4.2 Climate change

4.2.1 What is at stake?

The global climate is rapidly changing. Temperatures are rising, as are water levels. Ecosystems are changing as a result and societies run the risk of being hit by floods and cyclones. This process will continue as a direct result of human activities that increase the concentration of greenhouse gases in the atmosphere.

The authoritative source on this issue is the Intergovernmental Panel on Climate Change (IPCC), which published its latest summary of the scientific evidence on climate change processes in 2007. Another very influential study published in October 2006 was the Stern Review on the Economics on Climate Change.

The scientific consensus as described in the IPCC-report finds that most of the observed increase in globally averaged temperatures since the mid-20th century has been due to the observed increase in human-induced greenhouse gas (GHG) concentrations in the atmosphere (including carbon dioxide, methane, nitrous oxides and a number of gases that arise from industrial processes). The most important GHG is carbon dioxide, which is emitted mainly as a consequence of global fossil fuel combustion.[141]

If annual emissions would not increase beyond today's rate, the stock of GHG in the atmosphere would reach double pre-industrial levels by 2050 - that is 550 ppm CO_2. However, as demand for energy and transport increases around the world, and fast-growing economies invest in high-carbon infrastructure, this level could be reached by 2035, causing a global average temperature increase exceeding 2°C by that year. Under a business as usual scenario, there is 50% risk of global warming having exceeded 5°C by the end of the century. An illustration of the scale of such an increase is that current average temperature is around 5°C warmer than in the last ice age, 10,000 years ago.[142]

Depending on different scenarios going forward, world temperatures could rise by between 1.1 and 6.4°C during the 21st century, according to the IPCC. This will probably result in:[143]

- Sea levels rising by 18 to 59 cm;
- More frequent warm spells, heat waves and heavy rainfall;
- An increase in droughts, tropical cyclones and extreme high tides.

These developments are not only creating extraordinary and unprecedented risks to the global environment, but are also likely to have profound and potentially disastrous economic, social and health impacts. Another recent IPCC-report as well as the *Stern Review* predicted, among others, the following impacts of climate change:[144]

- Melting glaciers will cause a strong increase in annual average river runoff and water availability in some regions, together with droughts and lack of drinking water in other regions and in the long run;
- Approximately 15 to 40% of global plant and animal species are assessed to be at risk of extinction when the average temperature rises beyond 2°C. This will lead to

rapidly impoverishing ecosystems. The acidification of oceans will have major effects on marine ecosystems;

- Though global food production potential is projected to increase with local average temperature rising by 1-2°C, it will decrease above this temperature. Higher frequencies of droughts, floods hurricanes and heat waves are projected to affect local crop production negatively, especially in subsistence sectors at low latitudes;
- Coastal areas are projected to be exposed to increasing risks due to the rising sea-level and coastal erosion. Corals and coastal wetlands are at risk, but also many of the large cities in developed and underdeveloped countries, housing millions of people. The melting or collapse of ice sheets would eventually threaten land which today is home to 1 in every 20 people;
- Poor communities can be especially vulnerable, as they tend to have more limited adaptive capacities, and are more dependent on climate-sensitive resources such as local water and food supplies;
- Projected climate change-related exposures are likely to affect the health status of millions of people, particularly those with low adaptive capacity, through increases in malnutrition and consequent disorders, heat waves, floods, storms, fires and droughts, diarrhoeal disease, vector-borne diseases such as malaria and dengue fever, and other causes.

Companies in many economic sectors will be confronted with the economic, social and health impacts of climate change, while companies producing, processing, transporting and consuming fossil fuels will be confronted with the need to completely change their way of operating. For just about every company in the world, climate change introduces new risks and opportunities that will drive decisions on how to innovate and operate.

4.2.2 Best standards available

Because the climate change problem is global in nature, it requires an internationally coordinated set of responses. The 1992 UN Framework Convention on Climate Change (UNFCCC) and its 1997 Kyoto Protocol are the two most important international treaties addressing the threat of global climate change. The UNFCCC establishes overall global objectives and principles, and requires all member countries to report annually on their net greenhouse gas emissions. The UNFCCC has near-universal membership among the world's countries, including the United States.

The Kyoto Protocol builds on the principles and objectives of the UNFCCC and establishes targets and timetables for industrialised countries to limit or reduce their emissions of greenhouse gases to an average of 5.2 per cent below 1990 levels. The Kyoto Protocol entered into force in 2005, with the participation of all industrialised countries except the United States and Australia. Developing countries, almost all of which have joined the UNFCC and Kyoto Protocol, are not obliged to set specific targets and timetables for addressing greenhouse gas concentrations and are not likely to do so until at least the next reporting period, which begins in 2012.

Although the Kyoto Protocol has set the first step to reduce global greenhouse gas emissions, its reduction goals stay far below what is needed according to best scientific knowledge.

As a result of these international agreements, policies to regulate greenhouse gas emissions are being developed and implemented in major markets around the world. Companies in carbon-intensive sectors will be subject to regulations and standards in the EU, Australia, Canada, Japan, Russia, and some US regional markets.[145] In addition, these countries, as well as developing nations such as China, are introducing new regulations on fuel economy and CO_2 emissions in the automotive sector. Market-based emissions trading programmes, including the European Union Greenhouse Gas Emissions Allowance Trading Scheme (EU ETS) and the Chicago Climate Exchange (CCX), are also emerging in a number of countries.

Responsible companies have to respond to these developments with a three-step strategy:

Assessing and reporting on climate emissions

The increasingly accepted standard for accounting, measuring and reporting on greenhouse gas emissions is the Greenhouse Gas Protocol (GHG Protocol) developed jointly by the World Resources Institute and the World Business Council for Sustainable Development.[146] A growing list of companies has adopted the GHG Protocol for tracking and reporting their emissions. The GHG Protocol is consistent with the guidelines issued by the IPCC for reporting on emissions at a national level.

Reducing climate emissions

Of course, just reporting on emissions does little to reduce the risks of climate change – actual decreases in emissions are required. Establishing emissions reduction targets is fast becoming standard practice for businesses today.[147] In fact, many companies have set more aggressive targets than those established by the Kyoto Protocol (on average 5.2 per cent from 1990 levels).

Shifting towards climate-friendly technology

To respond successfully to climate change, society needs to transform the most carbon-intensive sectors: energy, industry and transport. The United Nations, for example, has identified renewable energy and improved energy efficiency as an important component of the Millennium Development Goals.[148]

A recent WWF study showed with a high degree of probability that known energy sources and proven technologies could be harnessed between now and 2050 to meet a projected doubling in global demand for energy, while at the same time achieving the necessary significant drop (about 60-80 percent) in carbon dioxide emissions needed to prevent dangerous climate change. This result can be achieved while excluding nuclear power, unsustainable biomass and unsustainable forms of hydroelectricity.[149]

4.2.3 Content of a bank policy

Present investments determine the carbon intensity of the future to come. As the impact of the projects financed will come about later, when the projects have finished, it is crucial that strict reduction targets are set today. As financiers of many investment projects, banks should play a leading role in shifting investments towards a less carbon-

intensive economy by setting more aggressive de-carbonisation standards than the national targets in order to delay or halt the accelerating process of global warming.

In December 2007, BankTrack released a position paper, "A Challenging Climate" which summarises what banks should do to help combat climate change. The following elements should be included in a bank's climate change policy:

Assessing and reporting the bank's climate impact

Banks need to assess their impact on global climate change in a comprehensive and reliable manner, by measuring both the greenhouse gas emissions caused by their own energy consumption (*operational emissions*) as well as their share in the greenhouse gas emissions of their clients (*financed emissions*). It is important to establish internal processes to understand the risks related to these emissions. Banks should require their clients to adopt a greenhouse gas accounting and public reporting system such as the *GHG Protocol*. Greenhouse data from every client need to be evaluated in every lending and financing decision and an appropriate carbon price needs to be reflected in every business calculation.

In doing so, banks can build upon the work of the Carbon Disclosure Project, a coalition of institutional investors which regularly asks the world's largest companies to report their annual investment-related and emissions information relating to climate change.[150] While the CDP is an important initiative to promote more transparency and disclosure on climate change, the responses are voluntary and the quality of the responses varies widely. More efforts are needed to develop a reliable overall inventory of corporate greenhouse gas emissions.

Moreover, banks should engage with civil society groups to agree upon a methodology to assign the greenhouse gas emissions of their corporate clients in a fair and reliable way to all financial stakeholders of these clients (shareholders, banks, bondholders, and others). BankTrack member groups Platform, les Amis de la Terre and Milieudefensie have already made pioneering assessments of banks financed emissions.

Setting measurable reduction targets

The commitment of the bank to greenhouse gas reductions should be made measurable by setting portfolio-level reduction targets, as well as normalised reduction goals (e.g. a carbon intensity-equivalent for each Euro that is lent by a bank to its clients). These targets should not only beat the average Kyoto Protocol targets, but should be based upon the ambition to prevent dangerous climate change impacts. This would translate into a carbon dioxide emission reduction target of about 90 percent by 2050 in industrialised countries.

Shifting financing from fossil fuels to renewable energy

To realize these ambitious goals, banks should review their investments in the energy sector. A radical shift away from investments in fossil fuels extraction and transportation, as well as fossil fuel-based electricity generation is needed. Banks need to develop targets and timelines to achieve a reduced exposure to the fossil fuel sector. New investments in fossil fuel should be avoided. Energy technologies which emit relatively large amounts of CO_2 per energy unit produced, such as powder coal plants, should be excluded completely from financing.

Instead, banks need to develop and fund a proactive strategy for investing in renewable energy and energy efficiency programmes and projects such as solar energy, wind energy, small-scale hydropower and sustainable biomass production. In June 2004, the 154 governments attending the International Conference for Renewable Energies called on the banking sector to offer more financing for renewable energy, and more risk-hedging financial tools to reduce investment risks in this sector.[151]

The innovative structures which are presently used by banks to limit country and other specific risks in the financing of oil pipelines and coal-fired power plants, should be applied to enable the financing of renewable energy production.

Financing the transition to a carbon-extensive economy

The bank's climate policy will not only have to deal with its energy producing clients, but as well with all energy consuming clients, corporate and private. The bank needs to use its financial services to enable all its present and prospective clients to contribute to the necessary transition to a carbon-extensive economy. Climate risk needs to be incorporated in the overall client risk identification and assessment process and a set of assessment tools needs to be developed to determine greenhouse gas reduction options for every client - whether active in the chemical industry or the food industry.

The transport sector merits specific attention in this respect. Producers of cars and other means of transport as well as companies involved in transporting goods and people need to be encouraged to develop new products and processes to drastically reduce their greenhouse gas emissions. Only making cars more fuel-efficient is certainly not sufficient to meet the goal of carbon reduction. New types of engines (electric), new means of transport and new transport concepts need to be developed to make the transport sector significantly less carbon-intensive.

Energy saving and efficiency by private clients should be rewarded, for instance by providing cheaper mortgages for energy efficient houses and/or commercial real estate. Together with their corporate clients, banks need to set greenhouse gas reduction targets as precondition for further financial services. For each client the options to replace energy-intensive products with alternatives, to reduce energy consumption in their production processes and to switch to (own) renewable energy sources should be explored and applied as far as possible. When some of these options seem to be cost prohibitive, the bank and its client should explore financing structures which would make these options achievable.

Banks and other financial institutions could combine their efforts in stimulating the companies they invest in to reduce their energy consumption, for instance by joining the UNEP FI's Climate Change Working Group (CCWG), the Investor Network on Climate Risk (INCR), the Institutional Investors Group on Climate Change (IIGCC), the Global Business Leadership Platform on Climate Change or the Global Roundtable on Climate Change.

Additionally, the bank should actively look for investment possibilities which can help de-carbonise the economy, such as public transport, low-energy housing and commercial

real estate, sustainable agriculture, forestry and fishery practices, and many other low-carbon products and services. Financing such initiatives and the requirements attached to them should be consistent with the specific sector policies described in this report.

Exclude 'false solutions'

Although de-carbonisation of the economy is a very high priority, it is important that banks should not finance or promote unacceptable alternatives ('false solutions') to fossil fuels as source of energy.

Nuclear energy, which entails great risks to human health, should be systematically excluded from all bank investments. Large-scale hydro-electricity dams, which are often damaging entire ecosystems and infringing rights of local people, are only acceptable under strict conditions (see paragraph 3.2 on Dams).

Production of biomass for biofuels or electricity, which often leads to severe environmental and social problems, should also meet strict conditions. Furthermore, banks should acknowledge that biomass production can never replace a significant percentage of global fossil fuel consumption without severely threatening biodiversity, land rights of local people and global food production (see paragraph 3.1 on Agriculture). For this reason, BankTrack calls upon banks to refrain from financing biofuel projects until all concerns have been adequately addressed.

Carbon offsets should be considered by the bank and its clients only as a last resort; they cannot be the key element of a climate policy. Carbon offset can be achieved by investing in projects that either avoid emissions in the first place or remove existing greenhouse gases from the atmosphere (*carbon sequestration*). However, a number of reports by SinksWatch and others demonstrate that many of these kind of projects do not lead to any real greenhouse gas reductions or have negatives sustainability consequences in other aspects. The Gold Standard developed by WWF for carbon offset investments aims to identify investments which do contribute to sustainable development.[152]

4.2.4 Scoring table

The considerations in the previous paragraphs lead to the following scoring table with regard to bank policies on climate change:

0. *The bank has no policy on this issue or has a policy that deals only with operational emissions;*
1. *The bank's policy acknowledges the bank has a responsibility for its financed emissions, but does not commit to clear steps;*
2. *The bank's policy aims to measure and reduce the bank's financed emissions OR takes concrete steps to shift its financing to renewable energy and a carbon-extensive economy (excluding unacceptable alternatives);*
3. *The bank's policy aims to measure and reduce the bank's financed emissions AND takes concrete steps to shift its financing to renewable energy and a carbon-extensive economy (excluding unacceptable alternatives);*

4. *The bank's policy sets ambitious (about 90%) portfolio-level reduction targets and is actively shifting its portfolio towards renewable energy and a carbon-extensive economy (excluding unacceptable alternatives).*

Signatories of UN Global Compact, UNEP Financial Initiative, the UN Principles for Responsible Investment and participants of the Carbon Disclosure Project score 1 point on climate change. These collective standards are discussed further in paragraph 7.1. The scores for these collective standards are awarded to all signatories, unless the bank's own climate policy scores higher. Scores of individual and collective standards are not added up; only the highest score is awarded.

4.2.5 Results

Climate change is a popular issue, and many banks (31) have at least published a position statement or climate policy. However, most of the time these publications focus mainly on *operational emissions* whereas the banks' *financed emissions* are many times higher. We score banks only on their policies regarding their financed emissions.

Ten banks specifically mention that they recognise their role in financing climate change by financing very carbon intensive industries, but none has translated this recognition into a credit policy with strict criteria or targets with respect to carbon emissions or financing of green energy.

Scores on Climate Change policies					
ANZ	2	BNP Paribas	1	Santander	1
Bank of America	2	Citi	1	Scotiabank	1
Dexia	2	Crédit Agricole	1	Société Générale	1
Fortis	2	Credit Suisse	1	Standard Bank	1
HSBC	2	Deutsche Bank	1	Standard Chartered	1
JPMorgan Chase	2	Goldman Sachs	1	State Bank of India	1
KBC	2	ICBC	1	Sumitomo Mitsui	1
Morgan Stanley	2	ING	1	UBS	1
Rabobank	2	Intesa Sanpaolo	1	Unicredit	1
Westpac	2	Merrill Lynch	1	WestLB	1
Banco Bradesco	1	Mitsubishi UFJ	1	ABN AMRO	1
Banco do Brasil	1	Mizuho Financial	1	Bank Mandiri	0
Banco Itaú	1	Nedbank	1	Bank of China	0
Barclays	1	RBS	1	China Construction	0
BBVA	1	Royal Bank of Canada	1	Saudi-American Bank	0