everyone in the world were to live like Australians, it would take 5.3 planet Earths to provide all the resources and absorb all the pollution. (AGO)

Throughout the world, more than 50% of the rivers are contaminated. In Europe, only 5 of the 55 largest rivers are pollution-free. (UNESCO)

In 2005, the hole in the ozone layer reached 27 million km² in the Southern Hemisphere – a surface area three times greater than that of the United States. (WMO)

Every year, the world produces 356 kg of cereal per person, yet 40 million people die of hunger. (FAO / WRI / WHO).

600 million people live under the threat of a volcanic eruption. (UNEP)

People living in developed countries, which make up 20% of the world's population, emit 10 times the amount of greenhouse gases per person compared to those living in the developing countries. (Hubert Reeves)

The use of agricultural fertilizers (nitrogen, phosphate and potassium hydroxide) has multiplied by 4 during the last 20 years. (FAO)

80% of children who go to school will never reach secondary level. (UNICEF, 2005)

More than 1 million people move to towns and cities each week. Nearly 1 billion people (1 in 6) now live in shanty towns. (UN HABITAT)

181 countries have ratified the Kyoto Protocol, committing them to reduce greenhouse gases. However the United States, the highest greenhouse gas producing country in the world, has not signed it.

Burning 4 m³ of wood saves the approximate equivalent of 1 tonne of oil and eliminates on average 2.5 tonnes of CO₂ in the atmosphere. (www.europa.eu.int)

Half of the world's population lives less than 100 km away from the coasts. This number may rise to 75% by 2025. (UNEP, 2004)

The market for wind energy has grown by about 29% since 2004. Europe currently produces 73% of world wind power; North America produces about 16% and Asia 9%. (www.europa.eu.int)

At the Rio Summit in 1992, the world's richest countries promised to contribute 0.7% of their GDP to foreign aid. These countries currently contribute less than 0.3%. (OECD)

There are 4.5 million green power consumers in the world today (REN21) and 250,000 of these are in Australia. (Green Power)

With the amount of sun enjoyed by Australia, solar energy could supply all our energy needs many times over. (ACF)

In Denmark, 30% of the electricity is supplied by wind energy. (UN)

Carbon dioxide emissions from human activity are responsible for more than 60% of the increase in the greenhouse effect. (OECD, 1999)

Thanks to the current agricultural production techniques, the earth could feed 12 billion people, however today, with a population of 6 billion people, 800 million suffer from hunger. (FAO / Worldwatch Institute)


In France, 42% of household waste is incinerated, 40% is sent to the dump, 12% is recycled, and 6% is composted. (ADEME)

If everybody was living and consuming as the French do, we would need two more planets. (WWF)

Desertification threatens the health and means of subsistence of over 1 billion people. (UN 2005)

The occurrence of acid rains have decreased in North America and in Western Europe, however this is not the case in Eastern Europe, the ex-Soviet Union, China and Japan. (Hubert Reeves)

Of the world's 226 countries, approximately 140 organize pluralistic elections. (UNDP, 2003)



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38% of the world's population is under 18 years old. 50% of the population of developing countries are children. (UNICEF, 2005)

Contaminated water is the cause of 5 million deaths per year. In comparison, 3 million deaths are caused by AIDS each year. (WHO).

87% of the world's teenagers live in a developing country. (UNFPA, 2003)

In 2004, worldwide estimates showed a total of 9.2 million international refugees and 19.2 million people who have become refugees within their country. (UNHCR, 2005)

To contain global warming, CO₂ emissions would have to be reduced by a half. The current objective outlined in the Kyoto Accord is a reduction of only 5% based on 1990 emissions. (IPCC)

In large European cities, more than 80,000 deaths per year are due to air pollution caused by road traffic. (WHO)

It now takes 6 weeks to consume the amount of gasoline used in 1 year in 1950. Half is used in transport. (French Secretary of Sustainable Development, 2003)

Less than 10 countries share 60% of the world's fresh water resources. (CIEAU)

More than 100 million people live in areas below sea level or on coasts subject to storm surges or flooding. (IPCC)

Australia is one of the largest per capita emitters of greenhouse pollution in the world: 27 tonnes per capita which is double the average for developed countries. (Australian Bureau of Statistics)

87% of Australia's power comes from burning coal, a high greenhouse-polluting fuel. (BCSE / WWF)

Since 1975, the number of adverse meteorological events such as cyclones, floods or heat waves has increased by 160%. (UNEP)

Since 1980, the volume of garbage generated per person in industrialized countries has tripled. (UNDP)

Throughout the world, 21 countries suffer from a lack of water. Twelve of these are Middle Eastern countries. (FAO)

Australians are big drivers: per capita we own more cars than any other nation except the United States. (ACF)

REFERENCES

ABS	Australian Bureau of Statistics	www.abs.gov.au
ACF	Australian Conservation Foundation	www.acfonline.org.au
ADEME	French Environment And Energy Management Agency	www.ademe.fr
AGENCE	French agency for the development and the promotion of Organic Farming	www.agence-bio.org
AGO	Australian Greenhouse Office	www.greenhouse.gov.au
BCSE	Business Council for Sustainable Energy, Australia	www.bcse.org.au
CEAA	Canadian Environmental Assessment Agency	www.caee-acee.gc.ca
CEDRE	Centre for documentation, Research and Experimentation on Accidental Water Pollution	www.le-cedre.fr
CIEAU	Information Centre on Water, France	www.cieau.com
CNRS	Centre National de la Recherche Scientifique, France	www.cnrs.fr
Comite 21	French committee for the environment and durable development	www.comite21.org
CRED	Centre for Research on the Epidemiology of disasters	www.cred.be
CSIRO	Australian Commonwealth and Scientific Research Organisation	www.csiro.au
FAO	Food and Agriculture Organisation	www.fao.org
Grameen Bank	Grameen Foundation	www.grameen-info.org
Green Power	Green Power	www.greenpower.gov.au
Hurbert Reeves	Hurbert Reeves	www.hurbertreeves.info
IAEA	International Atomic Energy Agency	www.iaea.org
IEA	International Energy Agency	www.iea.org
IFREMER	French Research Institute for Exploitation of the Sea	www.ifremer.fr
IGBP	International Geosphere Biosphere Program.	www.igbp.kva.se
IPCC	Intergovernmental Panel on Climate Change	www.ipcc.ch
IUCN	World Conservation Union.	www.iucn.org
Max Havelaar	Max Havelaar	www.maxhavelaar.ch
OECD	Organisation for Economic Co-operation and Development	www.oecd.org
Organic Monitor	Organic Monitor	www.organicmonitor.com
RAMSAR	Ramsar Convention on Wetlands	www.ramsar.org
REN21	Renewable Energy Policy Network (for the 21st Century)	www.ren21.net
SIPRI	Stockholm International Peace Research Institute	www.Sipri.se
UIPT	International Association of Public Transport	www.uitp.com
UN	United Nations	www.un.org
UN Habitat	United Nations Centre for Human Settlements (Habitat)	www.unchs.org
UNCCD	United Nations Convention to Combat Desertification	www.unccd.int
UNDP	United Nations Development Program	www.undp.org
UNEP	United Nations Environment Program	www.unep.org
UNESCO	United nations Education, Scientific and Cultural Organisation	www.unesco.org
UNFCCC	United Nations Framework Convention on Climate Change	www.unfccc.int
UNFAO	United Nations Food and Agriculture Organisation	www.unfao.org
UNFPA	United Nations Population Fund	www.unfpa.org
UNHCR	United Nations High Commissioner for Refugees	www.unhcr.org
UNICEF	United Nations Children's Fund	www.unicef.org
UNU	United Nations University	www.unu.edu
WCPR	World Climate Research Program	www.wmo.ch
WHO	World Health Organisation	www.who.int
WMO	World Meteorological Organisation	www.wmo.ch
Worldwatch Institute	Worldwatch Institute	www.worldwatch.org
WRI	World Resources Institute	www.wri.org
WWF	World Wildlife Fund	www.panda.org