

Investing in climate change: the role of Dutch banks



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Voorwoord

Met genoeg ga ik in op het verzoek een voorwoord te schrijven bij het Rapport "Investing in climate change: the role of Dutch banks". Als voormalig directeur van Milieudefensie en huidig directeur van Natuurmonumenten heb ik bij wijze van spreken ervaring opgedaan met beide kanten van de klimaatmedaille. Bij Milieudefensie met de noodzaak en – vooral ook – de grote mogelijkheden om actief beleid te voeren gericht op vermindering van door de mens veroorzaakte klimaatverandering. Bij Natuurmonumenten met de gevolgen van het veranderende klimaat die zich nu al in de natuur voordoen. En met de mogelijkheden en moeilijkheden om in het natuurbeheer op deze veranderingen in te spelen. Op dit moment beïnvloedt klimaatverandering al aantoonbaar de natuurlijke plantengroei van Nederland. Broedvogels als mezen ondervinden in het voorjaar problemen door het vervroegd invallen van de lente.

Door het stijgen van de zeespiegel lopen belangrijke kwelders in het Waddengebied op afzienbare termijn het gevaar onder water te verdwijnen. Dat het klimaat verandert is inmiddels een voldongen feit. Maatregelen nemen om de natuur te helpen zich aan te passen is dus een onontkoombare noodzaak. Maar het allerbelangrijkst is om het tempo van opwarming van de aarde binnen de perken te houden. Dat kan alleen maar bereikt worden door snel de emissies van broeikasgassen fors te beperken.

Daarbij draagt eenieder verantwoordelijkheid, van consument via bedrijf tot overheid. Dit rapport gaat over de rol die banken kunnen spelen. Zij hebben weliswaar een beperkte eigen uitstoot van CO₂, maar indirect zijn ze betrokken bij enorme emissies van de economische sectoren, waaraan ze financiële diensten verlenen.

De analyse en aanbevelingen in dit rapport zijn van groot belang voor banken die hun maatschappelijke verantwoordelijkheid serieus willen invullen. Daarmee zou een belangrijke bijdrage geleverd worden aan het beheersbaar maken van klimaatverandering.

Teo Wams

Directeur Natuurbeheer



Teo Wams,
Directeur Natuurbeheer Vereniging Natuurmonumenten:

"De analyse en aanbevelingen in dit rapport zijn van groot belang voor banken die hun maatschappelijke verantwoordelijkheid serieus willen invullen."

Inleiding

In de discussie rond de Nederlandse “energietransitie” – de omslag van een op fossiele brandstoffen gebaseerde energiehuishouding naar een systeem gebaseerd op duurzame energie – is financiering onderbelicht gebleven. Dit rapport van Milieudefensie is een eerste stap om een verandering te brengen in dit hiaat in het maatschappelijke debat over de toekomst van de Nederlandse energievoorziening en de strijd tegen klimaatverandering.

Een omslag naar duurzame energie kan niet plaatsvinden indien investeerders zich blijven richten op oude technologieën en nieuwe (duurzame) energietechnologieën verstoken blijven van de broodnodige investeringen. Door gebrekkige toegang tot (risicodragend) kapitaal breken nieuwe technologieën in Nederland moeilijk door in de markt. Voor een succesvolle omslag naar een duurzame energievoorziening zou dit moeten veranderen.

Banken hebben in het verleden een belangrijke rol gespeeld in de financiering van projecten die tot klimaatverandering leiden. Zo zijn twee van de grootste Nederlandse banken grote investeerders in de energiesector (goed voor ongeveer een derde van de uitstoot van broeikasgassen in Nederland). Een andere Nederlandse bank is nauw betrokken bij de landbouw, een sector die meer dan tien procent van de mondiale en nationale broeikasgassen voor haar rekening neemt. Gezien de nauwe relatie tussen banken en energie- en CO₂-intensieve sectoren is het alleszins redelijk om te verwachten dat de financiële sector haar verantwoordelijkheid zal nemen om bij te dragen aan de oplossing.

In de internationale financiële sector groeit het besef dat ook zij een verantwoordelijkheid hebben bij het bestrijden van klimaatverandering. In dit rapport wordt het beleid van vier Amerikaanse banken en een Britse bank vergeleken met de wijze waarop de Nederlandse banken omgaan met klimaat en energie. Uit deze vergelijking komt één belangrijk verschil duidelijk naar voren: waar Nederlandse banken zich vooral richten op het aanbieden van duurzame financiële producten aan klanten (zoals duurzaam beleggen) leggen de internationale banken meer de nadruk op de invloed die zij zelf kunnen uitoefenen met hun leningen en investeringen. Dit betekent dat



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waar de Nederlandse banken de verantwoordelijkheid voor het tegengaan van klimaatverandering vooral bij hun klanten leggen, de Amerikaanse banken de verantwoordelijkheid in een grotere mate naar zichzelf toetrekken. De Nederlandse banken zouden hieraan een voorbeeld kunnen nemen. Deze toonaangevende internationale banken laten zien wat het betekent om medeverantwoordelijkheid voor klimaatverandering te nemen door klimaatbeleid op drie manieren in te vullen.

Het begint bij de erkenning dat de financiële sector een rol moet spelen in het bestrijden van klimaatverandering. Een tweede stap is het in kaart brengen van de klimaatgevolgen van grote leningen en een actieve inzet om deze uitstoot te verminderen. Dit kan bijvoorbeeld door de kosten voor CO₂ mee te nemen in de financiële analyses. En als derde, de ontwikkeling van concrete financiële producten voor klanten – zoals een klimaathypotheek. Hiermee laat een bank duidelijk aan de samenleving zien dat ze klimaatverandering serieus neemt

en wil investeren in de noodzakelijk omslag naar een duurzame energievoorziening.

De Nederlandse bankensector, goed voor een omzet van drie keer het Nederlandse BNP kan niet aan de kant blijven staan in deze belangrijke periode in de wereldgeschiedenis. Dit rapport laat duidelijk zien dat het voor grote banken mogelijk is om een actieve rol te spelen in het tegengaan van klimaatverandering en zo bij te dragen aan het veilig stellen van de toekomst van het leven op aarde. Toonaangevende internationale banken laten zien dat een klimaatvriendelijke bank mogelijk is. Nederlandse banken kunnen niet langer achterblijven!

Donald Pols

Campagneleider Klimaat & Energie
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Samenvatting

Klimaatverandering is een van de belangrijkste milieuproblemen van de éénnentwintigste eeuw. De temperatuur op aarde kan in de komende honderd jaar met 6 °C stijgen, met mogelijk catastrofale gevolgen voor mens en natuur. Dit rapport onderzoekt de speciale rol die banken kunnen spelen om CO₂-emissies terug te dringen om zo de dreiging van klimaatverandering af te wenden. Zoals alle andere bedrijven produceren banken via hun bedrijfsactiviteiten CO₂, de zogenaamde directe emissies. Maar banken veroorzaken een veel hogere indirecte emissie, via de CO₂-uitstoot die de door banken gefinancierde klanten genereren. Bij zowel de directe als de indirecte emissies kunnen belangrijke stappen gezet worden om klimaatverandering aan te pakken. Recentelijk is een aantal banken zich bewust geworden van de speciale rol en verantwoordelijkheden die banken hebben ten aanzien van klimaatverandering. Zij hebben vervolgens een formeel beleid geformuleerd voor een meer systematische aanpak van klimaatverandering.

Banken in Nederland

In dit rapport worden het opereren en de klimaatgerelateerde activiteiten van de grote Nederlandse banken onder de loep genomen, waaronder ABN AMRO, Fortis, ING en Rabobank. De twee kleinere duurzame niche banken, Triodos en ASN Bank (onderdeel van SNS Reaal) zijn ook meegenomen in de analyse. Over het algemeen worden Nederlandse banken gezien als voorlopers op milieugebied.

Ze hebben vaak een milieubeleid en programma's om hun energieverbruik terug te dringen. Ook hebben ze diverse klimaatgerelateerde financiële producten op de markt gebracht zoals investeringen in duurzame energie en duurzame beleggingsfondsen. Toch laten de bevindingen van dit rapport zien dat Nederlandse banken er nog niet in geslaagd zijn om een allesomvattend klimaatbeleid te formuleren waarin zij zich committeren aan het terugdringen van hun directe en, nog belangrijker, hun indirecte CO₂-emissies. Een uitzondering is ABN AMRO die voor de directe emissies een duidelijke reductiedoelstelling heeft vastgesteld. Triodos is de enige bank die uitvoerig rapporteert over haar directe CO₂-emissies en is bovendien ook volledig klimaatneutraal. Triodos heeft zich gecommitteerd aan energie efficiëntie en het gebruik van duurzame energie. Bovendien compenseert de bank de resterende directe emissies.

SNS Bank is de enige bank die geen enkele informatie geeft over haar CO₂-emissies. Geen enkele bank rapporteert of geeft schattingen van de indirecte emissies.

De vier grootste Nederlandse banken beschikken samen over 2.705 miljard euro. Op basis van openbare informatie schatten we dat hiermee jaarlijks een uitstoot gegenereerd wordt van 750 Mton CO₂. Dit is gelijk aan 2,8% van de wereldwijde CO₂-emissies of drie keer de uitstoot die de Nederlandse economie jaarlijks produceert (218 Mton). ABN AMRO en ING hebben de grootste indirecte emissies volgens dit onderzoek. Van de verschillende financiële producten die de vier grote banken aanbieden worden naar schatting de meeste indirecte emissies gegenereerd door zakelijke leningen, financiële beleggingen & vermogensbeheer en private banking. Omdat er weinig tot geen openbare informatie beschikbaar is over de ontvangers van financieringen of investeringen van banken, zijn dit ruwe schattingen. Bovendien zijn er geen gegevens openbaar over de financiering en investeringen in energie intensieve industrieën.

De directe emissies van Nederlandse banken bedragen ongeveer 0,8 Mton oftewel 0,37% van de totale Nederlandse emissies in 2005 (218 Mton). Deze emissies worden voornamelijk veroorzaakt door het energieverbruik van gebouwen, computers en andere ICT-apparatuur en zakelijke reizen. Door energie te besparen en duurzame energie in te kopen kunnen banken hun directe emissies terugdringen en tegelijkertijd het goede voorbeeld geven en aan hun klanten laten zien dat ze een voorloper zijn. Om een klimaatneutrale bedrijfsvoering te realiseren moeten de resterende emissies gecompenseerd worden door CO₂-rechten te kopen. Geschat wordt dat het de vijf grootste Nederlandse banken samen jaarlijks ongeveer 17 miljoen euro zou kosten (of 0,1% van de totale netto winst in 2005) om klimaatneutraal te worden.

Buitenlandse banken

Een aantal toonaangevende banken uit andere delen van de wereld hebben een sterk en uitvoerig klimaatbeleid geformuleerd en zich ingespannen om klimaatoverwegingen systematisch onderdeel te maken van hun dagelijkse werkzaamheden. Het lijkt erop dat op dit moment de grote Nederlandse banken achter lopen op deze buitenlandse banken. Dit rapport onderzoekt

daarom ook de 'best practices' op het gebied van klimaatbeleid bij een selecte groep banken waaronder de Amerikaanse banken Bank of America, Citigroup, Goldman Sachs en J.P. Morgan Chase en de Britse Bank HSBC. Van deze banken heeft de Bank of America het meest uitgebreide klimaatbeleid. Zij heeft de meest ambitieuze doelstelling om haar directe CO₂ emissies te reduceren en is de enige bank die ook een doelstelling heeft om de indirecte emissies van een deel van haar klantenbestand terug te dringen. De Britse HSBC is een ander goed voorbeeld omdat het sinds eind 2005 de eerste grote internationale bank is met een compleet klimaatneutrale bedrijfsvoering. De bank compenseert ook de emissies die veroorzaakt worden door zakelijke reizen en heeft zelfs haar klimaatneutraliteit door een externe controleur laten verifiëren.

De Amerikaanse en Britse banken die voor dit rapport zijn onderzocht, hebben minder CO₂-gerelateerde financiële producten en diensten ontwikkeld dan Nederlandse banken. De producten van de Nederlandse banken stellen klanten in staat om zelf te besluiten of en in welke mate zij hun uitstoot van CO₂ willen reduceren. De beschreven Amerikaanse en Britse banken daarentegen hebben activiteiten ontwikkeld gericht op het terugdringen van de CO₂-uitstoot van klanten, meestal via leningen of investeringen. Deze banken spelen een actieve rol doordat CO₂-emissies onderdeel zijn van de reguliere goedkeuringsprocedure voor leningen en investeringen. Hierdoor hebben ze (mn bij leningen aan grote bedrijven) een grotere invloed op hun klanten bij het reduceren van de CO₂-emissies.

Bovendien zijn de beschreven Amerikaanse en Britse banken ook meer open over hun doelstellingen om indirecte CO₂-emissies terug te dringen en hebben ze een (uitvoeriger) klimaatbeleid ontwikkeld. Met name op het gebied van beleid lopen de Nederlandse banken achter bij hun Amerikaanse en Britse collega's. De Britse en Amerikaanse benadering kan daarentegen omschreven worden als meer 'top-down' (beginnend op beleidsniveau), terwijl de Nederlandse benadering als 'bottom-up' gekarakteriseerd kan worden (beginnend op productenniveau). Van beide benaderingen moet de invloed op het verlagen van de (directe en indirecte) CO₂-emissies nog vastgesteld worden. Beide benaderingen zijn waardevol en zowel de Nederlandse als de Amerikaanse en Britse banken worden uitgedaagd om de goede voorbeelden van andere banken over te nemen.

Actieplan voor de Nederlandse banken

Op basis van de bevindingen van dit rapport wordt geconcludeerd dat Nederlandse banken zich

pro-actiever moeten opstellen op het terrein van klimaatverandering en een systematisch plan van aanpak moeten ontwikkelen. Met een dergelijk kader en de daarbijbehorende rapportages kunnen banken beter verantwoording afleggen aan het publiek over hun rol en verantwoordelijkheden op het gebied van klimaatverandering. De volgende zeven richtlijnen zijn gebaseerd op de normen voor 'best practice' en zijn voor alle (Nederlandse en buitenlandse) banken nastrevenswaardig:

1) Ontwikkel een compleet klimaatbeleid met een bijbehorend plan van aanpak

Banken moeten een formele beleidsverklaring opstellen rond het thema klimaatverandering. Deze verklaring geeft beleid en praktijk binnen het bedrijf een duidelijk en consistent kader. In deze beleidsverklaring wordt de relevantie van klimaatverandering voor het bedrijf omschreven en worden de rollen en verantwoordelijkheden van de bank voor dit probleem gespecificeerd.

2) Stel duidelijke doelstellingen voor het terugdringen van zowel directe als indirecte CO₂-emissies

Banken moeten duidelijke doelstellingen formuleren voor het reduceren van zowel directe als indirecte emissies en een termijn waarin ze deze doelen wil halen. Hiermee kan de progressie gemeten worden en kunnen banken op hun verantwoordelijkheid aangesproken worden.

3) Gebruik duurzame energie en maak de eigen bedrijfsvoering klimaatneutraal

Om een sterke impuls te geven aan energiebesparing en het goede voorbeeld te geven aan haar klanten zouden banken de elektriciteit moeten betrekken van duurzame bronnen en ernaar moeten streven om hun eigen bedrijfsvoering volledig klimaatneutraal te maken. Op de middellange termijn moeten zowel de dienstreizen als het woon-werkverkeer van het personeel ook onderdeel van een klimaatneutrale bedrijfsvoering zijn.

4) Promoot het eigen klimaatbeleid bij voorlopers en achterblijvers op klimaatgebied

Om de beleidsdoelstellingen op het gebied van indirecte emissies te kunnen halen, zullen banken klimaatonderwerpen bij hun klanten ter sprake moeten brengen. Voorlopers en achterblijvers zullen er altijd zijn. Banken moeten in hun beleid uitleggen hoe zij voorlopers willen ondersteunen en achterblijvers willen beïnvloeden om op deze wijze haar beleidsdoelstellingen te halen.

5) Beschrijf betrokkenheid en publieke standpunten

Banken kunnen en moeten uit zichzelf actie ondernemen tegen klimaatverandering. Op de lange termijn zijn deze inspanningen echter alleen effectief in het terugdringen van de CO₂-emissies als de klanten van banken de noodzaak voor actie begrijpen. Bovendien moet er ook een effectief beleid en een regelgevend plan van aanpak zijn. Banken moeten uitleggen hoe ze van plan zijn met om klanten en regeringen te stimuleren in actie te komen tegen klimaatverandering.

6) Innoveer en ontwikkel nieuwe producten

Banken kunnen innoveren en producten ontwikkelen om hun klanten te stimuleren CO₂-emissies terug te dringen. Dit kan zowel voor particuliere klanten zijn (met name op het gebied van hypotheek en de huizenmarkt) als voor zakelijke klanten (met name bij klanten uit de energie intensieve sector). Banken moeten onder andere de kosten voor CO₂ in hun financiële modellen internaliseren. Hierdoor zullen de investeringen van banken verschuiven naar bedrijven met minder CO₂-emissies of naar bedrijven die vooruitstrevende ideeën hebben om hun CO₂-emissies terug te dringen. Deze internalisatie van de CO₂-kosten kan bij verschillende financiële producten worden toegepast waaronder leningen, investeringen en vermogensbeheer voor derden.

7) Rapporteer jaarlijks de directe en indirecte CO₂-emissies en de voortgang op het bereiken van de doelstellingen

Banken zouden jaarlijks verslag moeten uitbrengen over hun directe en indirecte emissies en hun voortgang op het bereiken van de reductiedoelstellingen. Zo kan systematisch de voortgang gemonitord worden en legt de bank verantwoording af aan haar klanten. Waar mogelijk, zou deze verslaglegging volgens internationaal erkende richtlijnen moeten plaatsvinden zoals die door de Greenhouse Gas Reporting Protocol en GRI gepromoot worden. Banken moeten ernaar streven om volledig te rapporteren over alle directe en indirecte CO₂-emissies.

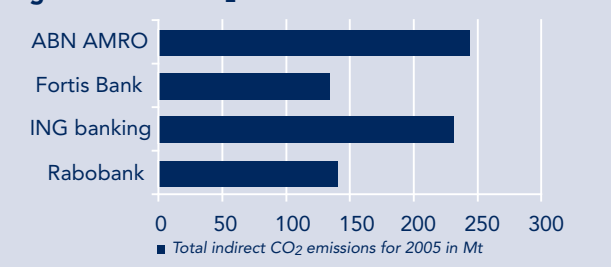
Executive Summary

Climate change is one of the most important environmental threats of the 21st century. Global temperatures could rise by 6°C within 100 years with possibly devastating results for humanity and the world's ecology. This report investigates the special role that banks can play to reduce CO₂ emissions¹ and hence mitigate climate change. Like every company, banks produce CO₂ from their operations (direct CO₂ emissions). But banks also indirectly generate CO₂ emissions by financing clients who generate CO₂ emissions (indirect CO₂ emissions). Indirect emissions are much larger than the direct emissions of banks, however, in both areas important steps can be taken to address climate change. Recently, a number of banks have become aware of their special role and responsibilities with regard to climate change issues and have introduced formal policies to address climate change in a more systematic manner.

Dutch banks

The report reviews in more detail the operations and climate change related activities of major Dutch banks including ABN AMRO, Fortis Bank, ING Bank and Rabobank. Two smaller sustainable niche banks, Triodos Bank and ASN Bank (part of SNS Reaal) are also included in the analysis. In general, Dutch banks are regarded as environmental sector leaders. They typically have environmental policies and programmes in place to limit energy consumption. Furthermore, they have developed a broad range of climate change related financial products including investments in renewable energy and sustainable investment funds. However, based on the findings of this report, it becomes clear that Dutch banks have so far failed to adopt comprehensive climate change policies in which they commit themselves to reduce their direct and, more importantly, indirect CO₂ emissions. When it comes to direct emissions, ABN AMRO is an exception as it has set a clear target to reduce its direct CO₂ emissions. Similarly, Triodos Bank is the only bank that has comprehensive reporting on its direct CO₂ emissions and the bank is fully carbon-neutral. Triodos Bank is committed to energy efficiency and the use of renewable energy and it offsets all its remaining direct CO₂ emissions. SNS bank is the only bank that does not report any information on its CO₂ emissions. None of the banks report on or provide estimates of their indirect CO₂ emissions.

Figure: indirect CO₂ emissions for each bank



On the basis of publicly available information, we estimate that the EUR 2,705 billion of combined total assets of the four major Dutch banks annually generate 750 mega tonnes of CO₂. This represents some 2.8% of annual global CO₂ emissions, or three times the Dutch economy's total CO₂ emissions of 218 Mt. Based on our findings, ABN AMRO and ING have the largest indirect CO₂ emissions. Of the different financial products offered by the four major banks, commercial loans, financial assets and asset management & private banking are estimated to generate most indirect emissions. These are rough estimates as public reporting of banks as to the recipients of financing or investments is poor and typically no data is disclosed as to financing and investments in energy intensive industries.

Dutch banks' direct CO₂ emissions represent some 0.8 Mt or 0.37% of total CO₂ emissions of 218 Mt of the Netherlands in 2005. These emissions are mostly produced by energy consumption from buildings, ICT-equipment and business travel. Banks should aim to reduce these direct CO₂ emissions to set a good example and to show leadership towards their clients. Banks can minimise these CO₂ emissions by saving energy or buying energy from renewable sources. The remaining emissions could be offset by buying CO₂ credits and thereby making the banks' operations carbon neutral. To become carbon neutral, it is estimated that the five Dutch banks would together have to spend an estimated annual amount of EUR 17 million i.e. some 0.1% of their aggregated net profit in 2005.

Non-Dutch banks

Several important banks from other parts of the world have established strong and comprehensive climate change policies and related efforts to systematically

integrate climate change considerations into their day-to-day business. The major Dutch banks currently seem to lag behind these banks. Therefore, this report also examines best practices in the field of climate change policies for a selected number including Bank of America, Citigroup, Goldman Sachs and J.P. Morgan Chase from the United States and British bank HSBC. Of these banks, Bank of America has the most extensive climate change policy. It has the most ambitious targets to reduce direct CO₂ emissions and is the only bank that has also set a target to reduce indirect CO₂ emissions for part of its client portfolio. British bank HSBC also provides a good example since it is the first major international bank that has become fully carbon neutral by the end of 2005. It also compensates CO₂ emissions caused by business travel and an external auditor has even verified whether HSBC is indeed carbon neutral.

The US and UK banks reviewed in this report have developed less CO₂ related financial products and services than the Dutch banks. The products of the Dutch banks enable clients to choose to which extent they want to decrease their CO₂ footprint. However, the selected US and UK banks have developed activities that aim to reduce CO₂ emissions of their clients, for which they mostly use loans and investments. These banks take on an active role themselves as to extent their (especially corporate loans) clients are enabled to choose to which extent they want to decrease their CO₂ footprint as CO₂ emissions has become part of the regular loan or investment approval process.

Furthermore, the selected US and UK banks are more explicit about their goal to reduce indirect CO₂ emissions and have developed (more comprehensive) climate change policies. Especially in this respect of policies the Dutch banks lag behind their US and UK peers. However, as the approach of the US and UK banks can be characterised as more top down (starting at the policy level) and the approach of the Dutch banks more bottom up (starting at the product level), in both approaches the actual impact on lower (indirect and direct) CO₂ emissions still have to be measured. Both approaches are valuable and both Dutch and US/UK banks are challenged to integrate the best-practices from the other banks.

Action list for Dutch banks

On the basis of the findings of this report, it is recommended that Dutch banks become more pro-active on climate change related issues and develop a systematic framework for action. Such a framework and related reporting would increase much needed accountability towards the public as to the role and responsibilities of

banks in the area of climate change. The following seven guidelines are considered best-practice standards that all (Dutch and non-Dutch) banks should aim for:

1. Establish a comprehensive climate change policy as a framework for action

In order to provide a consistent framework for corporate action, banks have to adopt a formal policy statement on climate change. Such a policy statement would explain the relevance of climate change for the company and specify how the bank sees its role and responsibilities.

2. Set clear reduction targets for both direct and indirect CO₂ emissions

In order to monitor progress and strengthen accountability, banks should set clear CO₂ reduction targets and target dates. These should be set for both direct and indirect CO₂ emissions.

3. Use renewable energy and make own operations carbon neutral

In order to provide strong incentives to minimise energy use and in order to set a good example towards their clients, banks should use electricity from renewable energy sources and strive to make their own operations fully carbon neutral. These activities should at least in the medium term include all business travel as well as commuting by employees.

4. Clarify how it will promote and engage with climate change leaders and laggards

In implementing the policy objectives with respect to indirect CO₂ emissions, banks will have to raise climate change issues with their clients. There will always be leaders and laggards and banks should explain how they plan to promote leaders and how they will engage with laggards to achieve their policy objectives.

5. Lay out engagement and public policy position

Banks could and should take action on their own in the area of climate change. However, in the long-run such efforts will only effectively contribute to reducing global CO₂ emissions if banks' clients also understand the need for action and there exists an effective policy and regulatory framework. Banks should explain how they intend to engage with clients and governments to promote effective climate change action.

6. Develop new products and innovate

Banks can innovate and develop products to stimulate clients to reduce their CO₂ emissions. This could be done towards both retail clients (especially in the

mortgage and housing market) and corporate clients (especially those active in the energy intensive sectors). Banks should, amongst others, internalise CO₂ costs in their financial modelling. In this way banks can shift their investments to companies that have less CO₂ emission or have state-of-the-art programmes in place to reduce CO₂ emissions. This internalisation can be applied to a number of financial products, including loans, investments and third party asset management.

7. Report annually on direct and indirect CO₂ emissions and progress towards targets

To improve accountability and in order to systematically track progress, banks should report annually on direct and indirect CO₂ emissions and progress towards targets. Where available, this reporting should be done following internationally recognised reporting standards such as those promoted by the Greenhouse Gas Reporting Protocol and by GRI. Banks should strive to provide comprehensive reporting on all their direct and indirect CO₂ emissions.

1 Introduction

Climate change is one of the biggest environmental challenges that humanity faces and probably the most important environmental threat of the 21st century. According to some estimates, average global temperatures could rise by 6°C within 100 years with possibly devastating results for humanity and the world's ecology. The root cause of the climate change that we are experiencing at the moment is still subject to scientific and political debate. However, the vast majority of climate change research now strongly confirms a direct relation between human activity, the rising levels of atmospheric greenhouse gases and climate change. CO₂ or carbon dioxide is the most important greenhouse gas and is emitted during the combustion of fossil fuels². As it becomes clear that climate change will come at potentially very high costs for future generations and is difficult to reverse, momentum is now gaining at governments, companies and individuals to reduce CO₂ emissions and try to mitigate climate change.

Several climate change related regulatory measures have been adopted by governments of which probably the most important one is the Kyoto Protocol. With this treaty 163 nations commit to reduce their CO₂ emissions over the period 2008-2012 by 5.2% compared to their 1990 emissions. Although some of the largest and fastest growing CO₂ emitters (i.e. the United States, Australia and China) do not participate or have no binding targets, Kyoto represents countries responsible for 60% of global CO₂ emissions. In order for relevant European countries to achieve commitments under Kyoto, the EU Emissions Trading System (EU ETS) was introduced in 2005. Even in the United States several initiatives have been developed at a regional and local level to address climate change. For example mayors of some of the most important cities have committed themselves to follow the goals of the Kyoto Protocol. As these initiatives are being executed, policy makers in turn shift to set long-term, post-Kyoto targets. Companies need these long-term policy objectives to justify significant long-term investments in energy efficiency and/or investments in renewable energy sources.

Banks play a very special role in our economies and similarly in efforts and solutions for reducing CO₂ emissions. Like every company, banks produce

CO₂ from their operations. But banks can also influence the behaviour of their clients, by adding CO₂ related conditions to the pricing of their financial products. In this way, they are potentially able to reduce CO₂ emissions of their clients. The four major Dutch banks (i.e. ABN AMRO, Fortis Bank, ING's banking division and Rabobank) together finance activities that produce an estimated 750 mega tonnes of CO₂.³ This represents approximately 2.8% of global CO₂ emissions. Put in a different way, this is more than three times the total CO₂ emissions of the Netherlands. These four major Dutch banks were selected to their size. Friends of the Earth requested to include SNS Reaal (which is the parent company of SNS Bank), and Triodos Bank as well⁴. Triodos Bank only finances sustainable activities. The same is true for ASN Bank which is also part of SNS Reaal.

Generally speaking, the Dutch banks currently seem to lag behind several major international banks. These international banks have established strong and comprehensive climate change policies and related efforts to integrate climate change considerations into their day-to-day business. This report reviews current policy and practice of selected Dutch and international banks in the field of climate change. Based on this review as well as a broader look at international policy developments, climate change best practice guidelines are put forward which are meant to provide a systematic framework to guide the efforts of Dutch banks in this field. The focus is on major mainstream banks. The inclusion of the two smaller niche banks, Triodos Bank and ASN Bank as part of SNS Reaal, could be stimulating to mainstream banks. Obviously, it is not expected that mainstream banks can behave exactly the same as such smaller niche banks.

Structure of the report

Chapter 2 provides an overview of the current knowledge about climate change, the national (Dutch) and international policy context and illustrations of the scale of efforts needed to tackle climate change. Chapter 3 discusses the special role and responsibilities of banks to reduce CO₂ emissions from their own operations (direct CO₂ emissions) and from those of their clients (indirect CO₂ emissions). It also describes which measures banks have taken to reduce these direct and indirect emissions. Chapter 4 provides a detailed overview of the Dutch

banking sector. It highlights the dominance of the four major banks in the Dutch financial market, assesses the level of indirect CO₂ emissions for the four major banks in total and for the most important financial products. Chapter 5 gives an overview of current practice of six Dutch banks in terms of climate change policies and strategies and related reporting. Chapter 6 examines the climate change policies of selected major international banks. Based on findings and conclusions of the preceding chapters, Chapter 7 puts forward best-practice guidelines for Dutch banks, which are meant to provide a systematic framework to guide the efforts of Dutch banks in this field. Chapter 7 also highlights priorities for action for Dutch banks.

2 CO₂ emissions and reduction targets & measures

Introduction

CO₂ is indispensable for life on earth. Plants, trees and algae need CO₂, water and light for photosynthesis and growth. As a by-product they create oxygen. Next to this function, CO₂ also regulates the earth's temperature. It is called a greenhouse gas (GHG), since it helps to trap some of the sun's energy that the earth's surface radiates back into space. This so called greenhouse effect, for which CO₂ accounts for up to 60%, works somewhat like the glass panels of a greenhouse.

Why we have to reduce CO₂ emissions

CO₂ emissions as a result of human activity have doubled between 1970 and 2002 to 25.6 giga tonnes (Gt) per year⁵, while there were almost no human-produced emissions in the pre-industrial era⁶. As a result, atmospheric CO₂ concentrations have increased by 35% to 380ppm⁷ in 2004 from 280ppm before the industrial revolution⁸, while they have remained stable over the last thousand years at this pre-industrial level. Current models foresee that CO₂ emissions will increase to some 62 Gt per year by 2050, leading to CO₂ concentrations of 750ppm if no CO₂ reduction programmes are implemented. There is much debate on how these higher concentrations will influence the global climate. According to the Intergovernmental Panel on Climate Change, these increased CO₂ concentrations could lead to a global warming of between 1.4 and 5.8°C and would cause a wide range of negative impacts on the natural world and human society⁹.

Most important are:

- 1 Higher sea levels with risk of flooding, mostly from the melting of the Greenland ice sheet¹⁰,
- 2 A weakening or shutdown of the Gulf Stream, putting Western Europe in a 'mini ice age',
- 3 A reversal of land carbon sinks, which could result in a global temperature rise above 3°C¹⁰,
- 4 A risk of water shortage for 3.5 billion people and a risk of flooding for 75 million people¹¹,
- 5 An increased rate of extinction of plant and animal species due to climate change¹²,
- 6 More weather related natural disasters. Economic losses could double to USD 150 billion per annum in ten years¹³.

The Kyoto protocol

At the Earth Summit in 1992, the first international policy steps were taken to reduce CO₂ emissions and hence to mitigate climate change. Some 180 countries signed the United Nations Framework Convention on Climate Change (UNFCCC). The signing of this convention was followed by several inter-governmental conferences to turn this commitment into practice. The principal agreement followed in Kyoto in 1997 (the so called Kyoto Protocol), which came into force in 2005, following Russia's ratification. The 163 countries that now have ratified the Kyoto Protocol together represent some 60% of global CO₂ emissions and more than half the world's gross domestic product. Two notable countries that signed the Climate Change Convention but not the Kyoto Protocol are the United States and Australia. The protocol aims to reduce CO₂ emissions over the period 2008-2012 by 5.2%, compared to 1990 levels¹⁴. Only developed countries have to conform to this target, for which they each received their own reduction target (see Table 1 for some examples). These targets mainly depend on the development stage of the country's economy and its level of CO₂ emissions.

During the latest climate meeting in Montreal in December 2005, many countries stressed the need to look beyond Kyoto and to develop long-term reduction targets. Some countries have already adopted individual long-term targets (see Table 1), which aim to prevent that global average temperatures would rise above 2°C. As some experts estimate, global warming should not increase by more than 2°C above the pre-industrial level to limit the negative impacts mentioned above.

To achieve this target, CO₂ concentrations would need to be stabilised at about 400ppm. In turn, this implies that annual global CO₂ emissions in 2050 are no higher than today's level of 25.6 Gt¹⁵. This means that CO₂ emissions would have to reduce by some 36 Gt in 2050 compared to the expected 62 Gt, or a reduction of almost 60%.

Other initiatives to reduce CO₂ emissions

The US and Australia have not ratified the Kyoto Protocol, although the US contributes 23% to world-wide CO₂ emissions and Australia is the world's biggest coal exporter. However, these two countries and some other countries are involved in several local, regional

and international CO₂ reduction initiatives. The most important are:

- 1 The Regional Greenhouse Gas Initiative (RGGI) formed by 9 north-eastern US states. It aims to stabilise emissions from 600 power plants in 2009 and reduce them by 10% in 2020 from now ¹⁶.
- 2 Mayors of 224 cities in the United States have signed an agreement to commit to the goals of the Kyoto Protocol¹⁷. Some large cities include: Los Angeles, New York and Chicago.
- 3 A CO₂ trading system for Australian states that may be pursued without federal support.
- 4 The Australian coal industry aims to reduce CO₂-emission intensity by 33% by 2030.
- 5 The Asia Pacific Partnership on Clean Development and Climate (AP6), which includes six Asia-Pacific nations: Australia, China, India, Japan, South Korea, and the United States. Countries set individual non-binding goals to reduce CO₂ emissions.
- 6 The Climate Leaders programme from the US Environmental Protection Agency's (EPA), which includes voluntary reductions from several multinationals and asks participating companies to

set an aggressive corporate-wide GHG emissions reduction goal to be achieved over 5 to 10 years¹⁸.

Whereas several of the above mentioned initiatives could lead to significant future reductions in CO₂ emissions, it is important to highlight that these initiatives are often voluntary and lack firm targets and/or enforcement

Kyoto's instruments

The Kyoto Protocol's instruments include International Emissions Trading (IET), Joint Implementation (JI) and Clean Development Mechanism (CDM). They have been adopted in order to achieve CO₂ emissions reductions in a cost efficient manner. JI aims to finance emission reduction activities in transition economies in Eastern Europe and CDM in developing countries. For every ton of carbon saved, the investor receives credits called Certified Emission Rights (CER) for CDM and Emission Reduction Units (ERU) for JI. These credits can be sold and traded using IET.

Table 1: CO₂ reduction targets and actual results

Country/Region	Kyoto targets ¹⁹	Results for 2003 ²⁰	Long-term target proposals
France	0%	-2%	-75% by 2050 ²¹
Germany	-21%	-19%	-40% by 2040 ²¹
Netherlands	-6%	1%	-50% by 2050 ²²
Spain	15%	41%	
UK	13%	-13%	-60% by 2050 ²¹
EU-15	-8%	-2%	
EU-25		-8%	-60 to -80% by 2050²³
Japan	-6%		
Russia	0%		
Total Kyoto	-5.2%		
US	-7%		
State of California			-80% by 2050
RGGI			-10% by 2019 ²⁴

mechanisms. They are generally not considered acceptable alternatives to the targets spelled out in the Kyoto Protocol. Nevertheless, they clearly indicate that also in these countries governments recognise that climate change requires action and that the sometimes Kyoto critical views of federal governments not fully reflect the more supportive views of lower layers of government.

The EU and the Dutch CO₂ reduction policy

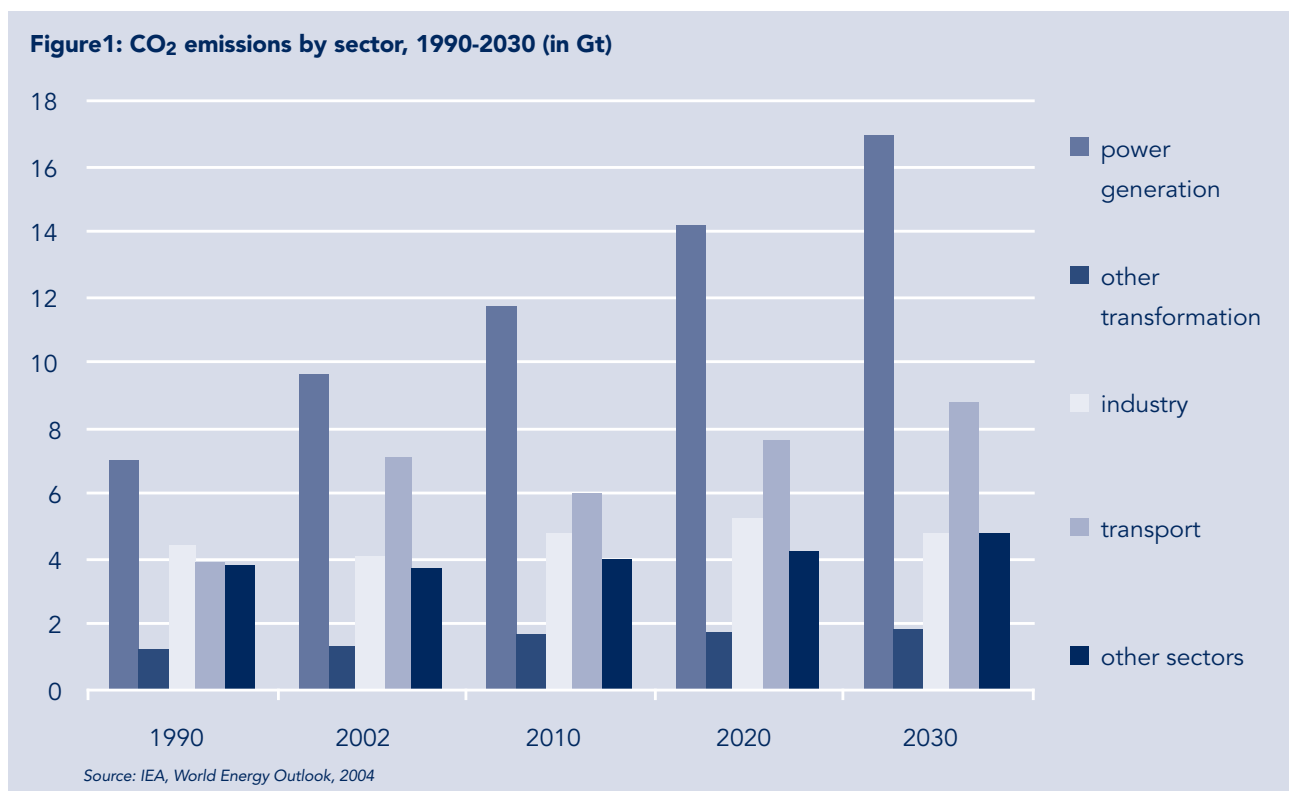
The EU has already started an Emission Trading System (EU ETS) in the beginning of 2005 to ensure it will meet the national Kyoto targets. This system covers 12,000 major industrial plants across Europe or 45% of European emissions. It targets sectors such as Energy, Utilities, Chemicals, Cement and Steel²⁵. Participants are given allowances to generate specified levels of emissions and must find ways to keep emissions below their permitted level, or buy allowances from another participant in the marketplace if they are short of allowances. In a recent update to evaluate the progress being made, the EU indicated that a considerable number of member states have gaps to close. Some 12 countries, including the Netherlands are not sufficiently on track towards meeting their Kyoto targets. The EU urges these countries to better use EU ETS to fully realise the potential of emissions trading²⁶.

The Netherlands has taken additional steps in 2006 and now believes it is on track to meet their -6% reduction target. Among others, the Government has set a

mandatory goal to increase the share of bio-fuels in normal fuel to 5.75% by 2010. This will reduce annual CO₂ emissions by 1.4 Mt²⁷. It has also agreed to a prolonged operation of one nuclear energy facility, under the conditions that the operators additionally invest EUR 250 million in renewable energy projects. This should reduce CO₂ emissions by another 1.4 Mt per year in 2012²⁸. Next, it will also stimulate the reduction of CO₂ in the greenhouse farming industry. Furthermore, it indicated that the Dutch foreign reduction policy would now be sufficient to attain the Kyoto goals. This foreign reduction policy uses CDM and JI (see box). The Netherlands is one of the largest investors in these instruments²⁹. The World Bank is managing two Dutch carbon funds, the Netherlands Clean Development Mechanism Facility and the Netherlands European Carbon Facility. In April 2006, the Government indicated it will sign additional foreign reduction contracts to cover potential setbacks³⁰.

CO₂ emissions by sector

Power generation and transport are the largest contributors to global CO₂ emissions, with 40% and 23% respectively (Figure 1). As they are also the fastest growing sectors, they are the sectors with the greatest reduction potential but also the greatest need to reduce CO₂ emissions. Due to fuel mix differences per sector, CO₂ reduction strategies require a specific strategy for each sector. Half of the electricity plants still use coal, which is mainly used for households and industries.



The transport sector is the largest consumer of oil, accounting for 60% of world oil consumption³¹. In the transport sector, aviation is growing fast in relative and absolute terms.

How to reduce CO₂ emissions

To achieve a CO₂ reduction of 60% or 36 Gt by 2050, drastic measures need to be taken. For illustrative purposes, 11 examples using available technologies are provided under five types of measures that would all need to be taken to achieve a CO₂ reduction of 36 Gt. The examples illustrate the scale of efforts needed to achieve these targets and may for different reasons not represent realistic options³². Each individual example would achieve an annual CO₂ emission reduction of some 3.5 Gt.

1 Energy conservation

- Double fuel economy on all existing vehicles using hybrid or advanced diesel technologies.
- Insulation and efficient lighting of new buildings. New energy saving bulbs saves 0.25 Gt.
- Adding carbon focus to new capital (buildings, power plants, etc.) in developing countries.

2 Renewable energy

- Add 300,000 wind turbines of 5 MWatt to replace 700 GW of conventional coal plants.
- Add 2 million hectares of solar thermal plants or solar panels in developing countries, which provide 2 billion people access to electricity.
- Use 250 million hectares of land (India's size) to daily produce 34 million barrels of bio-fuels.

3 Natural sinks

- Halve deforestation and replant 300 million hectares with new forest.
- Avoid aeration of the soil (conservation tillage) to promote carbon retention on all cropland.

4 Nuclear energy

- 700 GW of nuclear plants to replace conventional coal facilities. The number of nuclear reactors would almost have to triple from 441 to over 1200. Nuclear energy is controversial because of risks like storage of nuclear waste, nuclear pollution and severe NGO opposition.

5 Fossil carbon management

- 1,400 GW of modern gas fired plants rather than 700 GW of conventional coal plants.
- Carbon capture and storage at 700 GW of conventional coal fired power stations.

Concluding remarks

CO₂ emissions as a result of human activity have doubled in the last thirty years to 25.6 Gt per annum and are expected to further rise to 62 Gt by 2050, if no steps will be taken. The increased CO₂ emissions lead to higher atmospheric CO₂ concentrations. This will cause earth's temperature to increase by 1.4 to 5.8°C and induce a wide range of negative impacts on the natural world and human society. To mitigate this climate change, 163 countries have committed themselves to execute the Kyoto Protocol, which foresees into a country specific reduction of CO₂ emissions for all developed countries. Policy makers are now shifting their attention to establish long-term post Kyoto reduction targets with the aim that CO₂ emissions in 2050 are no higher than today's level and limit earth temperature to rise by 2°C. The US and Australia, as two major CO₂ emitting countries, have not ratified the Kyoto Protocol. As many local and regional policy makers in these countries see the urgency of the issue, they have developed initiatives that act in the spirit of Kyoto. The EU for its part has taken active steps to ensure its member countries will meet the Kyoto targets. The EU has recently indicated that 12 countries, including the Netherlands, are not sufficiently on track to meet the Kyoto targets. The Dutch Government has therefore taken additional measures in 2006 and it now believes it is on track to meet the -6% reduction target. To stabilise global CO₂ emissions, far reaching measures need to be taken, which require huge investments. Annually some USD 40 billion would already be needed to offset most of the CO₂ emissions caused by increased energy demand in developing countries³³.

3 CO₂ emission reductions and the banking sector

Introduction

Banks influence whole economies with their financial products and services. As the entities that price and allocate scarce capital, they provide important signals to all economic actors as to the costs and risks of specific industries and businesses. Companies, households and governments make use of banks to finance their activities, to bridge their financial deficits and invest their surpluses. In this way, banks function as the ‘lubricant’ of the economy. In principle, banks could also use their role as capital providers to influence and stimulate their clients to reduce their CO₂ emissions. Clearly, the level of influence on the client depends, among others, on the type of financial product, the competition a bank faces for a particular client and on the inherent profitability of reducing CO₂ emissions. There is at present still some debate about the actual leverage banks have towards their clients. Nevertheless, a number of leading banks have become aware of their special role and responsibilities with regard to climate change issues (sometimes also demanded by its savings clients) and have introduced formal policies to address these in a systematic manner.

This chapter presents how banks could reduce their own direct CO₂ emissions and how banks can use their

financial products and services to reduce CO₂ emissions of their clients. In the context of this report, the latter are referred to as indirect CO₂ emissions.

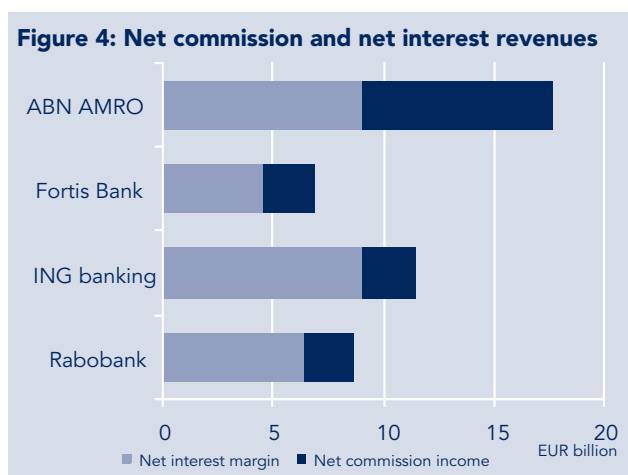
How banks work

Banks offer a broad range of financial products and services, which can be grouped in balance sheet based products and commission-based products. Some examples of balance sheet based products include loans, investment, savings accounts and bank debt. Some examples of commission-based products include fees from private banking and from asset management. All these products will be discussed in more detail later in this chapter. To illustrate these two types of products, Figure 2 and 3 present a simplified balance sheet and an income statement for ABN AMRO for the year 2005. As the name says, balance sheet based products represent a certain value, which can be found on a bank’s balance sheet. If a client transfers money to a savings account, the value can be found on the right side of a bank’s balance sheet (this is also called the liability side or credit side). It means that a bank has a liability to this client, for which it pays interest in return. As banks have generally very little control over the behaviour of these savings clients³⁴, savings activities are excluded from this report.

Figure 2: Balance sheet in EUR billions*				Figure 3: Income statement in EUR billions*	
Assets		Liabilities		Net interest revenue	
Fixed assets	13.3	Group capital	24.2		9.1
Investments	3.0	Debt	539.6	Net commission revenue	8.6
Financial assets	325.8	Accounts	268.1	Other revenues	5.5
Loans	488.9	Other	49.0	Total revenues	23.2
Cash	16.7			Expenses	-17.5
Other	-33.2			Profit before taxes	5.7
Total	880.8	Total	880.8	Taxes	-1.2
				Net profit	4.4
Source: ABN AMRO					
* = Numbers do not add up due to rounding differences					

Banks use the money from saving deposits to lend to other clients. These loans can be found on the left side of a balance sheet (this is also called the asset side or debit side). Banks make a profit from these loans by asking higher interest rates than the rates they have to pay on credit-side products. The profit can be found on an income statement as net interest revenue. Banks can also use the money they receive to invest in shares of other companies or in fixed assets. Fixed assets are mostly real estate such as shopping centres or offices. As banks own these real estate assets, they can in principle exercise a large influence on the operators and tenants to reduce their CO₂ emissions. Banks also invest in assets like offices, cars or computers that are used to conduct their own banking business. The use of these assets generate a bank's direct CO₂ emissions.

Commission-based activities cannot be found on a bank's balance sheet. Instead, commission revenues are found on the income statement as net commission revenue. Examples include: asset management for third parties, private banking (advising and buying shares for wealthy private clients), offering investments funds and brokerage. For all these activities, banks receive a commission based on the value of the transactions or a fixed fee. Although banks do not own the shares or bonds managed on behalf of third parties (i.e. the bank's clients), banks could still use their position to exert influence on companies and organisations to reduce their CO₂ emissions.



It may be interesting to note that whereas balance-sheet products traditionally generated almost all profits, in the recent 1-2 decades there has been an important shift towards commission-based products. The latter nowadays can represent more than half of a bank's revenues. Figure 4 compares revenues from balance sheet products (net interest revenues) and from commission based products

(net commission revenues). In 2005 commission based revenues at the four banks amounted to 28% of the sum of the net interest revenues and net commission revenues. ABN AMRO has the largest focus on commission-based activities. Income from these activities amounted to EUR 8.6 billion in 2005, versus some EUR 2.3 billion for the other banks. In some countries, margins of balance sheet based products have come under pressure. Whereas it is beyond the scope of this report to analyse this issues in any more detail, the actual leverage banks have to tie CO₂ related conditions to their products and services may be influenced by profit margins. These may be an indicator of the level of competition in certain business segments and this may in turn be inversely correlated to the bargaining power of banks towards their clients.

A bank's direct CO₂ emissions

Energy consumption makes up some 90% of a bank's direct CO₂ emissions³⁵. This energy is used for heating, cooling and lighting of buildings, ICT-equipment, business travel etc. The remainder of a bank's CO₂ emissions comes from waste production, which is mostly paper waste. The level of a bank's CO₂ emissions is rather moderate, because the delivery of financial products does not produce a lot of CO₂. In total, CO₂ emissions from the banking sector in the Netherlands amounted to 0.79 Mt in 2004³⁶, which equals to 0.37% of total CO₂ emissions from Dutch society of 214 Mt³⁷.

How to reduce direct CO₂ emissions

The measures that banks can take to reduce their own CO₂ emissions fall in the general category of energy saving measures and the use of renewable energy sources. Although the absolute impact of such measures is limited due to the modest amount of direct emissions from this sector, banks can set a good example to their clients by implementing such measures. Some of the most important measures that banks can take are presented below.

Save energy

Reducing energy consumption by changing behaviour can be a cost-effective measure for banks to reduce CO₂ emissions. Little capital investments are required, but 'only' a change of mind from employees. Good promotion among employees and support from the board of management are the most important factors for a successful campaign. To make management and its employees more aware, banks can introduce environmental management systems. These enable to monitor and steer energy consumption. Examples to save energy include turning of the screen, pc or light when leaving the room. Banks can also reduce energy by

providing financial incentives to employees to use public transport, to share cars or to use bicycles for commuting. Another possibility is the installation of videoconference facilities for employees at home, in order to further expand the possibilities of tele working.

New cooling for ABN AMRO's head office

Dutch utility company Nuon has developed a new means to cool buildings in the new Amsterdam Zuidas district. From 2006 Nuon will extract water 30 metres deep from a nearby lake, Nieuwe Meer. The water will be used to deliver 10,000 Megawatts of cooling to ABN AMRO's head office per year. The new system cuts CO₂ emissions by around 75% compared to traditional cooling equipment³⁸.

A bank can also save energy by introducing technological innovations that improve energy efficiency. Most measures require more investments and have a longer time to market. However, the benefits are often considerable. Simple examples include the installation of energy saving bulbs and of light sensors at office lighting. More capital intensive examples include the installation of special pumps that use underground water to heat buildings in wintertime and cool buildings in summertime or the connection of the cooling system for ICT servers to the building's heating system.

Becoming carbon neutral

To set a good example, banks could aim at becoming carbon neutral. A bank is called carbon neutral, if it does not produce direct CO₂ emissions on a net basis. Banks can reduce CO₂ emissions from energy consumption by using renewable energy sources. But they will still produce

Triodos Bank is a carbon neutral bank

Dutch Triodos Banks aims to reduce CO₂ emissions by using electricity from renewable energy sources and by reducing energy consumption as far as possible. Its remaining CO₂ emissions from gas consumption, paper consumption, business travel and commuting are compensated, by buying CO₂ credits from KlimaatNeutraal Groep, which sequesters CO₂ by planting trees in the Czech Republic, Uganda, the Netherlands, Malaysia and Ecuador. As a result, Triodos Bank's activities are carbon neutral³⁹.

CO₂ emissions from other activities such as paper consumption, business travel and commuting. To compensate for these remaining CO₂ emissions, banks can also invest in renewable energy projects like wind turbines in Joint Implementation or Clean Development Mechanism countries. This also creates considerable commercial opportunities. Between 1995 and 2005, capacity of wind turbines in Europe grew at an annual average of 22%⁴⁰, while the return on investment can be as high as 8 or 9%⁴¹. Another option to compensate for CO₂ emissions is to buy CO₂ credits from third parties, which for example sequester CO₂ by planting new trees or invest in sustainable energy.

How to reduce indirect CO₂ emissions

The key role for banks to reduce CO₂ emissions and hence to mitigate climate change is to reduce CO₂ emissions of their clients that receive financing and related services. This is also called indirect reduction of CO₂ emissions. To achieve such reductions, banks could add CO₂ related conditions to their existing financial products.

The interest rates that banks charge for loans are subject to various financial conditions. Banks can include CO₂ related conditions to determine their interest rates. Banks can for example provide interest discounts on a loan if a client meets a certain CO₂ reduction target. This is possible, since the economy is becoming 'carbon constrained'. In such an economy, CO₂ emissions cause additional risk to banks' clients, such as 1) the risk that regulations on CO₂ emissions become more strict for companies, 2) physical risk such as severe weather conditions for oil rigs and 3) competitive & reputation risk, where companies that produce CO₂-emitting products can become weaker positioned compared to companies that have developed emission-reducing technologies. Since banks have to take more allowances to cover these credit risks, they have to ask higher interest rates. Banks therefore need to convince their corporate clients to reduce their CO₂ emissions. This reduces the credit risk for banks and at the same time stimulates the client concerned to develop more energy-efficient products.

Since banks enter new territory, they have opportunities to develop new financial products and become more innovative. However, it will always be a question whether adding CO₂ conditions really generates a profit, or whether it only improves their corporate image. It will also remain difficult for banks to persuade their clients to reduce CO₂ emissions, as long as it is not profitable for the companies themselves. Governments and public policy therefore also have an important role to play in this field. They can establish a framework that would

create a more clear business case for banks to integrate CO₂ emissions conditions in their products and put a clear price tag on the emissions of CO₂ by clients. This could be through carbon taxes, special fiscal policies, or price subventions for financial products that aim to reduce CO₂ emissions. This points to the important responsibility of banks to promote and contribute to the development of sound public policies that will provide clear and long-lasting incentives for them to reduce their indirect CO₂ emissions.

As presented above, banks have several financial products to which they can add CO₂ related conditions. To use these products effectively, banks can start asking their clients to report on their CO₂ emissions and ask them to set targets to reduce CO₂ emissions. Achieving these targets can serve as a condition for the price setting of the financial product. If an existing client with a poor CO₂ performance is unwilling to reduce its CO₂ emissions, banks can decide to discontinue their relationship with the specific client. Below some of the most important financial products are discussed, including examples of specially designed products that aim to reduce CO₂ emissions.

Loans

Loans are the most important asset on a bank's balance sheet, representing some 50% of total assets. Banks

Several US banks offer green mortgages

Energy reduction potential from heating and cooling buildings is significant, since residential and commercial buildings account for around 40% of total energy consumption in the EU. Green mortgages promote the construction of sustainable buildings. The Dutch Government offers banks to give a reduction on their mortgage interest rates when new houses or renovation projects meet very strict energy criteria⁴². This makes the facility difficult to offer. The amount is limited to EUR 34,000 and the interest rate is some 1% below average market rates. A bank has several other possibilities to stimulate its clients to make their houses more energy efficient. In the US, Fannie Mae⁴³ has developed the Energy Efficient mortgage. It rewards buyers of energy efficient homes and encourages energy efficiency measures with more favourable mortgage terms. Also in the US, JP Morgan and Citigroup provide higher mortgages based on the same income for energy-efficient houses, since they also count the value of energy savings as income.

CO₂ criteria for project finance

Many banks adhere to the Equator Principles, which require banks to add social and environmental criteria to lending criteria for project financing with a value of more than USD 50 million⁴⁵. Several NGOs have indicated that the issue of climate change was one of the main deficiencies that should be addressed in the Equator Principles⁴⁶. If banks want to be proactive and show leadership, they can start to include CO₂ emission reduction to their environmental criteria. This could alter their decisions to finance projects that produce less CO₂ emissions or review possibilities to make the projects more energy efficient. Furthermore, banks could use their experience in the field of project finance for large renewable energy projects.

provide a broad range of loans: personal loans and mortgages to consumers, commercial loans to large multi-nationals and tailor made project finance for large projects such as oil-pipeline projects⁴⁴. For most loans, they also ask guarantees, such as a house in case of a mortgage or a stable income in case of a personal loan. If a client fails to pay interest on its mortgage, a bank can even decide to sell the underlying assets.

To reduce CO₂ emissions from clients using loans, banks can integrate the costs of CO₂ emissions in their financial risk assessment of a loan. This would require that clients report the expected CO₂ emissions of the specific asset (machine or plant) for which they seek finance. As a result, CO₂ emissions influence the decision whether the bank could finance the investment or not. Banks could also stimulate clients to introduce energy efficient machines, by providing discounts to their clients for every tonne of CO₂ that they are ahead of their emission target. In all these ways, banks can play a leading role to reduce CO₂ emissions from their lending clients. In practice, competition from other market players may limit the possibilities of banks to impose stricter conditions and to be effective, CO₂ requirements need to be carefully designed.

ING reduces real estate CO₂ emissions

ING has reduced by 75% the CO₂ emissions from the buildings that are included in its Australian real estate funds. To this end it has implemented special monitoring systems and reduction programmes.

Real estate

Most banks have a real estate portfolio not only for their own use, but also as an investment. Since a bank owns the property, it also means it can exercise a very large influence over managers and tenants. Banks can improve the energy efficiency of a building, by developing special CO₂ reduction plans. Banks can also reduce CO₂ emissions and achieve financial benefits of new commercial buildings, if they take maintenance and energy costs into account in the design and selection of building materials prior to the start of the development. This is called life cycle costing⁴⁷.

Investments

Banks can invest money by buying shares of companies. They can buy large stakes in stock-listed companies or finance smaller often non-listed start-up companies through venture capital. They become shareholders in return, meaning they partly own a company. As a strategic shareholder, a bank regularly meets with the company's management to evaluate the company's financial performance. This means that a bank can exercise a large influence on the company. It could ask the company's management to consider implementing CO₂ reduction programmes. A bank can also include CO₂ emission costs in its financial evaluation of the company. As a result a bank can decide to sell its stake, if it believes there are too

Invest in projects using Kyoto's instruments

Banks can generate additional return on their investment by using CDM and JI. Banks receive emissions reduction credits for their investments in CO₂ reducing projects. These project credits represent a value of between EUR 2.41 and EUR 5.77 per tonne CO₂ between January 2004 and April 2005⁴⁸. Banks can sell these project credits at market prices, which were priced between EUR 7.00 and EUR 17.15⁴⁹ over the same period. Admittedly, this is not without risks. Although the Kyoto Protocol states that project credits will be interlinked to the International Emission Trading systems, this is not possible before 2007 due to administrative problems. Furthermore, these financial instruments also help to improve the local working conditions of communities involved in the specific projects. Investing in Kyoto instruments is therefore regarded as a very promising instrument for banks as part of their climate change policy, since they contribute to reduce CO₂ emissions in developing countries.

Dutch banks and the Carbon Disclosure project

The Carbon Disclosure Project (CDP) is asking the world's largest companies to disclose information on their CO₂ emissions⁵⁰. It is funded by a variety of charities and supported by a coalition of institutional investors with more than USD 21,000 billion in assets. All major Dutch banks and the two ethical banks ASN Bank and Triodos banks are signatory to the CDP.

much risks or costs associated with the CO₂ emissions, or shift its investments to companies that have less or no CO₂ emissions.

Asset management

Banks can manage financial assets such as shares and bonds for their own purposes and for third parties. As such, it is partly a balance-sheet product and partly a commission-based product. Asset management is purely profits driven and can include short-term buy and sell strategies, while investments, which were discussed above, are more strategic by nature. Banks can use their voting rights to put climate change on the agendas of the companies in which they invest. Banks can also promote the reduction of CO₂ by integrating CO₂ emission risks and opportunities in their financial models. Furthermore, they can stimulate financial analysts that provide investment advice to include environmental analysis in their report. This is the more important, since CO₂ emission costs now impact a company's profitability. Spanish utility company Endesa had an emission rights deficit in 2005 of 8.5 Mt CO₂ as low rainfall led to a shift in fuel mix from hydro energy to coal. Consequently, Endesa had to take an additional charge of EUR 185 million for the year⁵¹.

SNS Reaal is a member of the EAI

The Enhanced Analytics Initiative (EAI) is the first market driven step to include environmental issues in analyst reports. This was taken by ten pension funds and asset managers including SNS Reaal, ABP Investments and PGGM. They award 5% of commissions to research providers to compile non-financial issues within mainstream research. As a result, climate change has become an important topic in analyst reports from the participating research providers.

Renewable energy for private investors

In the Netherlands, the internal rate of return of an investment in wind turbines can be as high as 16 to 20%, thanks to special tax breaks that stimulate the investment in renewable energy⁵². To this end, private investors have to become an entrepreneur for fiscal reasons.

Private banking

Private banking is a commission-based activity, since a bank manages financial assets on behalf of third parties. Although a bank does not own the shares, it has a fiduciary duty to treat these investments as if it were their own. A bank can use its advisory role to motivate its clients to invest in companies with a good environmental track record. It can also advise clients to invest in renewable energy, which can be very profitable for individuals.

Funds

Investment funds pool investments to reduce risk and offer these as a financial product to clients. There is a wide range of investment funds, ranging from plain share funds to very sophisticated derivative funds. Banks can set up special climate change funds, which only invest in companies that have a clear CO₂ reduction programme. This will stimulate companies to reduce their CO₂ emissions. Banks can also develop funds that put more focus on renewable energy projects and projects

Rabobank finances carbon funds

The most well-known carbon fund is the Prototype Carbon Fund⁵³, which is financed by 6 Governments and 17 companies, including Dutch Rabobank. Funds under management have doubled in one year to USD 915 million by the end of August 2005⁵⁴. A second example of a carbon fund is the European Carbon Fund. It was launched in 2005 by a consortium of companies, led by Caisse des Depots and Fortis Bank and raised EUR 143 million⁵⁵. Another example comes from Credit Suisse, HSBC, Société Générale and JP Morgan which have put EUR 200 million in Trading Emissions⁵⁶. This carbon fund is listed on the London Alternative Investment Market, meaning private investors can also invest in it. Since the start of the fund in April 2005, the share price has increased from 100p to 191p in April 2006⁵⁷.

that increase energy efficiency in developing countries. Triodos Bank is the first Dutch bank, which has set up such fund⁵⁸. Investing in these projects through the Clean Development Mechanism provides the advantage that the financing company receives emission credits, which can be sold to third parties. To promote CDM, banks can pool these investments in so called 'carbon funds' and offer these to investors or even to private clients via the equity market.

Brokerage and trading

Brokerage is a commission-based activity that aims to buy or sell shares for clients (often institutional investors such as asset managers, pension funds and insurance companies), for which they receive a commission. Brokers also employ financial analysts to provide advice to their clients. Analyst reports influence the decision making of stock selection of these institutional investors. Traders execute the orders of brokers, or trade 'blocks' of shares with other traders to obtain the lowest possible price. Traders can also speculate with shares for their own account. The influence of brokers and traders on clients seems fairly moderate. However, Dresdner Kleinwort Wasserstein, already incentivises its financial analysts to integrate climate change issue in their reports. This could shift the investment focus of their clients towards companies that have sound CO₂ reduction programmes.

There is still a large price difference between project emission credits and market based credits, although both represent the right to emit one tonne of CO₂. To reduce this price gap, banks can use their experience in the field of trading to make a market for emission credits after 2012, when the current Kyoto Protocol ends. The lack of a long-term successor of the Kyoto protocol is one of the major obstacles to a continued success of the current carbon-constrained markets.

Concluding remarks

Banks function as the lubricant of the economy. Companies, households and governments make use of banks to finance their activities and to bridge their financial deficits and surpluses. Therefore, banks can use their financial products to reduce CO₂ emissions of these clients. For a bank, these emissions are referred to as indirect CO₂ emissions. Banks also produce CO₂ from their own operations, but this is rather limited to some 0.37% of the CO₂ emissions from the Dutch society. However, they can set a good example to their clients. Banks can minimise CO₂ emissions by saving energy, buying green energy and compensating their CO₂ emissions to become carbon neutral. But the key role for banks is to reduce indirect CO₂ emissions.

Banks have a broad range of financial products to their disposal, to which they can add CO₂ reduction conditions. An important example of such a condition is the integration of CO₂ emissions of a corporate client in the financial risk assessment of a commercial loan. This could alter banks to finance companies that produce less CO₂ emissions, or to engage management of poor performing companies to execute a CO₂ reduction strategy.

4 Dutch banking sector and indirect CO₂ emissions

Introduction

The previous chapter has outlined how banks could use their financial products and services to reduce CO₂ emissions of their clients (indirect CO₂ emissions). This chapter looks at the importance and structure of the Dutch banking sector and gives a short historical overview how these banks were formed. It provides the needed overview of the Dutch banking sector and as such lays the building blocks for chapters 5 and 7. Next, the chapter provides more detailed information on the value and market shares of the most important products that banks can use to reduce their indirect CO₂ emissions. Furthermore, rough estimates are made of the indirect CO₂ emissions for each financial product for the four major Dutch banks. It also tries to examine the financial exposure of the banks to energy-intensive industries. This would help to specify the indirect CO₂ emissions of Dutch banks.

Structure of the Dutch banking sector

The Dutch banking sector is of great importance to the Dutch economy, with assets of EUR 1,780 billion⁵⁹. This is equivalent to more than 4 times the Dutch Gross Domestic Product of EUR 415 billion⁶⁰, or EUR 111,250 per capita. The Dutch banking sector is also very concentrated. In total it includes 97 registered banks, of which 55 are Dutch banks and 42 are foreign-owned banks or subsidiaries⁶¹. However only four banks, ABN AMRO, ING, Rabobank and Belgium-Dutch financial

Fortis, dominate the market as they account for some 90% of total banking assets⁶². Because of the size of these banks, they also have a considerable influence on other Dutch companies. One indication for this is the considerable number of board seats that the executives and non-executives of the four largest banks have in other companies⁶³. The four banks have also become very internationally oriented, with important presences in major markets worldwide. Profits from Dutch activities compared to their total profit have decreased considerably in the last 15 years from 60% to some 35% in 2003⁶⁴. Also in an international context, the Dutch banks are important players. Measured by total assets, all four banks belong to the top 25 worldwide (see Annex 3 for an overview of the 50 largest banks). Table 2 presents some key figures for the four Dutch banks.

The major Dutch banks were formed by a wave of mergers in the beginning of the last decade. Important drivers for this consolidation were the lifting of legal restrictions on mergers between insurers and banks in the Netherlands and the anticipation of the liberalisation of European markets in 1992. Table 3, provides an overview of the most important mergers that formed the current companies. All banks and insurance companies that formed the current financials have a long history of mergers and acquisitions themselves, often with roots dating back to 19th century.

Table 2: Key figures for the Dutch banks

	ABN AMRO	Fortis Bank	ING banking division	Rabobank Group	SNS Bank	Triodos Bank
Total assets in EUR billion	881	484 (729)*	834 (1,159)*	506	53.1 (68.1)*	0,1
Net profit in EUR billion	4.4	2.4 (3.9)*	4.0 (8.9)**	2.1	0.2 (0.4)*	
Number of employees in (FTE's)	96,835	41,162 (54,245)*	63,700 (111,530)*	45,580	3,158 (5,336)*	
Number of countries present	60	48	56	36		5
Rank in top of 50 global banks	12	21	11	22	>50	>50

* Figures between parentheses are for the group. This first figure is for the banking division

** Before tax

Table 3: Overview of most important mergers in the Dutch banking sector

1991	ABN (Algemene Bank Nederland) and AMRO (Amsterdam-Rotterdam Bank) formed ABN AMRO
1991	NMB Postbank and Nationale Nederlanden formed ING (Internationale Nederlanden Group) Group
1990	AMEV/VSB and Assurance General merged into Fortis
1990	AMEV and VSB merged into AMEV/VSB
1989	NMB (Nederlandse Middenstands Bank) and Postbank merged into NMB Postbank
1983	Savings banks of Amsterdam, Rotterdam and Utrecht merged into VSB (Verenigde SpaarBank)
1972	Raiffeissen-Bank en Boerenleenbank merged into Rabobank

After domestic consolidation, Dutch banks expanded further abroad. ABN AMRO acquired several banks in the US Midwest and created its third home market with the acquisition of the Brazilian bank Banco Real in 1998. Recently, a fourth home market was added with the acquisition of the Italian bank Banca Antonveneta. The most important acquisitions for Fortis include Belgian banks ASLK and Generale Bank, Dutch MeesPierson and American Bankers Insurance Group. ING acquired several banks, such as Bank Brussels Lambert, Barings and Furman Selz, but mainly focused on expanding its insurance activities. Of the four banks, Rabobank Group is the only co-operative bank. It is owned by 248 local banks⁶⁵. Its operations are more focussed on the Netherlands, although it also has considerable operations abroad. In 2005, Rabobank Group merged its insurance subsidiary Interpolis with Eureko, the parent company of Dutch co-operative insurance group Achmea.

Assessing total indirect CO₂ emissions

The major Dutch banks are large international players. Together they have EUR 2,705 billion⁶⁶ of assets to provide loans to (corporate) clients and invest in other companies (see Figure 5). As a result, they have a large influence on companies. To assess the amount of CO₂ emissions that Dutch banks finance through their financial products the following calculation can be made. Obviously, considerable assumptions had to be made

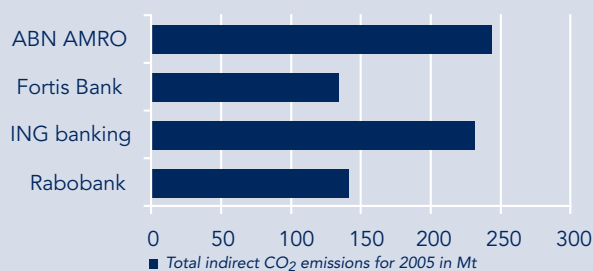
given the lack of specific CO₂ related information from the banks. The assets of the four banks equal to 3.8% of estimated worldwide banking assets of EUR 71.4 trillion⁶⁷ by the end of 2005. Assuming that all commercial banks together finance some 75%⁶⁸ of all worldwide activities that emit CO₂ emissions and hence of the worldwide estimated CO₂ emissions of 26.4 Gt⁶⁹ by the end of 2005, this results in estimated indirect CO₂ emissions of some 750 Mt by the four Dutch banks for 2005⁷⁰. See figure 5 for indirect CO₂ for each individual bank. It means that indirect CO₂ emissions of the four Dutch banks account for 2.8% of worldwide CO₂ emissions. Put in a different way, indirect CO₂ emissions of the banks are 3.4 times the estimated total CO₂ emissions of the Dutch society of 218 Mt in 2005⁷¹.

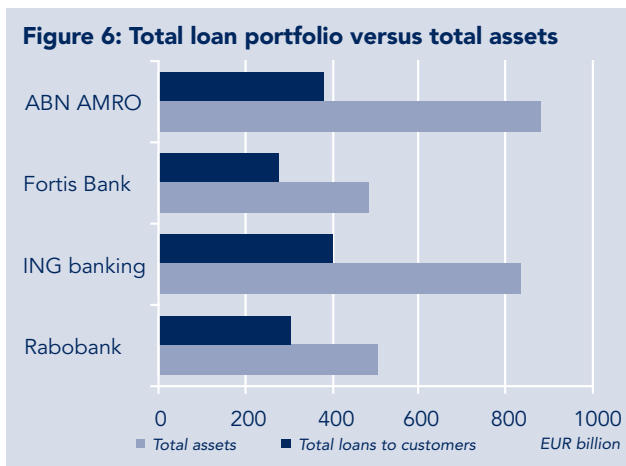
Public reporting of the four largest banks provides the necessary information to calculate the relative importance of the main financial products for each bank. This can be used to make rough estimates of indirect CO₂ emissions for the most important financial products. These are discussed in more detail in the sections below. These sections also examine to what extent the exposure of each financial product to energy-intensive industries can be assessed.

Loans

Loans are the largest balance sheet product of Dutch banks (on average 50% of the four bank's total assets by the end of 2005). All four banks provide a breakdown of loans into the most important categories. These include loans to financial institutions, commercial loans, mortgages and personal loans. Commercial loans and mortgages represent 83% of the total loan portfolio in value terms. ING Group's banking division has the largest loan portfolio (see Figure 6), but Rabobank and Fortis bank have the highest exposure to loans if compared to total assets. Together, the four major Dutch banks have an estimated loan market share of 90% in the Netherlands⁷².

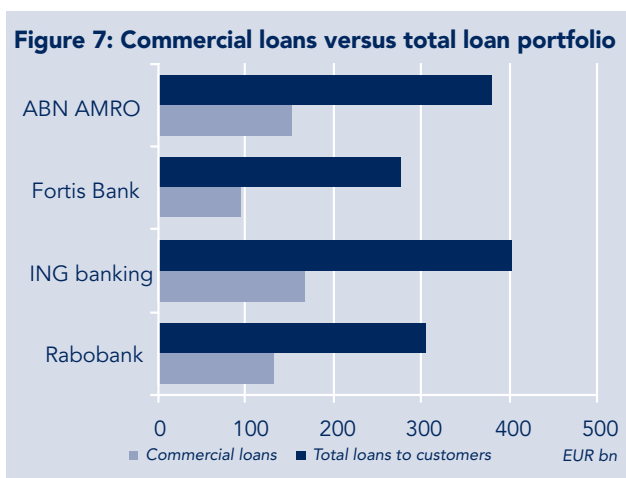
Fig. 5: Indirect CO₂ emissions for each individual bank





Commercial loans

By the end of 2005, the four major Dutch banks had commercial loans outstanding of EUR 546 billion, with ABN AMRO and ING taking leading positions (see Figure 7). A rough estimate reveals that indirect CO₂ emissions from commercial loans amount to 151 Mt of CO₂⁷³. Table 4 at the end of this chapter presents a breakdown of these indirect CO₂ emissions for each of the four banks.



Except for ING, all three other banks provide some sector breakdown of their commercial loan portfolio. Such information is necessary in order to make accurate estimations of a bank's financing to sectors that are high CO₂ emitters. ABN AMRO provides the most detailed information. It reports a sector breakdown for its commercial loan portfolio for its three home markets (Netherlands, US and Brazil)⁷⁴. It becomes clear from these breakdowns that its financing is geared towards energy intensive sectors, such as utilities, transport, metal & mining and oil & gas. Depending on the home market the exposure to energy intensive sectors varies between

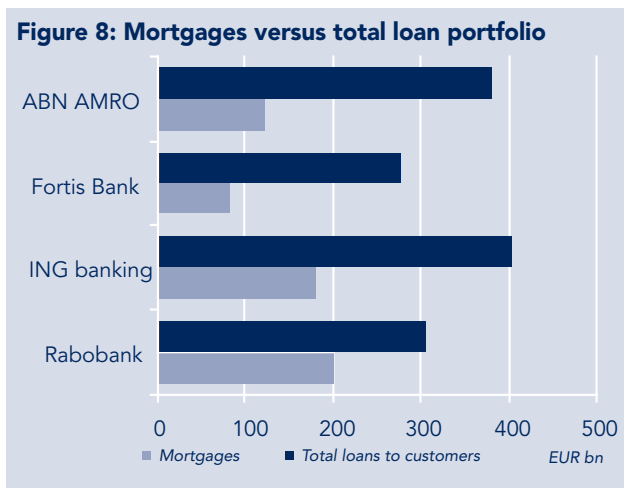
20% and 51%. Fortis only provides a sector breakdown for its large corporate loans (total value EUR 35 billion, which is 37% of all commercial loans)⁷⁵. Energy-intensive sectors account for 36% of these corporate loans⁷⁶. Finally, ING provides no disclosure of the sectors they finance, although they have the largest commercial loan portfolio.

Rabobank indicates that it does not finance energy-intensive industries, but states it is mostly targeting the food and agro sectors (36% of commercial loan portfolio⁷⁷). Given that the food processing industry is often relatively energy intensive and that the 'trade, industry and service' segments account for the remainder 64% it remains unclear what the exposure may be to energy intensive industries. Furthermore, DSR notes that modern intensive agriculture is one of the largest contributors to non-CO₂ GHG-emissions (methane from cattle raising and nitrous oxide from artificial fertilizers). In the Netherlands, agriculture accounts for 12%⁷⁸ of all emissions. Since Rabobank finances some 83% of the Dutch agricultural sector⁷⁹, its indirect emissions from this sector alone could represent more than 21 Mt, which is 10% of estimated Dutch CO₂ emissions of 218 Mt in 2005⁸⁰. The level of these indirect emissions alone is almost 700 times larger than Rabobank's total direct CO₂ emissions in the Netherlands in 2004 of 0.03 Mt⁸¹. The indirect CO₂ emissions of Rabobank could therefore be considerable higher than one would expect at first sight.

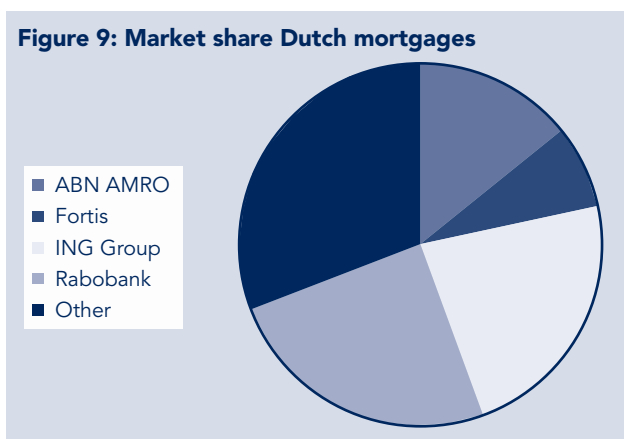
Commercial loans also include project finance and financing of renewable energy sources. Reporting can be found to some extent in the banks' sustainability reports. Rabobank is the only bank that does not provide such project finance. ABN AMRO and ING report on the selection process of projects and on the number of reviewed projects per industry based on non-financial criteria, but do not report on the value of the projects they finance. Fortis is the only bank that provides details about the amount of project finance: EUR 2.5 billion. ABN AMRO's project finance represents reportedly some EUR 2.1 billion⁸².

Mortgages

Within the loans category, mortgages are the most important category. Banks could therefore play an important role to help reduce CO₂ emissions by promoting house owners to increase the energy efficiency of their houses. The total value of mortgages of the four banks amounted to EUR 584 billion by the end of 2005, representing some 43% of all loans. The importance of mortgages differs a lot between the banks as Figure 8 presents. At ABN AMRO and Fortis Bank mortgages represent some 30% of the total loan portfolio, versus



45% for ING Group (through its subsidiary Postbank) and even 66% for Rabobank. The latter two also have the largest market shares in the Netherlands (Figure 9). None of the banks is actively promoting the green mortgage facility of the Dutch government (see previous chapter for more details), although the facility is still valid. This could be due to the terms of the facility.

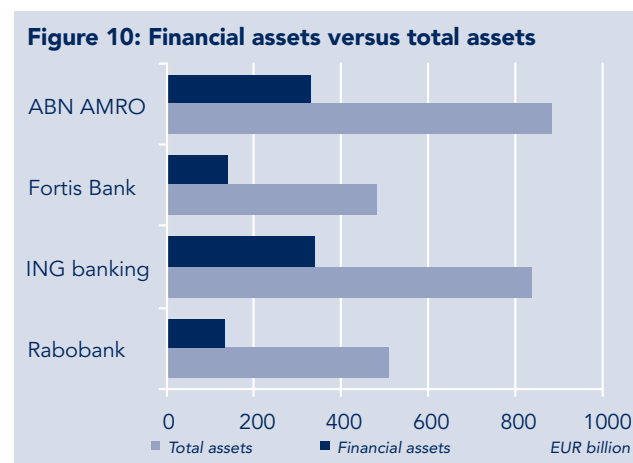


It is possible to estimate indirect CO₂ emissions for the Dutch banks from mortgages. Based on the total value of mortgages of EUR 584 billion and using an estimate of EUR 181,000 for the average value of an outstanding mortgage⁸³, the four major Dutch banks finance some 3.1 million houses. Average CO₂ emissions per house amounts to 5 tonnes of CO₂ per year (heating, warm water, cooking and electricity)⁸⁴. Total indirect CO₂ emissions from mortgages therefore amounts to 16 Mt per year. Table 4 provides a breakdown per bank.

Financial assets and investments

Financial assets and investments are the second most important balance-sheet based product. ‘Financial assets’ means investments for a bank’s own account in shares,

bonds and real estate. It is also called ‘asset management for own activities’. Total financial assets amounted to EUR 932 billion for the four major Dutch banks by the end of 2005 (see Figure 10). Three important categories of financial assets are shares, bonds and real estate. All four banks provide some disclosure on these categories, but not one bank provides a sector breakdown of its financial assets portfolio. To assess indirect CO₂ emissions, only the part that is invested in shares is taken into account. These shares represent an estimated 40% or EUR 372 billion⁸⁵. This represents an estimated 1.0% of the value of all worldwide stock-listed companies of EUR 37 trillion, or 0.75% of global CO₂ emissions of 26.4 Gt⁸⁶. As such, indirect CO₂ emissions from the four Dutch banks using financial assets amounts to some 200 Mt. A breakdown for each individual bank is provided in table 4.



Investments include minority shareholdings, strategic interests in other companies and real estate. The value of investments is between EUR 2.5 and 3.6 billion for each of the four banks and totals EUR 12 billion⁸⁷. Real estate can be divided in two separate categories: fully owned real estate investments and owned interests in real estate funds. Investments in real estate funds only reflect the value of the equity investment in the fund. Only two banks have disclosed the value of their fully owned real estate investments: ING (EUR 1721 million for the banking operations) and Rabobank (EUR 768 million). Too little information is available to calculate indirect CO₂ emissions for minority shareholdings and real estate separately. Taken together it is possible to estimate indirect CO₂ emissions from the four banks for investments at 6.4 Mt of CO₂ per year⁸⁸.

Asset management and private banking

All four banks provide some disclosure about the value of their Private Banking clients or of their third-party

asset management. By the end of 2005, ABN AMRO had EUR 176 billion assets under management for third parties and EUR 131 billion under administration for its private banking clients. Fortis Bank had EUR 157 billion under management and EUR 70 billion under administration. Rabobank states to have EUR 156 billion under management, but does not indicate whether this also includes the value of its private banking clients. ING only reports that at group level, managed assets amount to EUR 547 billion, but only EUR 310 billion is estimated to come from its banking activities⁸⁹. Aggregating the amounts of asset management and private banking, the four Dutch banks invest some EUR 900 billion, of which an estimated 40% or EUR 360 billion is invested in shares. Using the same methodology as for financial assets and funds, one can derive that indirect CO₂ emissions using asset management and private banking amount to 193 Mt. None of the banks provides a sector breakdown of the assets they manage for third parties or have under administration for wealthy investors. It is therefore not possible to examine if the banks invest a large part in energy intensive industries. See table 4 for an overview of indirect CO₂ emissions per individual bank.

Funds

The Dutch market for investment funds is valued at EUR 98 billion, of which an estimated EUR 79 billion comes from private investors⁹⁰. Looking at the market shares, the four largest financial institutions account for 74% or EUR 73 billion of the Dutch market for investment funds (see Figure 11). Some 49% or EUR 36 billion of these funds are invested in shares. A rough estimate indicates this represents some 0.10% of global outstanding capital, or 0.07% of global CO₂ emissions⁹¹. Indirect emissions from the Dutch banks using investment funds amounts to 19 Mt. A more specific calculation of indirect CO₂ emissions via investment funds can only be

calculated if a sector breakdown of the investment funds would be available.

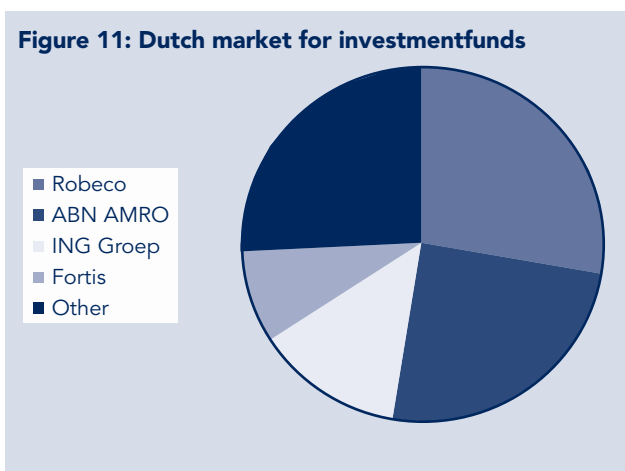
Brokerage & trading and leasing

The market for brokerage and trading and other related activities such as underwriting new bond or share listings is a real international market. It is dominated by a few global investment banks such as Goldman Sachs or Morgan Stanley. ABN AMRO reported it had EUR 1.3 billion in net commissions from financial assets brokerage and a result of EUR 2.3bn from financial transactions, such as financial assets trading, foreign exchange dealing and derivatives transactions. ING generated EUR 641 million from financial assets brokerage and EUR 420 million from financial transactions. No information was found how large the share of these commissions is related to energy-intensive industries or the share from companies in the renewable energy sector. Furthermore, no method was found how to assess direct CO₂ emissions for this financial product.

Concluding remarks

The Dutch banking sector has developed well over the last decades and is dominated by four banks: ABN AMRO, Fortis, ING and Rabobank. Together they hold an estimated market share of 90% in the Netherlands. These banks have also become large international players, due to their international expansion strategy. This also implies they finance a considerable part of global activities that produce CO₂ emissions.

Estimates provided in this Chapter indicate that indirect CO₂ emissions of the four major Dutch banks represent 750 Mt. This equals to 2.8% of worldwide CO₂ emissions or 3.4 times the estimated total CO₂ emissions of the Dutch society of 218 Mt in 2005. Commercial loans, financial assets and asset management are the financial products that have the largest indirect CO₂ emissions for the four Dutch banks as Table 4 shows.



For 2005 in Mt	ABN AMRO	Fortis Bank	ING banking	Rabobank Group	Total
Total assets	244	134	231	140	750
Most important financial products⁹²					
Commercial loans	42	26	47	36	151
Mortgages	3	2	5	6	16
Financial assets	70	29	73	28	200
Investments	2	1	2	2	6
Asset management & private banking	66	49	45	33	193
Funds*	6	2	3	7	19
<i>* figures are for 2004 and based on Dutch market</i>					

Based on available data, exposure to energy-intensive industry or the share of products/services that have an explicit climate-change related dimension cannot be estimated from the company's public reporting. Only for commercial loans a sector breakdown of the client portfolio is provided by ABN AMRO and Fortis. From this it becomes clear that energy intensive sectors form an important part of their portfolio (between 20 and 50%). Rabobank states it does not finance energy intensive industries. But since it finances the agricultural sector, which produces greenhouse gases like methane and nitrous oxide, its indirect CO₂ emissions could be larger than one would expect at first sight. ING has the largest loan portfolio, but does not provide a sector breakdown.

More research is needed by the Dutch banks to provide more detailed information about their indirect CO₂ emissions. As a starting point, banks can provide a sector breakdown of their different financial products, or at least indicate their exposure to energy-intensive industries (see Figure 1) for each of their financial products. Banks can also start to assess their indirect CO₂ emissions for part of their financial products. These could then be used as a basis to set reduction targets for indirect CO₂ emissions. In this way banks demonstrate that indirect CO₂ emissions is an important issue on which they want to take action.

5 CO₂ reporting and reduction goals Dutch banks⁹³

Introduction

This chapter investigates the current status of direct CO₂ emission reporting and of reduction goals for direct CO₂ emissions among six Dutch banks. It also investigates what Dutch banks report on indirect CO₂ emissions and which CO₂ related financial products they have already developed to reduce these indirect CO₂ emissions. The information used for this chapter is based on fact sheets that were created for each investigated bank. These banks include the four major Dutch banks ABN AMRO, Fortis Bank, ING's banking division and Rabobank. SNS Reaal, with its banking division SNS Bank, is also included as the fifth Dutch bank by size, although SNS Bank is much smaller in size⁹⁴. It also includes Triodos Bank, which is much smaller but holds a special position. It is regarded a pioneer in the field of sustainable banking, in the sense that it only finances companies and projects that add to society and that benefit people and the environment⁹⁵. Triodos Bank could therefore provide a good example for the other banks. Some international banks are ahead of the Dutch banks in the field of CO₂ reporting and reduction goals. Their reporting and reduction goals will be the subject of chapter 6.

Use of fact sheets

The relevant information that has been gathered for this and the next Chapter has been structured and presented for each individual company in a data fact sheet in Annex 1 for the selected Dutch banks and in Annex 2 for the selected US/UK banks. Each fact sheet contains information on the transparency of the bank concerned, on its policies in the field of climate change, on targets to reduce direct and indirect CO₂ emissions and on reporting of CO₂ emissions and CO₂ related financial products. Reporting on indirect CO₂ emissions in the data fact sheets also includes the results from a survey by Friends of the Earth Netherlands among Dutch banks and selected international banks on specific key performance indicators for indirect CO₂ emissions (section 4.2). Given the scope of this report no feedback was asked from the banks on the data fact sheets.

Reporting on climate change

Global warming caused by CO₂ emissions will have large consequences for life on earth. It is therefore essential that CO₂ producing companies recognise their responsibility and reduce their CO₂ emissions. Banks have a special role to play in this, since they finance such companies. Banks can cooperate or engage with these companies to reduce their CO₂ emissions (indirect CO₂ emissions). Furthermore, banks have large offices that consume energy (direct CO₂ emissions). Banks can therefore set a good example by minimising their direct CO₂ emissions.

A selected group of international banks has therefore recently published a climate change policy, in which they acknowledge these responsibilities and set quantitative targets to reduce CO₂ emissions. Not one of the six Dutch banks has formulated such a climate change policy, in which they commit themselves to reduce their direct and indirect CO₂ emissions. Fortis, ING and Rabobank emphasise to some extent the commercial opportunities and risks of indirect CO₂ reductions, but these banks remain far from explicit. ABN AMRO is the only bank that has put climate change to the foreground in its 2005 sustainability report, although it does not publish a separate climate policy. It states that: 'Companies must show leadership on climate change. It is important that we take a credible and substantive approach that reflects our international presence and particularly our strong position in the energy sector. We will link our initiatives closely to our role as a financial institution and to making a contribution both to society and our clients in particular, and to the bank itself⁹⁶. Triodos Bank is focused on reducing CO₂ emissions, both in its office activities and in its products and services, but has not published a specific climate change policy. Triodos Bank has the policy to only finance environmentally sound projects. SNS Reaal is not specifically reporting on climate change as such, but it states in its sustainability report of 2004 that it offers sustainable financial products, as it acknowledge its actions have consequences for future generations.

Reporting on direct CO₂ emissions

Except for SNS, all banks report on their direct CO₂ emissions. Only Triodos Bank has a very extensive reporting. Furthermore, the reporting from ABN AMRO

and Triodos Bank is based on the Green House Gas Protocol. This standard states how companies can distinguish between emissions from energy consumption (heating, cooling and lighting of buildings and running ICT equipment) and from travelling (business travel and commuting). Fortis, ING and Rabobank do not use this internationally recognised standard in their reporting. Concerning energy consumption, Fortis only reports its emissions from its Benelux offices. However, it indicated

to increase the scope of their CO₂ emissions in its 2005 reporting. All banks, except for SNS, report in some way on CO₂ emissions from business travel by car and by plane as Table 5 presents. Triodos Bank can serve as a good example to the other banks. It is the only bank that reports CO₂ emissions for all means of transport, including commuting by car. Rabobank does not present CO₂ emissions from travelling, but reports total kilometres flown. SNS only reports on energy consumption per FTE.

Table 5: Direct CO₂ emissions for Dutch banks

	ABN AMRO	Fortis¹	ING²	Rabobank Group³	SNS Bank⁴	Triodos Bank*
Year	2005	2004	2005	2005	2004	2005
Ktonne						
Total reported direct CO ₂ emissions	ND	ND	ND	ND	ND	1.0
o/w energy consumption (housing, paper)	277	107	284	33.5	8.2	0.2
o/w business air travel	70	3.2	24	3.9	ND	0.4
o/w business car travel	ND	ND	14	ND	ND	0.1
o/w commuting (car and public transport)	ND	ND	ND	ND	ND	0.3
Kg						
CO ₂ from energy consumption per FTE	2839	3093	2463	735	2600	612
CO ₂ from business air travel per FTE	714	101	208	694	ND	1611
CO ₂ from business car travel per FTE	ND	ND	121	ND	ND	364
CO ₂ from commuting per FTE	ND	ND	ND	ND	ND	1309

Source: company reports

* Figures for Triodos Bank are presented before compensation of direct CO₂ emissions for comparison reasons

1 Reported figures are for Fortis on a consolidated basis for the year 2004. Energy consumption is for Benelux offices. Business air travel is for Belgium and the Netherlands. CO₂ from air travel is estimated based on reported figures for flown miles.

2 Reported figures are for ING Group on a consolidated basis. CO₂ from air and car travel is estimated based on reported figures for flown and driven km and CO₂ for total business travel.

3 CO₂ from air travel is estimated based on reported figures for flown km for Dutch operations.

4 CO₂ emissions from energy consumption is estimated based on reported energy consumption of 31 giga joules per FTE for the year 2004.

Comparing direct CO₂ emissions

Due to incomplete reporting of CO₂ emissions by most banks, it is not meaningful to compare total CO₂ emissions to evaluate the energy efficiency differences between the six banks. However, this is possible for CO₂ emissions from energy consumption. ABN AMRO has the highest CO₂ emissions from energy consumption due to its size. Fortis has the highest CO₂ emissions per Full Time Equivalent Employee (FTE). For Triodos Bank, CO₂ emissions from energy consumption per FTE are very low as it is the most progressive to save energy: it uses 100% green electricity, has introduced many energy saving technologies in its buildings⁹⁷ and has no retail network. ABN AMRO, SNS Reaal, Triodos Bank and Rabobank (Dutch offices only) all use green energy. Most banks have also introduced heat pumps in (part of) their offices to reduce energy consumption. Rabobank has introduced heat pumps at most of its Dutch offices to reduce energy consumption. SNS Reaal for its office in Alkmaar, ING for its headquarters in Amsterdam and Triodos for its new building in Zeist.

Business travel and commuting form the second important source of CO₂ emissions produced by a bank. But only Triodos Bank is providing figures for both items. A comparison is only meaningful for air travel. CO₂ emissions per FTE from air travel are much higher at Triodos Bank than at the four major banks. This is attributable to the international nature of Triodos Bank's activities. As a small bank (258 FTEs on average in 2005), it is one of the world's largest financing companies of Micro Finance Institutions, which requires relative to the other activities of Triodos substantial flying to developing countries. To reduce CO₂ emissions from car travelling, ING Nederland, Rabobank and Triodos Bank have agreed in 2005 with Friends of the Earth to only use energy efficient cars for their lease cars⁹⁸. All Dutch banks could participate in this initiative and start to report on the achieved CO₂ reduction in next year's reports.

Dutch banks: increasing energy efficiency or reducing direct CO₂ emissions?

Except for ABN AMRO, all Dutch banks lack a target to reduce their CO₂ emissions. Until now, the banks were working on a long-term energy efficiency programme as part of an initiative by the Dutch government. The aim was to increase energy efficiency for their Dutch operations by 25% in 2005 compared to 1995⁹⁹. However, the programme does not specifically relate to reducing CO₂ emissions. Furthermore, 2005 was the last year of the 10-year period and no new programme has been introduced¹⁰⁰. In the latest reporting over 2004, the banks reported they were only able to attain an increase of

cumulatively 12% versus 1995, which is far from the target of 25% in 2005. Only Fortis has publicly reported that it has achieved a 20% energy efficiency increase in 2004 versus 1995. The increase from the other major banks is therefore lower. The new targets that ABN AMRO has recently set could provide a good example for the other banks. It has recently formulated an explicit energy and CO₂ reduction programme, with cost savings of some EUR 3.5 million per year. The programme includes a group-wide energy reduction of 10% by 2008 (compared to its 2004 level) based on relative metrics (kWh/m², kWh/FTE), and with a proportionate reduction in CO₂ emissions¹⁰¹.

Which banks are compensating CO₂ emissions and how much does it cost?

Another method for banks to mitigate climate change is to compensate CO₂ emissions by buying CO₂ credits. Of the six banks, only Triodos Bank compensates all its direct CO₂ emissions to become 'carbon neutral' in this way. In February 2006, it has asked the other Dutch banks to become carbon neutral as well. ABN AMRO has indicated in its 2005 sustainability report that it will partially offset its carbon emissions, but has not given a time frame. At the current compensation price of EUR 13.00 per tonne of CO₂¹⁰², becoming carbon neutral would cost the five banks that are not carbon neutral in total EUR 17 million¹⁰³. ABN AMRO would have to incur an estimated EUR 6.3 million for its global operations to become carbon neutral. ING Group (to become fully carbon neutral would cost EUR 6.1 million for its global activities) is already compensating its carbon emissions from its worldwide business travel until 2008, but it does not state how much CO₂ it compensates. Fortis (EUR 2.9 million), Rabobank (EUR 1.3 million) and SNS Reaal (EUR 0.2 million) do not state if they have intentions to become partly or completely carbon neutral.

Monitoring CO₂ reduction targets and assurance of CO₂ reporting

All banks have environmental management systems (EMS) in place that monitor energy use, but only Triodos Bank and Rabobank are ISO 14001 compliant. ISO 14001 is an international standard that indicates the company concerned has a sound EMS. Such a system includes among others monitoring of environmental performance and taking corrective and preventive measures when targets are not attained. A bank has to choose its most important environmental performance indicators. In order to monitor CO₂ reduction targets, banks could therefore include CO₂ related indicators in their EMS.

All Dutch banks have asked an external registered party like an accountant or certification institute to verify

whether their public reporting is free of misstatements. This is called a negative assurance report. Except for SNS Bank and Triodos Bank, the accountants all follow international assurance standards. Negative assurance does not mean however, that the information provided in the report reflects the actual performance achieved in the year concerned. This is provided in a positive assurance report. ABN AMRO is the only bank that provides positive assurance.

Reporting on indirect CO₂ emissions

All banks, except for ING, explicitly underline the importance of indirect CO₂ emissions. However, it is striking that none of the six Dutch banks is reporting on its indirect CO₂ emissions, or is making attempts to assess indirect CO₂ emissions. Making more detailed estimates than those that were made in chapter 4 is not an easy task for banks. They must collect CO₂ emissions from all their clients and assess how much of these emissions they can influence. Most multinationals, which are important clients for banks, already report accurate CO₂ emissions. Banks can start to aggregate these CO₂ emissions to calculate their indirect CO₂ emissions. A first step that banks could do is to set up a (common shared) database in which they collect CO₂ emissions data from their clients using international standards such as the Green House Gas protocol. For balance-sheet products such as commercial loans and investments, banks could ask for CO₂ emission of a specific asset that they are financing. An alternative is to look at the percentage of loans or investments for which they provide finance to the company and use this percentage on the company's total CO₂ emissions to estimate the indirect CO₂ emissions. For commission-based activities such as brokerage or private banking it will prove to be even more difficult to calculate indirect CO₂ emissions. Dutch banks can do further research in this field.

ABN AMRO states on its indirect CO₂ emissions that it aims to better understand its role in the Energy sector, in order 'to work with our clients to improve the efficiency and sustainability of their core energy business.'¹⁰⁴ Fortis indicates it 'concentrates its emission reducing efforts on its energy and emissions intensive customers'. Both banks however do not indicate how they work with their clients to reduce their CO₂ emissions. Rabobank only states that 'some clients have carbon liabilities and others have latent opportunities.' SNS Reaal does not make a statement on the emissions of its clients. Triodos Bank does not finance energy-intensive companies at all, but only sustainable companies or companies with little CO₂ emissions. For example, it only finances organic agriculture. The bank recently commissioned a study together with Stichting Natuur en Milieu, which revealed that organic

agriculture sequesters 4 times more CO₂ than non-organic agriculture¹⁰⁵.

Survey on indirect CO₂ emissions

To obtain a more detailed overview of the reporting on indirect CO₂ emissions, a survey was sent to all examined banks¹⁰⁶. The questions that were asked can be found in section 4.2 of the fact sheets in Annex 1 and 2. Questions concern the exposure to energy intensive sectors and the involvement in renewable energy for the most important financial products. Questions were also asked on the percentage of clients that report their CO₂ emissions to the bank concerned. Finally, questions were asked on some climate-change related financial products (green mortgages and carbon funds).

Only Triodos Bank provided answers to all questions. The answers from Triodos Bank confirm its focus on sustainable banking. It has no exposure to energy intensive sectors and 16% of its loans portfolio is provided to renewable energy. Of the four major Dutch banks ABN AMRO and Fortis provided a written response to explain why they were unable to provide answers. The other banks only provided oral feed back. The consensus of these answers was that answering to the survey would take too much resources. ABN AMRO stated that 'the data could help in building support and raising awareness for this growing global problem (i.e. CO₂ emissions)'. It also provided more general information concerning climate change related products it has already developed. Fortis indicated that 'the time has not yet come for Fortis ... to discuss the responsibilities ... with respect to our clients' carbon emissions.' The survey was also sent to five international banks (these banks are discussed in more detail in the next chapter), but none of the banks provided written answers. None of the banks provided a reason, except for one (too difficult to provide the information).

Financial products that aim to reduce indirect CO₂ emissions

The six Dutch banks have already introduced several financial products that aim to reduce indirect CO₂ emissions. An overview of selected products that has been found in the public reporting for each investigated bank can be found in the companies fact sheets in Annex 1. From these sheets it becomes clear that ABN AMRO and Triodos Bank are offering the broadest range of CO₂ related financial products.

Chapter 4 reported that loans are the most important financial product for banks. It is therefore positive that all banks have introduced environmental criteria in their evaluation process for commercial loans. However, no

public reporting has been found about specific climate related criteria. For financial assets and investments, the second important balance-sheet based product, a limited number of products have been developed. These mainly focus on including SRI criteria in asset management for own activities (for which evidence was found for each of the six banks) and developing energy efficient real estate (only ING and Triodos reported to be active in this field). Furthermore, it is surprising that none of the banks actively market green mortgages, although mortgages is the most important balance-sheet based product for Dutch banks. Most CO₂ related financial products that have been developed are commission-based products. All Dutch banks have developed climate change related products. Furthermore, all six banks have SRI funds. ABN AMRO, Fortis and Triodos Bank include SRI criteria in (some of) their private banking activities. The latter two co-operate through a joint venture. In the field of brokerage, ABN AMRO, Fortis, SNS Reaal and Triodos Bank conduct research on climate change. Finally, ABN AMRO and Triodos Bank provide underwriting for green companies.

Financial products for developing countries

The expected increase of CO₂ emissions in the next decades will be almost completely generated in developing countries. It is therefore important that CO₂ related products and services also target companies or

projects in developing countries. Banks can use their financial expertise and work together with clients that are front-runners in the field of CO₂ reduction. Through providing loans or making investments, they can finance the construction of efficient energy production facilities and introduce new energy-saving technologies. However, the six Dutch banks, report almost nothing on this subject. Fortis and Rabobank are providing loans to companies through the Clean Development Mechanism (CDM). Fortis as participant in the European Carbon Fund and Rabobank as participant in the Prototype Carbon Fund¹⁰⁷. CDM has been especially developed to promote the financing of CO₂ reduction projects in developing countries. For these projects, banks receive CO₂ credits, which they can sell to third parties. The Dutch banks could also ask clients that are active in developing countries to implement programmes to reduce their emissions in the developing countries concerned. As a starting point, banks could report on the amount of financing to developing countries and on the reduction of CO₂ emissions they have attained there.

Investment funds are a second financial instrument where banks can put a special focus on developing countries. Until now, Triodos Bank is the only bank that offers funds that finance renewable energy projects in developing countries. Through the Triodos Renewable Energy for Development Fund, it provides financing to small and medium sized enterprises that are active in the field of

Table 5: Climate change ranking of multinationals in carbon intensive industries (Maximum score= 100)

Industry	Score	Leader	Score	Laggard	Score
Chemical Industry	52	DuPont	85	PPG	21
Electric Power	49	AEP	73	Constellation	23
Auto Industry	48	Toyota	65	Nissan	33
Industrial Equipment	43	General Electric	58	Deere	14
Metals and Mining	42	Alcan	77	Phelps Dodge	6
Forest Products	37	Int'l Paper	49	Georgia-Pacific	26
Oil and Gas	35	BP	90	Williams	3
Coal Industry	21	Rio Tinto	57	Foundation	5
Food Industry	18	Unilever	49	ConAgra	4
Airline Industry	17	UPS	30	UAL	3

Source: Ceres 2006

renewable energy. A second fund from Triodos Bank is the Global Renewable Energy Fund of Funds. This fund provides financing to existing investment funds in developing countries that focus on the market for renewable energies. The other Dutch banks could follow these examples and search for business opportunities that help to reduce CO₂ emissions in developing countries.

How to start reducing indirect CO₂ emissions

None of the banks has set any form of target to reduce its indirect CO₂ emissions, although these emissions are considerably larger than the banks' direct emissions. These indirect CO₂ emissions lead to credit risks for banks, as it becomes increasingly important to reduce CO₂ emissions from corporate clients. The clients that are active in energy-intensive sectors and lack targets to reduce their emissions need the special attention of banks. As a starting point, Table 5 provides an overview of international leaders and laggards in the ten most energy-intensive industries¹⁰⁸. With this kind of information, banks could investigate whether they can add conditions to their financial products that favour the reduction of indirect CO₂ emissions. Banks can also lobby governments for fiscal incentives to make indirect CO₂ reductions more attractive.

Concluding remarks

Banks have a special role to address the issue of climate change, since they provide financing to companies and individual households that produce CO₂ emissions. It is therefore striking that none of the six investigated Dutch banks have a climate change policy, in which they commit themselves to reduce their direct and, more importantly, their indirect CO₂ emissions. Furthermore, all banks except for Triodos Bank lack comprehensive reporting on direct CO₂ emissions and none report on or provide estimates of the indirect CO₂ emissions.

To reduce their direct CO₂ emissions, Dutch banks need to set clear targets and target dates. ABN AMRO is the only bank that has set a target to reduce direct CO₂ emissions. To further reduce direct CO₂ emissions, banks can set a good example to their clients and strive to become carbon neutral. Triodos Bank is the only Dutch bank that is already carbon neutral. To become carbon neutral, it is estimated that the six Dutch banks would in total have to spend an annual amount of some EUR 17 million i.e. some 0.1% of their aggregated net profit of EUR 19.7 billion in 2005. To reduce their indirect CO₂ emissions, banks could start by reviewing their current loan and investment portfolio and focus on energy intensive industries to which they have a large financial exposure. Corporate clients in these industries that do

not have state of the art CO₂ reduction programmes need their special attention. Banks can also use their financial expertise to reduce CO₂ emissions in developing countries, since the expected increase of CO₂ emissions in the next decades will be almost completely generated in developing countries.

6 Climate change policies of international banks¹⁰⁹

Introduction

A selected number of major international banks have a climate change policy or a clear environmental statement. These banks include: Bank of America, Citigroup, Goldman Sachs and J.P. Morgan Chase from the United States and British bank HSBC (Hongkong and Shanghai Banking Corporation)¹¹⁰. Except for Goldman Sachs they all belong to the world's largest banks (see Annex 3¹¹¹). This chapter examines which elements these policies contain related to direct and indirect CO₂ emissions. Also the reduction targets for both direct and indirect CO₂ emissions are discussed, as well as the specific financial products to reduce indirect CO₂ emissions for the selected banks. The information used for this chapter is based on fact sheets, of which the structure is similar to those used for the Dutch banks. These sheets can be found in Annex 2. A comparison between the international and the Dutch banks is also made for several CO₂ related topics. The goal is to use the experiences of these banks to draw up best-practice guidelines for Dutch banks in Chapter 7.

Policy statements on climate change

In the last two years all five international banks have developed a policy on climate change or a clear environmental statement, as they understand that climate change has commercial relevance that has to be dealt with and they need to take a position in this field. Most see the link between human-produced CO₂ emissions and climate change as scientifically proven. Others feel the need of further proof, but agree to apply the precautionary principle. The climate-change policies contain a general vision on climate change, the potential effect on businesses and society, measures to be taken to mitigate energy consumption and CO₂ emissions, and quantitative CO₂ reduction targets with a clear deadline.

Five elements of the investigated climate change policies can be highlighted:

1. Climate change and in particular the reduction of CO₂ emissions are seen as a major challenge to society, business, and politics. Good cooperation between all involved stakeholders is necessary to address this challenge accordingly¹¹².
2. A special role is put aside for the government to provide a sound policy framework to set the basic conditions for a market-driven mechanism.
3. Voluntary actions alone are not sufficient, but

regulations have to be put on the business parties¹¹³. This requires incentives and/or penalties to enforce these regulatory tools.

4. Furthermore, the banks see themselves as a mediator between different stakeholders. The banks recognise their special role in promoting measures of energy efficiency and emission reduction within their organizations, but more important, towards their clients and the government.
5. They assume that it is possible to realize substantial reduction targets for energy consumption and CO₂ emissions.

Policy statements on direct CO₂ emissions

All of the investigated banks aim to minimise the direct CO₂ emissions. The five international banks mostly focus on reducing energy consumption from their ICT equipment and from their buildings. Citigroup and HSBC also aim to use more renewable energy sources for their energy consumption. Bank of America and HSBC strive to become partially or completely carbon neutral via creating or purchasing carbon credits. Goldman Sachs states to consider to compensate its direct CO₂ emissions.

Most of the banks state they will disclose their electricity use and CO₂ emissions in order to provide transparency on the impact of their operations. However, reporting on CO₂ emissions is still far from complete, as table 6 indicates. All banks managed to establish clear reduction targets for their CO₂ emissions, to which they will live up to in the coming years. A beginning is made to report on goals, actions and achieved progress towards the set goals. The process is monitored to make adjustments to their positions and actions. But nothing is mentioned in the public reporting how and in which way the monitoring is taking place.

Policy statements on indirect CO₂ emissions

Next to the direct emissions, the banks are dealing with the indirect CO₂ emissions of their clients. Using their financial products and services, the banks see that they have the opportunity and the responsibility to stimulate their clients to reduce their CO₂ emissions.

The investigated American banks, except for Goldman Sachs, plan to reduce parts of the CO₂ emissions of their

clients. They aim to measure and disclose CO₂ emissions and set up plans to reduce or compensate emissions. The plans are used in the banks' internal review process of their clients. The banks will also assess the risks of climate change on their clients' businesses, as they want to limit risk and invest in change where appropriate. Bank of America is starting this process with an assessment and reporting on CO₂ emissions from its energy and utilities portfolio. Using the outcomes, it stated to continue to evaluate methods of reducing CO₂ emissions in its chain of activities.

All investigated banks state that they have incorporated economic, social and environmental criteria in their financial products such as loans, debt and equity underwriting, and financial advisory services. Their approach is mostly derived from project financing, where they use the Equator Principles to include environmental criteria in their review process. Citigroup for example addresses 'environmental and social issues from both a credit risk perspective and a reputation and franchise risk perspective'¹¹⁴. All investigated banks state that they will continue developing products and services that address climate change and promote the reduction of

CO₂ emissions. The US banks also take their responsibility to stimulate the public discourse to change the trend of CO₂ emissions in the US economy. Therefore, they search to build partnerships on solutions with industry, climate change experts in NGOs and academia, US states and the Federal Government.

Targets to reduce CO₂ emissions

All examined banks have already set quantitative targets to reduce direct CO₂ emissions (see Table 6). Generally, the reduction targets vary between 5 and 10%. The timelines differ between 2007 and 2012.

Although all banks have a clear reduction strategy, not all report their direct CO₂ emissions, which seems odd. HSBC is a positive example for reporting as it is the only bank that also reports a breakdown of its direct CO₂ emissions for energy consumption and business travel. It is also the only bank that aims to become carbon neutral by 2006¹¹⁵.

The target was set in December 2004 and already realised by the end of 2005. For an estimated amount of EUR 2.3 million¹¹⁶, it compensated the 170 Kt of CO₂ it generated in the last quarter of 2005, by investing in four different CO₂ reduction projects¹¹⁷.

Table 6: Overview of CO₂ emissions and CO₂ reduction targets for five selected international banks

Ktonne per year	Bank of America	Citigroup	Goldman Sachs	HSBC	J.P. Morgan Chase
Total direct CO ₂ emissions	ND ¹	ND	ND	663	ND
o/w energy consumption	1300 ²	1351	ND	539	ND
o/w business travel	ND	ND	ND	124	ND
Direct CO ₂ reduction target	9%	10%	7%	5% ³	5-7%
Indirect CO ₂ reduction target	7% ⁴	ND	ND	ND	ND
Target year direct CO ₂ reduction	2009	2011	2012	2007	2012

Source: environmental reports, climate change policies, Carbon Disclosure Project

1 ND = Not disclosed.

2 2002 data is most recent reporting, no specification for the reported CO₂ figures is given, but it is assumed to be from energy consumption only.

3 Reduction target only applies to energy consumption from buildings (i.e. travel is not included).

4 Reduction target is for the energy and utility portfolio, target year is 2008

Bank of America is the only bank that set a specific target to reduce CO₂ emissions from both its own operations and in its energy and utility portfolio¹¹⁸. Already in 2005, it has realised its 7% reduction target for its direct CO₂ emissions. This target was originally set in 2004 for 2008. It did not hesitate to set a more ambitious target to further reduce CO₂ emissions by 9% in 2009 compared to 2005. The first target was reached by a range of energy consumption reductions. Actions were financed from a budget of USD 15 million and included the installation of energy-efficient lighting and of energy-efficient heating and cooling equipment, the implementation of control systems and the use of solar energy. An energy management system was implemented in the 50 largest office buildings, which resulted in a reduction of energy consumption of 13% for these buildings per year.

Monitoring CO₂ reduction targets and assurance of CO₂ reporting

HSBC is the only bank that has asked an independent accountant to audit its sustainability report according to international assurance standards. It is also the first global bank, that received assurance from its auditor on its projects that offset its direct CO₂ emissions. Furthermore, none of the international banks has adopted ISO 14001 certification, although HSBC is in the process towards adopting such certification. ISO 14001 ensures the implementation of a sound environmental management system. Bank of America and HSBC are the only banks that report on the progress to realise their targets. Unfortunately, Bank of America does not provide any information how it calculates its indirect emissions.

Comparing Dutch and international banks

The five selected international banks have recently become front-runners to address climate change, as they have published detailed climate change policies and report clear CO₂ reduction targets. In these policies, these banks take into account several elements that have been discussed in the beginning of this chapter. The major Dutch banks currently seem to lag behind these banks as they have no such climate change policies. To compare the reporting of the international and the Dutch banks, a selection of CO₂ related information from 98 international banks was compared using the SiRi Pro database. This database is currently based on public reporting for the years 2004-2005 (FY 2004 annual reports)¹¹⁹. As such it enables a broad presentation of where the Dutch and five non-Dutch banks stand in 2005, also in comparison to a broader group of some 100 banks world wide. The results are presented in Table 7. In this table the sign 'X' means that the bank is an 'above average performer' for the specific item in 2004-2005. The sign '(X)' means that

the respective bank will mostly likely become a 'above average performer' in 2006¹²⁰. This information was retrieved from the fact sheets in Annex 1 and 2, which are updated until May 15, 2006 (and so contain data from FY 2005 annual reports). As such, the latest developments become visible. Especially the international banks have improved their position as they introduced climate change policies. From the table it becomes clear that Dutch banks still perform better in the field of policies on green procurement, targets to increase the use of renewable energy and transparency on reporting.

All five international banks now have targets to reduce CO₂ emissions, which the Dutch banks miss, except for ABN AMRO. All examined banks (Dutch and non-Dutch) have climate change related criteria for their loans and asset management businesses. Overall, the Dutch banks are more advanced in product development including climate change issues.

Selected CO₂ related financial products

Although Dutch banks have been more active in a broad range of product developments, especially in the retail market, the US/UK banks have especially focussed on corporate banking. This section discusses three selected CO₂ related products and services from the five US/UK banks that could set an example for the Dutch banks. While the five international banks have developed less CO₂ related financial products, most of these products are especially developed to reduce CO₂ emissions of their clients. The three US banks that specifically target to reduce their indirect CO₂ emissions (Bank of America, CitiGroup and JP Morgan), are also very explicit in their climate change policies about their goal to reduce indirect CO₂ emissions using financial products.

Internalising CO₂ costs

In project transactions in the power sector, J.P. Morgan Chase will quantify the financial cost of CO₂ emissions and integrate them into the financial analysis of a transaction¹²¹. The goal is to internalise the cost of energy consumption and of CO₂ emissions and to alter investment choices. J.P. Morgan Chase will also encourage these clients to evaluate alternative energy technologies.

Green mortgages

Two American banks provide energy-efficient mortgages or green mortgages. These banks are Citigroup and J.P. Morgan Chase. Both recognise that energy-efficient homes have lower operating costs for the homeowners than a standard home. Therefore they add the value of the energy savings to the income of the borrower to calculate its debt capacity. Dutch banks have not used this method until now. They have neither actively marketed their green

Table 7: Selected CO₂ related information based on SiRi Pro database and most actual public reports

	number of above average performers	ABN AMRO	Fortis	ING Group	Rabobank	SNS Reaal	Bank of America	Citigroup	Goldman Sachs	J.P. Morgan Chase	HSBC
Policy on green procurement	11	X	X	X	X	X	(X)	(X)		X	
Targets and programmes											
- to reduce CO ₂ and/or energy consumption	6	X					X	(X)	(X)	(X)	X
- to increase the use of renewable energy	7	(X)		(X)	X	X		(X)			(X)
Environmental criteria in loans	33	X	X	X	X		X	X	(X)	(X)	X
Env. criteria in investments/asset management	47	X	X	X	X	X	X	X	(X)	(X)	X
Reporting on											
- CO ₂ emissions	27	X	(X)	X	X			X			X
- renewable energy consumption	11	(X)	X	(X)	X	X					
- assets managed according to SRI criteria	10	(X)	(X)	X	X	X					(X)

mortgage facility, probably because it is not attractive enough for homeowners or for the banks.

Engage clients to reduce indirect CO₂ emissions

J.P. Morgan Chase will encourage clients that are large CO₂ emitters to develop mitigation plans. It will ask its clients to measure and disclose its CO₂ emissions and describe plans to reduce or offset CO₂ emissions. The bank stated to add carbon disclosure and mitigation to its client review process beginning by year-end 2005¹²².

Concluding remarks

Five international banks have been examined on their climate change policies. These include: Bank of America, Citigroup, Goldman Sachs and J.P. Morgan Chase from the United States and British bank HSBC. Bank of America has the most comprehensive climate change policy. Its policy recognises climate change as a scientifically proven fact and confirms the commercial relevance of climate change. Moreover, the bank points out the special role of financial institutions to mitigate their direct and indirect CO₂ emissions. It also has the most ambitious targets to reduce direct CO₂ emissions and is the only bank that has set a target to reduce indirect CO₂ emissions for part of its client portfolio. British bank HSBC also provides a good example since it is the first major international bank that has become fully carbon neutral by the end of 2005. It also compensates CO₂ emissions caused by business travel and an external auditor has even verified whether HSBC is indeed carbon neutral.

The major Dutch banks seem to lag these international banks as they have no climate change policies and, with the exception of ABN AMRO, miss reduction targets.

Nevertheless, the Dutch banks outperform the selected international banks in the field of CO₂ reporting and renewable energy (direct impact). Dutch banks also offer a broader range of CO₂ related products. The major difference with the international banks is that the selected international explicitly target to reduce their indirect emissions especially with regard to their loans and investments clients. Dutch banks could improve by developing balance sheet based activities and products to reduce CO₂ emissions products, as these provide the most direct contact with clients. Based on the assessment of the US/UK banks, these could include:

- 1) internalising CO₂ costs into their financial modelling,
 - 2) green mortgages and
 - 3) engage clients to report their CO₂ emissions and develop mitigation plans.
- If Dutch banks want to become front-runners in the field of climate change, they would also need to establish a clear climate change policy, set direct and indirect CO₂ reduction targets, become carbon neutral, and report on direct and indirect CO₂ emissions and progress towards targets.

7 Climate change best practice guidelines

Some of the largest US banks have adopted a formal policy statement to reduce CO₂ emissions and to mitigate climate change. Chapter 5 has examined the current status of climate change practice and CO₂ reporting by Dutch banks. Based on the findings, it appears that in general the largest Dutch banks miss such comprehensive policy statements as well as consistent reporting on CO₂ emissions and related programmes and reduction targets. On the basis of these findings, it is recommended that Dutch banks become more pro-active on climate change related issues and develop a systematic framework for action. Such a framework and related reporting would increase much needed accountability towards the public as to the role and responsibilities of banks in the area of climate change. The following seven guidelines are considered best-practice standards that all banks should aim for:

1. Establish a comprehensive climate change policy as a framework for action

In order to provide a consistent framework for corporate action, banks have to adopt a formal policy statement on climate change. Such a policy statement would explain the relevance of climate change for the company and specify how the bank sees its role and responsibilities. A best-practice climate change policy should:

- Recognise the overwhelming scientific evidence for human induced climate change and confirms its societal and commercial relevance.
- Highlight the special role of banks to reduce and minimise CO₂ emissions and to support public policies.
- Explain the relevance of direct and indirect emissions and highlight the sources of emissions it considers most relevant.
- Explain strategy and priorities for action with a specific focus on the issues raised under best practice recommendations 2-7 (see below).

2. Set clear reduction targets for both direct and indirect CO₂ emissions

In order to monitor progress and strengthen accountability, banks should set clear CO₂ reduction targets and target dates. These should be set for both direct and indirect CO₂ emissions. Although the scope of these targets may in the beginning be limited to the most important sources of direct and indirect emissions, in the

medium term these targets should cover the majority of direct and indirect emissions (i.e. direct emissions should include business travel and commuting of employees and indirect emissions should include the majority of balance sheet and commission based products).

3. Use renewable energy and make own operations carbon neutral

In order to provide strong incentives to minimise energy use and in order to set a good example towards their clients, banks should use energy from renewable energy sources and strive to make their own operations fully carbon neutral. These activities should at least in the medium term include all business travel as well as commuting by employees. If banks want to see leadership from their clients, they will need to set an example themselves and carbon neutrality will be the strongest signal they can provide. This will also strengthen the understanding of banks as to the practical challenges and obstacles an organisation faces to achieve such objectives.

4. Clarify how it will promote and engage with climate change leaders and laggards

In implementing the policy objectives with respect to indirect CO₂ emissions, banks will have to raise climate change issues with their clients. There will always be leaders and laggards and banks should explain how they plan to promote leaders and how they will engage with laggards to achieve their policy objectives. The engagement strategies may often depend on the products and services provided as well as on the industry clients operate in and banks should explain how they intend to balance such differences. Banks could e.g. demand GRI or GHG Protocol reporting from companies.

5. Lay out engagement and public policy position

Banks could and should take action on their own in the area of climate change. However, in the long-run such efforts will only effectively contribute to reducing global CO₂ emissions if banks' clients also understand the need for action and there exists an effective policy and regulatory framework. Banks should explain how they intend to engage with clients and governments to promote effective climate change action.

Banks compete fiercely with each other to win new clients and retain existing ones based on commercial propositions. To integrate climate change considerations successfully in their activities, commercial banks will need to engage with their clients on the need to take action. They should therefore lay out how they will engage notably with their loan and investment clients on climate change issues. Similarly, banks depend to a certain degree on an effective public policy framework that promotes innovate and progressive climate change policies and action. Banks should therefore also recognise the important role they can play to support effective government action and clearly lay out how they want to directly or indirectly support governmental action of a more voluntary or legally binding nature.

6. Develop new products and innovate

Banks can innovate and develop products to stimulate clients to reduce their CO₂ emissions. This could be done towards both retail clients (especially in the mortgage and housing market) and corporate clients (especially those active in the energy intensive sectors). Banks should, amongst others, internalise CO₂ costs in their financial modelling. In this way banks can shift their investments to companies that have less CO₂ emission or have state-of-the-art programmes in place to reduce CO₂ emissions. This internalisation can be applied to a number of financial products, including loans, investments and third party asset management. Banks can also encourage clients that are large CO₂ emitters to develop mitigation plans and start to offer green mortgages. Furthermore, banks can also develop carbon funds that invest in Clean Development Mechanism and Joint Implementation projects. By investing in CDM, banks can help to mitigate CO₂ emissions in developing countries. Such innovations in the field of CO₂ conditions should help banks to make them more competitive in an economy that is increasingly becoming 'carbon constrained'.

7. Report annually on direct and indirect CO₂ emissions and progress towards targets

To improve accountability and in order to systematically track progress, banks should report annually on direct and indirect CO₂ emissions and progress towards targets. Where available, this reporting should be done following internationally recognised reporting standards such as those promoted by the Greenhouse Gas Reporting Protocol and by GRI. Banks should strive to provide comprehensive reporting on all their direct and indirect CO₂ emissions.

Reporting on the above is considered essential in order to track progress of individual banks but also in order to

compare and benchmark the performance of banks. Such reporting is also necessary to set a good example towards clients, as these will have to implement similar reporting if banks are to effectively reduce indirect CO₂ emissions. If investors worldwide want to promote standardised reporting on climate change issues as they indicate through the Carbon Disclosure Project, they will need to set an example in order to remain credible. Reporting on CO₂ emissions should also allow banks to improve reporting standards on these issues. Whereas there are relatively well-developed guidelines for direct emissions reporting, no internationally reporting standards exist so far for indirect emissions of banks. Given that this is the area where the positive impact of banks could be greatest, progress on standardised reporting on indirect emissions is necessary. Reporting on these indirect emissions would be the best way to move discussions forward in a fast and efficient manner.

Annex 1:

Fact sheets selected Dutch banks

Companies include:

- ABN AMRO
- Fortis
- ING Group
- Rabobank Group
- SNS Reaal
- Triodos Bank

Note: The information collected on Dutch and international banks is based on companies' public reporting (i.e. website, Annual Report and Sustainability Report), information available through the Carbon Disclosure Project, as well as information collected through a questionnaire by Milieudefensie (Dutch branch of Friends of the Earth) that was sent to companies in March 2006. Given the scope of this project, the information collected and compiled in the fact sheets in Annex 1 and 2 was not reviewed by companies and may therefore not be fully accurate or complete. These fact sheets are meant to provide an overview of current climate change practice of these banks based on publicly available information. Given that the quality of public reporting is sometimes poor, the fact sheets should not be interpreted as providing a fully complete and accurate picture of the status quo.

Company Name: ABN AMRO	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	ABN AMRO is signatory to the CD Project
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	Sustainability report 2005
Use of guidelines of GHG Protocol	Yes	CO ₂ calculation tool of the WRI/WBCSD GHG Protocol Initiative
Data audited, according to which standard	Yes	Verification by Ernst & Young Accountants, in accordance with the Exposure Draft Standard RL 3410 Assurance Engagements relating to Sustainability Reports
2. Policy		
Formal policy statement on climate change	No	
Policy to increase use of renewable energy for operations	Yes	All Dutch offices and head office locations use 100% green electricity and it will look to do so elsewhere, depending on feasibility.
Policy to offset direct emissions	Partly	It will partially offset its carbon emissions
Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	

Company recognises climate change and its commercial relevance	Yes	Climate change is one of the major environmental challenges of our time and ABN AMRO views that climate change and the policy responses to climate change are becoming more and more important for the business environment in which we operate. Companies must show leadership on climate change.
Company recognises indirect impact of financial institutions	Yes	The majority of our overall environmental impacts are indirect –through our financing and investment activities. We will link our initiatives (to reduce CO ₂ emissions) closely to our role as a financial institution.
Participant in climate change related policy initiatives	Yes	Sponsors the Ecosystem Marketplace, member of the Climate Group, member of the Business & the Environment Programme of HRH The Prince of Wales's, member of the Clean Air Counts initiative and member of the Corporate Leaders Group on Climate Change in the UK. Signatory bank to UNEP FI
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Yes	Group-wide energy reduction of 10% by 2008 (compared to its 2004 level) based on relative metrics (kWh/m ² , kWh/FTE), and with a proportionate reduction in CO ₂ emissions.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	No	No reporting on progress of old CO ₂ target found in 2005 Sustainability report
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Yes	346.5 Kt CO ₂ in 2005 from energy consumption and air travel.
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	Partly	CO ₂ emissions from air travel were 69.6Kt. No figures for car travel and commuting.
4.1.2 Energy Use		
Total annual energy use	Yes	915.5 gWH
Total annual energy costs	Yes	Energy costs were EUR 51.1m in 2004

4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	6	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		

5.1.1 Loans	Yes	Provide lending to CDM and JI projects that are too small for project finance, SRI Criteria for commercial loans, Loans to renewable energy through green financing (ABN AMRO Groenbank and ABN AMRO Groenfonds). ABN AMRO has adopted the Equator Principles.
5.1.2 Investments	No	
5.1.3 Asset management	Yes	SRI criteria included in shares and bonds
5.2 Commission based financial products		
5.2.1 Funds	Partly	ABN AMRO manages several SRI funds, no carbon funds.
5.2.2 Third party asset management	No	
5.2.3 Private banking	Yes	SRI criteria for private banking
5.2.4 Brokerage & Trading	Yes	Underwriting climate change-related companies. Climate exchange related: 1) trading and clearing of EU allowance Futures, 2) monetising EU allowances and 3) Trading EU allowances Over-The-Counter.
5.2.5 Leasing	No	
5.2.6 Private equity	Yes	ABN AMRO will create a private equity fund for investments in renewable energy and clean technology in 2006
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: Fortis	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	Fortis Investments is signatory to the CD project
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	Sustainability Report 2004
Use of guidelines of GHG Protocol	Partly	Using conversion factors for CO ₂ emission reports
Data audited, according to which standard	Yes	CSR reporting has been externally verified according to The International Standard on Assurance Engagements (ISAE) 3000
2. Policy		
Formal policy statement on climate change	No	
Policy to increase use of renewable energy for operations	No	
Policy to offset direct emissions	No	

Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	
Company recognises climate change and its commercial relevance	Yes	Policies implemented to reduce emissions and mitigate climate change have a particularly strong impact on Fortis.
Company recognises indirect impact of financial institutions	Yes	Fortis indicates that as a financial institution, it concentrates its emission reducing efforts on its energy and emissions intensive customers.
Participant in climate change related policy initiatives	No	
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Partly	No CO ₂ target. Fortis Bank NL aims to improve energy efficiency by 25% for end of 2005.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	Partly	Of 25%, 20% is now achieved.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Partly	69.5 Kt CO ₂ for the Benelux offices in 2004
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
Travel Related CO ₂ Emissions Globally	Partly	Estimated flying emissions, lease fleet will follow in 2005 reporting
4.1.2 Energy Use		
Total annual energy use	Partly	396.8 gWh for Benelux offices
Total annual energy costs	No	Fortis believes that reporting as a percentage to revenues is insignificant and therefore not measured
4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	

% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	Financing renewable energy projects through green funds. In 2004 financing of those projects totalled EUR 241 million, Fortis has adopted the Equator principles.
5.1.2 Investments	No	
5.1.3 Asset management	Yes	SRI criteria included in asset management.
5.2 Commission based financial products		
5.2.1 Funds	Yes	Co-sponsor of the European Carbon Fund (Fortis invests EUR 15 million). Fortis manages SRI funds

5.2.2 Third party asset management	Yes	SRI criteria for Large Cap European Equity portfolios. Fortis' subsidiary MeesPierson has a joint-venture with Triodos, called Triodos MeesPierson that offers SRI criteria for private banking.
5.2.3 Private banking	No	Fortis' subsidiary MeesPierson offers SRI based private banking.
5.2.4 Brokerage & Trading	Yes	Fortis equity research recently published a report analysing various companies in France and the Netherlands to ascertain whether their approach to the ETS should affect their stock rating. Climate exchange related: Carbon Trading Services, Carbon Finance Services, Carbon Trust Services and Carbon Fund Services
5.2.5 Leasing	No	
5.2.6 Private equity	No	
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: ING Group	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	ING Investment Management Europe is signatory to the CD Project.
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	Sustainability report
Use of guidelines of GHG Protocol		
Data audited, according to which standard	Yes	By Ernst & Young Accountants, against the reporting guidelines set out in the Sustainability Reporting Guideline issued by the Council for Annual Reporting in the Netherlands and the guidelines issued by the Global Reporting Initiative.
2. Policy		
Formal policy statement on climate change	No	
Policy to increase use of renewable energy for operations	Yes	In the Netherlands ING target to use 50% of its energy consumption from renewable sources in 2006.
Policy to offset direct emissions	Yes	ING states it offsets 30% of its emissions by using green energy planting 300 hectares of rainforest in Malaysia.

Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	
Company recognises climate change and its commercial relevance	Yes	ING aims to anticipate developments in the environmental field related to commercial services and aims to manage the environmental risks resulting from these activities.
Company recognises indirect impact of financial institutions	No	
Participant in climate change related policy initiatives	Yes	Global Round table on Climate Change, UNEP FI
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	No	The majority of business units have established energy-efficiency programs (58% of FTE's) or are developing these (33%). The company provides an example and performance data. However, the company does not disclose any quantitative targets.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	Partly	ING has good disclosure about progress towards targets, but no quantitative CO ₂ related targets have been found.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Yes	284 Kt CO ₂ for global energy consumption and business travel in 2005.
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	Partly	CO ₂ emissions for car and air travel amount to 38Kt, but no reporting on commuting.
4.1.2 Energy Use		
Total annual energy use	Yes	3.0million Gjoules
Total annual energy costs	No	Not stated, but indicated that this is 1% of net profit after taxation in 2004 (EUR 5.968m).
4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	

% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		

5.1.1 Loans	Yes	ING introduced SRI statements in its lending evaluation process, which are internal guidelines for handling certain non-financial impacts in specific industry sectors that are known for their potential environmental, social and/or reputation risk. Financing of renewable energy projects through green funds. Total value amounted to EUR 781 million. ING Group has adopted the Equator principles.
5.1.2 Investments	Yes	ING Property funds in Australia have included CO ₂ reduction targets.
5.1.3 Asset management	Yes	SRI criteria included in asset management.
5.2 Commission based financial products		
5.2.1 Funds	Partly	ING manages several SRI funds, but no carbon funds.
5.2.2 Third party asset management	Yes	ING IM offers SRI asset management to third parties.
5.2.3 Private banking	No	ING Nederland offers SRI based private banking.
5.2.4 Brokerage & Trading	Yes	ING acts as an agent in buying and selling of Joint Implementation emission rights for its Eastern European customers, but does not report on specially developed products.
5.2.5 Leasing	No	
5.2.6 Private equity	No	
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: Rabobank Group	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	Rabobank is signatory to the CD Project.
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	Sustainability report 2005, internet
Use of guidelines of GHG Protocol	No	
Data audited, according to which standard	Yes	The report is provided by KPMG Sustainability BV and is in accordance with the International Standards for Assurance Engagements (ISAE) 3000.
2. Policy		
Formal policy statement on climate change	No	

Policy to increase use of renewable energy for operations	Yes	As of 2005, the target is to have 100% renewable electricity for the Dutch offices. 96% is reported for 2005.
Policy to offset direct emissions	No	
Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	
Company recognises climate change and its commercial relevance	Yes	Rabobank foresees a rapid integration of financial markets and emission markets, since emission regulation will affect cash flows and balance sheets of companies.
Company recognises indirect impact of financial institutions	Yes	It recognises that some clients have carbon liabilities and others have latent opportunities.
Participant in climate change related policy initiatives	Yes	Signatory bank to UNEP FI
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Partly	Rabobank states it plans to increase energy efficiency and thereby reducing carbon footprint. It states to reduce CO ₂ emissions from its car fleet with 30% by 2008 for Rabobank Netherlands and the local Rabobanks.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	Partly	Rabobank has good disclosure about progress towards targets, but no CO ₂ related targets have been found.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Partly	33.5Kt CO ₂ for the Dutch offices reported compared to some 113Kt for 2004. The decrease is the result of the usage of renewable energy sources.
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	No	More than 23 million air kilometres in 2005, an increase of 31% compared to 2004. No CO ₂ emissions stated.
4.1.2 Energy Use		
Total annual energy use	Yes	194.9 gWH for the Dutch offices.
Total annual energy costs	No	Not stated, but indicated that this is less than 1% of total revenues
4.2 Indirect Emissions reporting		

4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		

5.1.1 Loans	Yes	Rabobank will start to implement CSR criteria in its loan evaluation process as of 2006. Specialised sustainable products and services, amounts for 2005: Rabo Green Bonds, EUR 2,644m Robeco CDO Green Bond EUR 30m Green loans (cumulative) EUR 2,184m
5.1.2 Investments	No	
5.1.3 Asset management	Yes	SRI criteria included in asset management.
5.2 Commission based financial products		
5.2.1 Funds	Yes	Rabobank and Robceo offer several SRI funds. It also participates in the Prototype carbon Fund of the World Bank since 2000.
5.2.2 Third party asset management	No	
5.2.3 Private banking	No	
5.2.4 Brokerage & Trading	Yes	Electronic trading portal for environmental commodity trading, called New Values. It facilitates Climex (European Climate Exchange) for the trade in CO ₂ emission rights and Renewable Energy Certificates of Origin. Rabobank Carbon Procurement Department, which is responsible for executing the master agreement that the Rabobank entered into with the Ministry of Housing, Spatial Planning and the Environment ("VROM") for the purchase of 10 million tonnes of GHG Reductions from 2003 until 2005. This was however not achieved, due to high CO ₂ prices.
5.2.5 Leasing	Yes	Green lease (EIA/VAMIL/MIA) 36 new contracts in 2005
5.2.6 Private equity	Yes	Robeco Sustainable Private Equity Fund of Funds
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: SNS Reaal	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	ASN (part of SNS Reaal) is signatory to the CD Project.
CDP3 questionnaire publicly available	No	
Other reporting that includes specific section on CO ₂ emissions	Yes	CSR report 2004
Use of guidelines of GHG Protocol	No	

Data audited, according to which standard	Yes	Verification by DHV adviesgroep, no international standard used.
2. Policy		
Formal policy statement on climate change	No	
Policy to increase use of renewable energy for operations	Yes	Target is to operate fully on renewable energy by the end of 2005. At the start of 2005, this amounted to 97%.
Policy to offset direct emissions	No	
Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	
Company recognises climate change and its commercial relevance	No	
Company recognises indirect impact of financial institutions	Yes	SNS offers sustainable financial products, as it acknowledge its actions have consequences for future generations. Sustainable developments are taken into account in product development.
Participant in climate change related policy initiatives	No	
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	No	SNS Reaal will start an energy scan in 2005. The result will provide as input for measures to reduce energy consumption.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	No	
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	No	(only operating in the Netherlands)
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	(only operating in the Netherlands)
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	No	
4.1.2 Energy Use		
Total annual energy use	Yes	22 GJ per FTE in 2005 versus 22,5 GJ per FTE in 2003 (2005 CSR report)
Total annual energy costs	No	
4.2 Indirect Emissions reporting		
4.2.1 Loans		

% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	22,50%	(% of shares) Majority of the investments of third party Assets under Management is according to the sector weights in the external MSCI benchmark, approximately market-weighted, except for a very specific exception: The investments of ASN Bank are very different from the external benchmark. ASN Bank does not invest in certain sectors. Currently the Bank and its Investment Funds do NOT invest in certain sectors covered by EU Emissions Trading, like power sector, fossil fuel generators, oil refining, iron/ steel, and glass/ceramics. ASN owns CRH (cement) and a few paper/pulp companies.
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	2%	(% of shares)
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	24,70%	(% of shares)
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	

4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	Its subsidiary ASN Bank offers special loan conditions for sustainable initiatives of its clients. ASN Bank also has a green fund, but does not disclose the amount.
5.1.2 Investments	No	
5.1.3 Asset management	Yes	SRI criteria of SNS asset management used for asset management for own activities
5.2 Commission based financial products		
5.2.1 Funds	Yes	SNS offers several SRI funds, but no carbon funds. These include funds through its subsidiary ASN Bank.
5.2.2 Third party asset management	Yes	Based on SRI criteria, SNS Asset Management manages portfolios for pension funds, charities and other institutional clients.
5.2.3 Private banking	No	
5.2.4 Brokerage & Trading	Yes	SNS Asset Management has a research department with 11 SRI analysts, SNS Reaal is part of the Enhanced Analytics Initiative and therefore includes environmental related information.
5.2.5 Leasing	No	
5.2.6 Private equity	No	
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: Triodos Bank	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	Triodos Bank is signatory to the CD Project.
CDP3 questionnaire publicly available	No	
Other reporting that includes specific section on CO ₂ emissions	Yes	Annual report 2005, which includes an environment report
Use of guidelines of GHG Protocol	Yes	CO ₂ calculation tool of the WRI/WBCSD GHG Protocol Initiative
Data audited, according to which standard	Yes	Verification by SGS Systems & Services Certification e.e.s.v., no international standard used.

2. Policy		
Formal policy statement on climate change	No	
Policy to increase use of renewable energy for operations	Yes	Triodos Banks uses 100% of its electricity consumption from renewable sources.
Policy to offset direct emissions	Yes	It completely compensates for its direct emissions.
Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	
Company recognises climate change and its commercial relevance	Yes	Within the broader context of 'sustainable banking' Triodos Bank is focused on the reduction of CO ₂ emissions, both in its office activities and in its products and services.
Company recognises indirect impact of financial institutions	Yes	Triodos only finances activities that aim sustainable development
Participant in climate change related policy initiatives	Yes	Signatory bank to UNEP FI
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	No	Subscriber of the sector initiative on energy reduction (Dutch energy covenant), but no targets mentioned in public reporting.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	Partly	Triodos has good disclosure about progress towards targets, but no direct CO ₂ related targets have been found.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Yes	1.0 Kton CO ₂ in 2005
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	Yes	0.9 Kton CO ₂ in 2005
4.1.2 Energy Use		
Total annual energy use	Yes	0.9 gWH
Total annual energy costs	No	
4.2 Indirect Emissions reporting		
4.2.1 Loans (loan portfolio amounts to EUR 665 million per ultimo 2005)		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	0%	

% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	nihil	Our clients are mainly smaller companies, which have no obligation to report on CO ₂ emissions.
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	16%	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	nihil	
% of green mortgages (as a % of total mortgages)	In the making	
% of project finance in fossil fuel related activities	0%	
% of project finance in renewable energy related activities	included in the above	
4.2.2 Asset Management and Investments (EUR 930 million per ultimo 2005)		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	some 2%	Best in class used
% of third party AUM where invested companies report annual direct CO ₂ emissions	unknown	
% of third party AUM invested in renewable energy	>20%	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	nihil	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	0%	
% of total investment securities where invested companies report annual direct CO ₂ emissions	nihil	
% of investment securities invested in renewable energy	0%	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	100%	
4.2.4 Private banking (EUR 127 million per ultimo 2005)		
% of assets under administration that have to satisfy minimum CO ₂ criteria	0%	Fully invested respecting the sustainability criteria of which environment is an important part.
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	0%	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	We have sustainability analysts, not financial analysts.	
FTE's in the field of CO ₂ trading	0.1	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	SRI filter for all loans. Loans to renewable energy sources (solar, wind and water) and organic agriculture.

5.1.2 Investments	Yes	Energy efficient real estate (Triodos Vastgoedfonds)
5.1.3 Asset management	Yes	SRI criteria included in asset management.
5.2 Commission based financial products		
5.2.1 Funds	Yes	<p>Several SRI funds are offered.</p> <p>Investment funds that focus on energy reduction: Triodos Groenfond Triodos Vastgoedfonds (energy efficient buildings) Triodos Renewable Energy Fund (UK)</p> <p>Funds for developing countries: 1) Triodos Renewable Energy for Development Fund, financing to small and medium sized enterprises that are active in the field of renewable energy 2) Global Renewable Energy Fund of Funds: financing of existing investment funds in developing countries that focus on the market for renewable energies.</p>
5.2.2 Third party asset management	Yes	Triodos has a joint-venture with Fortis' subsidiary MeesPierson called Triodos MeesPierson that offers SRI criteria for third party asset management.
5.2.3 Private banking	Yes	Triodos Bank offers SRI based private banking.
5.2.4 Brokerage & Trading	Yes	<p>Triodos Banks has its own research team that performs SRI research for Triodos Bank. Its subsidiary DSR performs SRI research for third parties.</p> <p>Climate exchange related: 1) Stichting Triodos Climate Clearing House, independent trading platform for credits from sustainable forest projects in developing countries 2) Invest in Climate Neutral Group, which offers climate compensation credits.</p> <p>Underwriting renewable energy projects.</p>
5.2.5 Leasing	No	
5.2.6 Private equity	Yes	Triodos venture capital fund of EUR 25m, among others renewable energy, fair trade, organic food, environment and health

* NA = Not Available

** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.

Annex 2:

Fact sheets selected international banks

Companies include:

- Bank of America
- Citigroup
- Goldman Sachs
- HSBC
- J.P. Morgan Chase

Note: The information collected on Dutch and international banks is based on companies' public reporting (i.e. website, Annual Report and Sustainability Report), information available through the Carbon Disclosure Project, as well as information collected through a questionnaire by Milieudefensie (Dutch branch of Friends of the Earth) that was sent to companies in March 2006. Given the scope of this project, the information collected and compiled in the fact sheets in Annex 1 and Annex 2 was not reviewed by companies and may therefore not be fully accurate or complete. These fact sheets are meant to provide an overview of current climate change practice of these banks based on publicly available information. Given that the quality of public reporting is sometimes poor, the fact sheets should not be interpreted as providing a fully complete and accurate picture of the status quo.

Company Name: Bank of America	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	Since CDP2
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	Website, Environmental Report 2004
Use of guidelines of GHG Protocol	No	
Data audited, according to which standard	No	
2. Policy		
Formal policy statement on climate change	Yes	BoA has the responsibility to address climate change and the service sector has a role in promoting and implementing reductions of greenhouse gas emissions that extends beyond its own operations, including relationships with customers and suppliers.
Policy to increase use of renewable energy for operations	No	BoA explores alternative energy potentials.
Policy to offset direct emissions	No	
Policy to reduce indirect emissions, i.e. emissions generated by its clients	Yes	Bank of America has made the commitment to address climate change by promoting and implementing reductions of CO ₂ emissions that extend beyond its own operations, including relationships with customers and suppliers.

Company recognises climate change and its commercial relevance	Yes	BoA states that "climate change could alter the natural, social and economic systems that support a growing global economy and sustain the quality of life for all of us on earth".
Company recognises indirect impact of financial institutions	Yes	With credit, investment, underwriting and payments as core businesses, BoA is committed to finance projects and companies that benefit the environment—and refrain from financing those with environmental practices that fall short of acceptable standards.
Participant in climate change related policy initiatives	Yes	Environmental Protection Agency's Climate Leader Program; Signatory of UNEP FI; Ceres (Coalition for Environmentally Responsible Economies); was a member of the GRI Stakeholder Council; member institution of EPA Climate Leaders; EPA Energy Star; member of Environmental Bankers Association.
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Yes	9% by 2009 compared to 2005; this corresponds with 3,5 million tons.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	Yes	7% reduction until 2008 compared to 2004 in indirect emissions in accordance with the Intergovernmental Panel on Climate Change targets; beginning with assessment and reporting from the energy and utilities portfolio.
Company reports on progress towards targets	Yes	BoA realized a 5% reduction of direct emissions that have been realized across all facilities during 2004. For 2005, the bank set an aggressive goal of 9% by 2009.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Yes	1.3 Mt (2002)
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	No	(not mentioned that it is included)
4.1.2 Energy Use		
Total annual energy use	Yes	In 2004: electricity, representing 93% of energy use (7% Natural gas), was responsible for 1.7 billion KWH
Total annual energy costs	No	

4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		

5.1 Balance based financial products		
5.1.1 Loans	Yes	Credit (loans) is committed to finding prudent ways to finance projects and companies that benefit the environment—and refrain from financing those with environmental practices that fall short of acceptable standards. Environmental Credit Policies: Two policies can be distinguished: I. Commercial and Small Business Environmental Policy, II. GCIB Environmental Policies. Bank of America has adopted the Equator Principles.
5.1.2 Investments	Yes	Investment is committed to finding prudent ways to finance projects and companies that benefit the environment—and refrain from financing those with environmental practices that fall short of acceptable standards.
5.1.3 Asset management	No	
5.2 Commission based financial products		
5.2.1 Funds	No	
5.2.2 Third party asset management	No	The bank does not specifically screen for environmental issues for accounts. However, environmental issues may be evaluated as just one additional aspect of the bank's overall evaluation of a company for investment purposes.
5.2.3 Private banking	No	
5.2.4 Brokerage & Trading	Yes	Underwriting is committed to finding prudent ways to finance projects and companies that benefit the environment—and refrain from financing those with environmental practices that fall short of acceptable standards.
5.2.5 Leasing	No	
5.2.6 Private equity	No	
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: Citigroup	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	(Also in CDP4)
CDP3 questionnaire publicly available	Yes	

Other reporting that includes specific section on CO ₂ emissions	Yes	Citizenship reports
Use of guidelines of GHG Protocol	No	(Citigroup is using Equator Principles)
Data audited, according to which standard	No	
2. Policy		
Formal policy statement on climate change	Yes	There is a set of Initiatives that include: minimizing own energy use; GHG reporting on financed power projects; and proactive approach that includes new investment and product solutions.
Policy to increase use of renewable energy for operations	Yes	Green power purchasing program
Policy to offset direct emissions	No	
Policy to reduce indirect emissions, i.e. emissions generated by its clients	Yes	Using the carbon intensity of power generation projects.
Company recognises climate change and its commercial relevance	Yes	Citigroup sees climate change as potential risk and potential opportunity.
Company recognises indirect impact of financial institutions	Yes	Citigroup recognises the opportunities to mitigate climate change by developing product solutions.
Participant in climate change related policy initiatives	Yes	e.g. Climate Leader Program, European Greenlight Program, Energy Star Partner, Climate Resolve, Climate Northeast. Signatory bank to UNEP FI
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Yes	Citigroup aims to reduce direct CO ₂ by 10% in 2012 versus the year 2005.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	No	Data are collected since 2002. Year 2003 will function as baseline year. Targets should be set in 2005. Hereafter, reporting towards targets can start.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Yes	1,352 Kt (2005)
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	Yes	666 Kt (2004)
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	Yes	119 Kt (2004)
Travel Related CO ₂ Emissions Globally	No	Not reported and not included in values above
4.1.2 Energy Use		
Total annual energy use	Yes	Energy use 2005: 23.6 GJ/FTE

Total annual energy costs	Yes	exceeds USD 200 million(2004)
4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	

5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	Menu of mortgage options designed to expand homeownership opportunities while promoting environmentally efficient homes. Focus on growth capital opportunities in renewable energy, sustainable forestry, and clean technology sectors. Citigroup has adopted the Equator Principles.
5.1.2 Investments	Yes	Sustainable Development Investment Program
5.1.3 Asset management	No	
5.2 Commission based financial products		
5.2.1 Funds	No	
5.2.2 Third party asset management	No	
5.2.3 Private banking	No	
5.2.4 Brokerage & Trading	No	
5.2.5 Leasing	No	
5.2.6 Private equity	No	
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: Goldman Sachs	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	
CDP3 questionnaire publicly available	No	As of March 2006, the secretariat of the CDP was still awaiting permission.
Other reporting that includes specific section on CO ₂ emissions	No	
Use of guidelines of GHG Protocol	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
Data audited, according to which standard	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
2. Policy		

Formal policy statement on climate change	Yes	Goldman Sachs recognizes that it has an impact through the goods it purchases, the manufacturing and production it finances, and the investments it makes.
Policy to increase use of renewable energy for operations	No	
Policy to offset direct emissions	No	Company states that "it will consider offsets"
Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	
Company recognises climate change and its commercial relevance	Yes	Climate change is a very important challenge and is linked to economic growth and development.
Company recognises indirect impact of financial institutions	Yes	Goldman Sachs recognizes that it has an impact through the goods it purchases, the manufacturing and production it finances, and the investments it makes.
Participant in climate change related policy initiatives	Yes	(1) Company will help establish a Center for Environmental Markets to undertake independent research to explore/develop public policy options for establishing effective markets around climate change. (2) Member of UNEP FI Asset Management Working Group
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Yes	Reduction of 7% by 2012 relative to 2005
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	No	Company states that will report on progress.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
Travel Related CO ₂ Emissions Globally	No	Plans to report on direct CO ₂ emissions. Scope and methodology of reporting as of March 2006 unclear.
4.1.2 Energy Use		
Total annual energy use	No	

Total annual energy costs	No	
4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (i.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	

5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	Provide financing to renewable energy and environmentally friendly technologies.
5.1.2 Investments	Yes	Intends to make available up to \$1 billion to invest in renewable energy and energy efficiency projects. Intends to be a leading U.S. Wind energy developer and generator through our recently acquired subsidiary, Horizon Wind Energy.
5.1.3 Asset management	No	
5.2 Commission based financial products		
5.2.1 Funds	No	
5.2.2 Third party asset management	No	
5.2.3 Private banking	No	
5.2.4 Brokerage & Trading	Yes	climate exchange related: Market maker in emissions trading (CO ₂ , SO ₂), weather derivatives, renewable energy credits, and other climate related commodities. Aims to play a constructive role in promoting the development of these markets. Commits to systematically incorporate environmental, social and governance criteria into fundamental analysis of companies.
5.2.5 Leasing	No	
5.2.6 Private equity	Yes	Wind energy partnership with Shell Wind Energy and own solar energy fund with BP Solar.
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: HSBC	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	CDP 1-4
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	
Use of guidelines of GHG Protocol	No	

Data audited, according to which standard	Yes	According to GRI and AA100
2. Policy		
Formal policy statement on climate change	Yes	Climate change represents the largest single environmental challenge this century. It will have an impact on all aspects of modern life. It is therefore a major issue for our customers and our staff, as well as for every organisation on the planet."
Policy to increase use of renewable energy for operations	Yes	The Carbon Management Plan consists of three phases: 1) manage and reduce our direct emissions. 2) reduce the carbon intensity of the electricity used by buying 'green electricity'. 3) offset the remaining emissions in order to achieve carbon neutrality.
Policy to offset direct emissions	Yes	In 2004, HSBC made a commitment to become the world's first major bank to achieve carbon neutrality. The target was achieved end of 2005.
Policy to reduce indirect emissions, i.e. emissions generated by its clients	No	No plans for clients or suppliers. Though in 2005, HSBC states that "sustainability risk needs to be managed carefully to minimise environmental and social damage indirectly caused by financing".
Company recognises climate change and its commercial relevance	Yes	Climate change will have a profound impact on the business activities of HSBC and its customers.
Company recognises indirect impact of financial institutions	Yes	HSBC want to create a low-carbon economy and is looking at ways to include climate change solutions in its business activities.
Participant in climate change related policy initiatives	Yes	1) Member of Davos G8 Climate Change Roundtable. 2) Corporate Leaders Group on Climate Change of the Cambridge Program for Industry 3) Alliance with Tropical Forest Trust. 4) A group of 13 businesses, including HSBC, has pledged its support for Tony Blair's plans for a low-carbon future in the UK. 5) Founding member of the Bank Working Group of The Climate Group. 6) Principal sponsor of NortheastSouthwest. 7) HSBC announces with Newcastle University and the University of East Anglia the 'HSBC Partnership in Environmental Innovation', a programme to research climate change and other topics as well as to develop technologies to overcome these challenges.
3. Targets		

Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Yes	5% from 2005-2007 (CO ₂ figures refer to emissions from energy use. The above figures represent 90% of HSBC's property portfolio by full-time equivalent)
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	No plans for clients or suppliers - maybe in the future
Company reports on progress towards targets	No	HSBC plans to report on its targets on its website in July 2006.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	Yes	633, 585, and 565 kt CO ₂ in 2005, 2004, and 2003 respectively.
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	Yes	124, 88, and 55 kt CO ₂ in 2005, 2004, and 2003 respectively.
4.1.2 Energy Use		
Total annual energy use	Yes	GWh 1,610 (2005); 1,496 (2004); 1,155 (2003)
Total annual energy costs	Yes	0.01% of 50.6 billion USD = USD 5.1 million
4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA*	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	

% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	Financing renewable energy projects (e.g. wind farms, hydro power projects) HSBC has adopted the Equator Principles.
5.1.2 Investments	Yes	It is financing renewable energy projects (e.g. wind farms, hydro power projects)
5.1.3 Asset management	No	
5.2 Commission based financial products		
5.2.1 Funds	Yes	Carbon Funds: HSBC has together with other banks put EUR 200 million in Trading Emissions.
5.2.2 Third party asset management	Yes	HSBC manages USD 1 billion in SRI assets
5.2.3 Private banking	Yes	Investment advisers within our Private Bank Investment Group advise clients on SRI funds as well as on mainstream funds.

5.2.4 Brokerage & Trading	Yes	Actively trading CO ₂ emissions futures HSBC has a dedicated SRI team of analysts in Paris. We have developed a global research model which integrates an understanding of the growing importance of sustainable development to business, in particular climate change and related low-carbon technologies.
5.2.5 Leasing	No	
5.2.6 Private equity	No	
* NA = Not Available		
** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.		

Company Name: J.P. Morgan Chase	Short Answer	Comment
1. Transparency on CO₂ emissions		
Participant in or Signatory to Carbon Disclosure Project (CDP3)	Yes	(Also in CDP 4)
CDP3 questionnaire publicly available	Yes	
Other reporting that includes specific section on CO ₂ emissions	Yes	Environmental Policy, herein they state that they are planning to publish CSR report based on a sustainability reporting framework such as GRI
Use of guidelines of GHG Protocol	Partly	JPM collects U.S. baseline resource consumption data based on various globally accepted environmental performance guidelines. However no direct reference to GHG guidelines.
Data audited, according to which standard	No	
2. Policy		
Formal policy statement on climate change	Yes	JPM will take a leadership role in the financial services industry by helping to reduce greenhouse gas emissions in its value chain and internally.
Policy to increase use of renewable energy for operations	No	
Policy to offset direct emissions	No	
Policy to reduce indirect emissions, i.e. emissions generated by its clients	Yes	Encourage clients to develop carbon mitigation plans (beginning end 2005)

Company recognises climate change and its commercial relevance	Yes	Climate change is a challenge for the bank and its clients with potential economic risks. JPM strives to create innovative financial solutions.
Company recognises indirect impact of financial institutions	Yes	JPM will develop financial tools to help reducing GHG emissions in its value chain.
Participant in climate change related policy initiatives	Yes	JPM supports policy dialogue on a market-based national U.S. policy on GHG emissions. Signatory bank to UNEP FI
3. Targets		
Company sets clear quantitative targets for direct CO ₂ emissions (direct emissions include travel related emissions)	Yes	5-7% greenhouse gas emissions reduction by 2012.
Company sets clear targets for indirect CO ₂ emissions, i.e. emissions generated by its clients	No	
Company reports on progress towards targets	No	JPM plans to provide annual carbon reporting on the aggregated GHG emissions from its power sector projects beginning in 2006.
4. Reporting		
4.1 Direct Emissions and Energy Use reporting		
4.1.1 Direct Emissions		
CO ₂ Emissions from Operations: Globally	No	In the process of estimating GHG footprint using 2005 as baseline.
CO ₂ Emissions from Operations: Annex B countries Kyoto Protocol	No	
CO ₂ Emissions from Operations: Countries of EU Emissions Trading Initiative	No	
Travel Related CO ₂ Emissions Globally	No	JPM is exploring the possibility to report travel emissions
4.1.2 Energy Use		
Total annual energy use	No	
Total annual energy costs	Yes	Total costs of fossil fuels and electric power are less than 1% of total net revenue of USD 43 bn as of year end 2004.
4.2 Indirect Emissions reporting		
4.2.1 Loans		
% of commercial loan portfolio in energy intensive sectors (i.e. those covered by EU ETS**)	NA	
% of commercial loan portfolio where invested companies report annual direct CO ₂ emissions	NA	
% of commercial loan portfolio in renewable energies (as % of total loan portfolio)	NA	
% of commercial loan portfolio that generate CDM or JI credits (as % of total loan portfolio)	NA	

% of green mortgages (as a % of total mortgages)	NA	
% of project finance in fossil fuel related activities	NA	
% of project finance in renewable energy related activities	NA	
4.2.2 Asset Management and Investments		
% of third party AUM invested in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of third party AUM where invested companies report annual direct CO ₂ emissions	NA	
% of third party AUM invested in renewable energy	NA	
% of third party AUM that generate CDM or JI credits (as % of total loan portfolio)	NA	
% of total investment securities in energy intensive sectors (I.e. those covered by EU ETS)	NA	
% of total investment securities where invested companies report annual direct CO ₂ emissions	NA	
% of investment securities invested in renewable energy	NA	
4.2.3 Real Estate		
% of real estate investments (third party) certified to energy efficiency standards (for example the EU Energy Performance of Buildings Directive)	NA	
4.2.4 Private banking		
% of assets under administration that have to satisfy minimum CO ₂ criteria	NA	
4.2.5 Funds		
% of carbon funds (as % of total assets under management in investment funds)	NA	
4.2.6 Brokerage and trading		
% of financial analysts incentivised for integrating climate change issues in analyst reports	NA	
FTE's in the field of CO ₂ trading	NA	
5. Climate Change related Services and Initiatives		
5.1 Balance based financial products		
5.1.1 Loans	Yes	<p>Seek investments in low-income "green" housing that among others conserves energy.</p> <p>Accommodate higher debt to income ratios for homes that are considered energy efficient.</p> <p>J.P. Morgan Chase has adopted the Equator Principles.</p>

5.1.2 Investments	Yes	JPM invests or considers to invest in renewable energy generation projects and technology and encourages clients to evaluate alternative energy technologies (end 2005). Seek a coalition to explore financing the GHG mitigation of coal-fired generating capacity.
5.1.3 Asset management	No	
5.2 Commission based financial products		
5.2.1 Funds	Yes	Carbon Funds: JP Morgan has together with other banks put EUR 200million in Trading Emissions
5.2.2 Third party asset management	No	
5.2.3 Private banking	No	
5.2.4 Brokerage & Trading	Yes	Actively trading CO ₂ emissions futures Building a global energy and energy-related trading commodities business. Research the financial implications of higher costs of carbon emissions to the electric power industry.
5.2.5 Leasing		
5.2.6 Private equity	Yes	JPM has been the lead investor in 10 wind farms with more than USD 240 m.

* NA = Not Available

** Sectors include the power sector (all fossil fuel generators over 20 MW), oil refining, cement production, iron and steel manufacture, glass and ceramics, and paper and pulp production.

Annex 3:

Global top 50 commercial banks

Current Rank	Previous Rank	BANK	Total Assets USD m	Share capital USD m
1	1	UBS AG, Switzerland	1.525.621	792
2	2	BNP Paribas SA, France	1.231.396	2.405
3	3	Deutsche Bank AG, Germany	1.141.862	1.892
4	4	The Royal Bank of Scotland Group plc, UK	1.120.113	1.578
5	5	Crédit Agricole SA, France	1.108.172	6.005
6	6	Barclays PLC, UK	986.199	3.098
7	7	JPMorgan Chase Bank National Association, USA	967.365	1.785
8	8	Credit Suisse Group, Switzerland	958.126	534
9	9	Sumitomo Mitsui Banking Corporation, Japan	916.710	6.254
10	(-)	The Bank of Tokyo-Mitsubishi UFJ Ltd, Japan	865.663	9.376
11	10	ING Bank NV, Netherlands	837.942	-
12	11	ABN AMRO Holding NV, Netherlands	827.271	2.339
13	12	Société Générale, France	817.030	756
14	14	Banco Santander Central Hispano SA, Spain	782.109	4.251
15	15	Bank of America NA, USA	771.619	2.834
16	16	Caisse Nationale des Caisses d'Épargne, France	739.311	8.014
17	17	Dresdner Bank Group, Germany	712.233	2.043
18	18	Citibank NA, USA	694.529	2.701
19	20	Industrial & Commercial Bank of China Ltd, China	675.395	19.412
20	21	Mizuho Bank Ltd, Japan	663.014	6.113
21	22	Fortis Bank NV/SA, Belgium	659.941	4.230
22	23	Rabobank Nederland, Netherlands	645.765	5.221
23	24	Bayerische Hypo-und Vereinsbank AG, Germany	635.324	3.061
24	25	Bank of Scotland, UK	586.543	1.555
25	26	The Norinchukin Bank, Japan	582.567	11.520
26	27	Commerzbank AG, Germany	577.517	2.101
27	28	HSBC Bank plc, UK	556.681	1.530
28	29	Lloyds TSB Group plc, UK	537.230	2.724
29	30	Mizuho Corporate Bank Ltd, Japan	526.193	10.072
30	31	Bank of China Limited, China	515.972	22.520
31	39	Agricultural Bank of China, China	484.960	-
32	32	DZ BANK AG, Germany	484.211	3.913
33	33	China Construction Bank Ltd, China	471.792	23.468
34	34	Landesbank Baden-Württemberg, Germany	461.884	6.214
35	35	Bayerische Landesbank, Germany	452.768	6.544
36	36	Kreditanstalt für Wiederaufbau (KfW), Germany	445.618	4.486
37	37	Calyon, France	435.043	4.241
38	38	Banco Bilbao Vizcaya Argentaria SA, Spain	422.825	2.258
39	45	Royal Bank of Canada, Canada	398.981	6.688
40	40	Wachovia Bank NA, USA	389.963	455
41	41	Danske Bank A/S, Denmark	379.801	1.228
42	42	National Westminster Bank Plc, UK	376.781	4.035

43	43	Nordea Group, Sweden	375.207	1.533
44	44	Banca Intesa SpA, Italy	373.247	4.840
45	46	Wells Fargo Bank NA, USA	366.256	520
46	47	UniCredito Italiano SpA, Italy	361.364	4.307
47	48	Banque Fédérative du Crédit Mutuel, France	351.218	1.770
48	49	WestLB AG, Germany	344.967	2.439
49	50	Abbey National plc, UK	325.861	908
50	51	Crédit Lyonnais, France	323.288	5.018

* These bank rankings are compiled from balance sheet information included in *The Bankers' Almanac* available at 27th January 2006.

Footnotes

- ¹ The Kyoto Protocol identifies six greenhouse gases, of which CO₂ is the most important. To compare emissions of these gases accurately, they are translated into CO₂ equivalent units. In the context of this report we use the term CO₂ emissions to mean CO₂ equivalent emissions of greenhouse gases.
- ² The Kyoto Protocol identifies six greenhouse gases. These include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), incompletely halogenated fluorocarbons (HFC), per fluorocarbons (PFC) and sulphurhexafluoride (SF₆). These gases each have different 'capacity' to cause climate change. To compare emissions of these gases accurately, they are translated into CO₂ equivalent units. In the context of this report we use the term CO₂ emissions to mean CO₂ equivalent emissions of greenhouse gases.
- ³ More information on the calculation of the amount of indirect CO₂ emission can be found in Chapter 5 at page 20. One mega tonne is the equivalent of 1,000,000 tonnes. Next to the term "mega", the term 'giga' is also mentioned in this report. It is equivalent to 1,000,000,000 tonnes.
- ⁴ These two banks are not included in the first four chapters due to their relative small size.
- ⁵ Some of the figures used in this report have been translated from carbon to carbon dioxide. One kg of carbon equals to 3.67 kg of carbon dioxide.
- ⁶ The Carbon Dioxide Information Analysis Center provides full details on CO₂ emissions, see <http://cdiac.esd.ornl.gov/>
- ⁷ The abbreviation 'ppm' means parts per million. For CO₂ this is the number of CO₂ molecules per million parts of air.
- ⁸ Since CO₂ is very stable in the atmosphere (it lasts approximately 200-450 years), emissions have a long-lasting impact on CO₂ concentrations. See http://en.wikipedia.org/wiki/Greenhouse_gas for details on greenhouse gases.
- ⁹ IPCC Climate Change 2001: Synthesis Report
- ¹⁰ UNEP FI, CEO briefing, The future of climate change policy, December 2005
- ¹¹ M. Meinshausen, Working Group I: The Climate Challenge, Presentation November 2004
- ¹² Chris D. Thomas et al., Extinction risk from climate change, Nature, January 8, 2004
- ¹³ UNEP FI, COP 6b sidebar event, July 18, 2001, Presentation by Thomas Loster, Munich Re
- ¹⁴ See http://en.wikipedia.org/wiki/Kyoto_Protocol for full details on the Kyoto Protocol.
- ¹⁵ British Petroleum website at <http://www.bp.com>, April 2006. See heading Environment and Society and then BP and climate change.
- ¹⁶ Regional Greenhouse Gas Initiative, Memorandum of Understanding in brief, December 20, 2005. See www.rggi.org
- ¹⁷ US Mayors Climate Protection Agreement, see <http://www.ci.seattle.wa.us/mayor/climate/default.htm#who> for a full list of participating cities.
- ¹⁸ See <http://www.epa.gov/climateleaders> for a full list of participants and their targets.
- ¹⁹ United Nations Framework Convention on Climate Change. See <http://unfccc.int> for more details.
- ²⁰ Eurostat. For more details see <http://europa.eu.int/comm/eurostat>
- ²¹ UNEP FI Climate Change Working Group, CEO Briefing, December 2005
- ²² As proposed by several ministries and companies on energy transition. For more details see <http://www.senternovem.nl/energietransitie/index.asp>
- ²³ As proposed by the European ministers of environment on March 10 2005.
- ²⁴ Regional Greenhouse Gas Initiative, Memorandum of Understanding in brief, December 20, 2005. See www.rggi.org
- ²⁵ For a complete list of sectors falling under the EU ETS, see Annex I in the European directive 2003/87/EC.
- ²⁶ Report from the Commission on the progress towards achieving the community's Kyoto target, December 15, 2005
- ²⁷ Press release ministry of VROM (Housing, Spatial Planning and Environment), March 15, 2006
- ²⁸ Press release Ministry of VROM, January 10, 2006
- ²⁹ Carbon Finance, annual report 2005
- ³⁰ Press release Dutch Government, April 13, 2006
- ³¹ International Energy Agency, key world energy statistics, 2005
- ³² R. Socolow, Solving the climate problem, December 2004; BP website at <http://www.bp.com>, April 2006; WBCSD, Facts and trends to 2050, 2005
- ³³ P. Kumar, poor nations need billions to fight climate change, February 6, 2006
- ³⁴ Although one could imagine that banks only accept savings deposits from clients if they satisfy certain CO₂ related requirements, the leverage that banks have to "impose" such conditions is considered relatively limited. There may also be legal problems to link such services to CO₂ related conditions.
- ³⁵ Credits Suisse Group, environmental performance evaluation Switzerland 1998/99
- ³⁶ Based on reported energy consumption of 5,400 giga joule,

- which has been converted into CO₂ emissions. Energy consumption reported by Senter Novem, Meerjarenspraken energie-efficiency, Resultaten 2004. The figure represents 95% of the banking sector.
- ³⁷ Milieu en Natuur Planbureau, Environmental compendium, see www.mnp.nl
- ³⁸ Beyond Kyoto, report from ABN Amro's Economics Department / Sector Research, July 2005
- ³⁹ Triodos Bank, Annual report 2004, Annual Report 2005
- ⁴⁰ Environmental Finance, February 2006
- ⁴¹ www.ecowind.nl
- ⁴² Ministries of VROM (Housing, Spatial Planning and Environment), Finance and LNV (Agriculture, Nature and Fishing), Regeling Groenprojecten
- ⁴³ Fannie Mae, is a US company that operates in the secondary mortgage market (purchasing mortgages originated by primary lenders).
- ⁴⁴ For project finance large means in general above USD 50 million per project.
- ⁴⁵ See <http://www.equator-principles.com> for more details and a full list of participants.
- ⁴⁶ Equator Principles II, NGO comments on the proposed revision of the Equator Principles, April 12 2006
- ⁴⁷ Beyond Kyoto, report from ABN Amro's Economics Department / Sector Research, July 2005
- ⁴⁸ Lecocq, K. Capoor, State and Trends of Carbon Market 2005, funded by the World Bank Carbon Finance Business, May 9, 2005. Original prices in USD, which were converted using a EUR/USD exchange rate of 1.24.
- ⁴⁹ European Climate Exchange data 2005
- ⁵⁰ See <http://www.cdproject.net>
- ⁵¹ Endesa, 2005 annual results presentation
- ⁵² This special tax break is called Energie Investerings Aftrek (EIA). For more information on the EIA and the IRR see the prospectus to underwrite two wind turbines in the south of the Netherlands at: <http://www.ecowind.nl/downloads/Prosp.DeLochtdefdef.pdf>. Without the tax break the return would amount to 8 to 9%.
- ⁵³ See <http://carbonfinance.org>
- ⁵⁴ Carbon Finance, annual report 2005
- ⁵⁵ See <http://www.europeancarbonfund.com>
- ⁵⁶ Environment News Service, May 10, 2005
- ⁵⁷ See <http://www.londonstockexchange.co.uk> Search for ticker code TRE on the Alternative Investment Market (AIM).
- ⁵⁸ Triodos, annual report 2005
- ⁵⁹ De Nederlandsche Bank. See for more information <http://www.statistics.dnb.nl>
- ⁶⁰ CBS Statline
- ⁶¹ Dutch Association of Banks, Annual report 2005
- ⁶² Intermediar, sector description of the financial services industry
- ⁶³ In total 35 executive board and supervisory board members of Aegon, ABN AMRO, Fortis and ING hold some 126 board seats in another company (Autoriteit Financiële Markten, Monitor Financiële Sector 2004).
- ⁶⁴ Autoriteit Financiële Markten, Monitor Financiële Sector 2004
- ⁶⁵ Rabobank Group, Sustainability Report 2005
- ⁶⁶ Comparing this figure with the total assets of the Dutch banking sector of EUR 1,780 billion underlines the international importance for these four major banks.
- ⁶⁷ World banking assets have been calculated using total assets of the 1000 largest banks of USD 60.5 billion (EUR 48.8 billion) in 2004 as reported by the banker on July 4, 2005 (www.thebanker.com). To this an estimated 33% has been added to derive a worldwide estimate. Another 10% is added to derive an estimated figure for 2005. The growth is based on a conservative estimate, using the reported 19.3% growth for 2003 and the 15.5% for 2004.
- ⁶⁸ 75% is a rough indication to take into account that commercial banks do not finance all assets, mostly not from state driven companies.
- ⁶⁹ Global CO₂ emissions for 2005 is calculated using a 1% annual average growth between 2002 and 2005. This is based on recent Reported CO₂ emissions in 2002 amounted to 25.6 Gt. The 1% growth equals the annual average growth of CO₂ emissions between 1990 and 2002.
- ⁷⁰ If indirect CO₂ emissions form SNS Bank of 15 Mt (based on total balance sheet of EUR 53.1 billion for SNS Bank at the of 2005) is also taken into account, total indirect CO₂ emission would amount to 765 Mt. Using the same methodology for Triodos Bank would result in indirect CO₂ emissions of 0.3 Mt.
- ⁷¹ Latest reported figure of 214 Mt for 2003 has been extrapolated to 2005, using a 1% annual growth. Source: Milieu en Natuur Planbureau, Environmental compendium, see www.mnp.nl
- ⁷² Calculated adding up Loans on balance sheets of four banks, comparing to total amount of Loans as published by the Dutch Central Bank. For Fortis and ING Group only the banking activities have been used
- ⁷³ The same methodology as presented for total indirect CO₂ emissions was used to calculate indirect CO₂ emissions for commercial loans
- ⁷⁴ See page 23 and further of the following presentation: http://www.abnamro.com/pressroom/releases/media/presentation/abnamro_fy2005_pres_app.pdf
- ⁷⁵ See page 48 of the presentation: www.fortis.com/shareholders/documents/Annual_Results_2005_Presentation.pdf
- ⁷⁶ Energy, Oil & Gas, Logistics, Chemicals & Pharma, Aviation & Intermodal Transport, Construction, Automotive & Equipment, Paper & Packaging/Building Materials, Metals Industry
- ⁷⁷ Rabobank Group, Annual Report 2004
- ⁷⁸ See <http://www.emissierechten.nl/landbouw.html>
- ⁷⁹ Rabobank Group, Sustainability Report 2005
- ⁸⁰ Market share reported by Rabobank at <http://www>.

- rabobankgroep.nl, Total Dutch CO₂ equivalent emissions as reported by Milieu en Natuur Planbureau for 2003 is extrapolated to 2005, using an annual growth of 1%, direct CO₂ emissions as reported in Rabobank's sustainability report 2004.
- ⁸¹ Rabobank, Sustainability Report 2005
- ⁸² WWF In association with BankTrack, Shaping the future of sustainable finance, 2006. USD amount converted to EUR at a rate of 1.24
- ⁸³ Calculated using 115% of the average house price of EUR 157,354 over the last thirteen years as published by NVM. See www.nvm.nl. 115% is derived by comparing the average mortgage in 2002 of EUR 230,664,- to the average house price of EUR 201.163,-. Source: www.kadaster.nl
- ⁸⁴ See www.milieucentraal.nl
- ⁸⁵ Only shares are taken into account, since a bank partly becomes owner when it buys shares. As an indication institutional investors hold some 35% of their financial assets in shares.
- ⁸⁶ Assuming that worldwide stock-listed companies are valued at EUR 37 trillion, which together produce an estimated 75% of global CO₂ emissions. The value of EUR 37 trillion is calculated assuming that the value of all companies in the MSCI World index (1,800 of the largest stock-listed companies) of EUR 22 trillion represents a value of 60% of all stock-listed companies in the world. Source: MSCI. Global CO₂ emissions is the estimated figure for 2005.
- ⁸⁷ Fortis Bank investment portfolio is estimated at EUR 2.5 billion.
- ⁸⁸ Calculated using the same methodology as for financial assets. The full amount is taken into account, as it assumed that investments are 100% equity investments.
- ⁸⁹ This estimate is based on other breakdowns between ING's banking and insurance activities.
- ⁹⁰ Autoriteit Financiële Markten, Zicht op beleggingsinstellingen, april 2004
- ⁹¹ The figures that were used to calculate indirect CO₂ emissions from funds have been based on the figures used for financial assets. The amount of indirect CO₂ is only for investment funds offered in the Netherlands.
- ⁹² It is not possible to compare the sum of indirect CO₂ emissions for the most important financial products with indirect CO₂ emissions for total assets, since the different definitions are used for different financial products. Furthermore both balance sheet based products and commission based financial products have been used, which is a broader scope than the total assets, which only deals with balance-based products.
- ⁹³ We note that the information collected on Dutch and international banks that is partly used for the analysis in chapter 5 and 6 is based on three main sources: Companies' public reporting (i.e. website, Annual Report and Sustainability Report), information available through the Carbon Disclosure Project, as well as information collected through a questionnaire of Milieudefensie (Dutch branch of Friends of the Earth) that was sent to companies in March 2006. The information collected on each company is summarised in fact sheets in Annex 1 and 2. We note that these data fact sheets were, given the scope of this project, not reviewed by companies and may therefore not be fully accurate or complete. The analysis and fact sheets are meant to provide an assessment of current climate change practice of relevant banks based on publicly available information. Given that the quality of public reporting is sometimes poor, the findings and fact sheets should not be interpreted as providing a fully complete and accurate description of the status quo.
- ⁹⁴ Total assets at SNS Bank of EUR 53.1 billion represents 10% of total assets at Fortis Bank, which is the smallest of the four major banks.
- ⁹⁵ www.triodos.com
- ⁹⁶ ABN AMRO, Sustainability Report 2005
- ⁹⁷ Some of these include heat pumps, core cooling of the building, light sensors and a ventilation system that inhales fresh air at night instead of an air conditioning system.
- ⁹⁸ See for a complete overview of participants: <http://www.milieudefensie.nl/verkeer/activiteiten/bedrijfswagens/index.htm>
- ⁹⁹ Senter Novem, Meerjarenaafspraken energie-efficiency voor de Nederlandse banken sector.
- ¹⁰⁰ Senter Novem, Meerjarenaafspraken energie-efficiency, Resultaten 2004
- ¹⁰¹ ABN AMRO, Sustainability Report 2005
- ¹⁰² Consumer price for one tonne of CO₂ compensation offered by KlimaatNeutraal Groep at <http://www.klimaatneutraal.nl>. Prices for companies are not publicly quoted, but CO₂ prices have ranged between EUR 5.77 for project credits and EUR 30.05 for market credits. See Chapter 3 on page 13 for more information.
- ¹⁰³ All carbon costs are based on estimated full CO₂ reporting, including estimates of figures stated as not disclosed as stated in Table 3.
- ¹⁰⁴ ABN AMRO, Sustainability Report 2005
- ¹⁰⁵ Triodos Bank press release, October 25, 2005. The full report is available at <http://www.snm.nl>
- ¹⁰⁶ DSR in co-operation with Milieudefensie - Friends of the Earth Netherlands developed the survey. The survey was sent by the latter and the results were integrated in the report by DSR.
- ¹⁰⁷ See Chapter 3 at the example of funds for more information on the involvement of these two banks in carbon funds.
- ¹⁰⁸ The full report is available at http://www.ceres.org/pub/docs/Ceres_corp_gov_and_climate_change_0306.pdf
- ¹⁰⁹ We note that the information collected on Dutch and international banks that is partly used for the analysis in this chapter is based on three main sources: Companies' public reporting (i.e. website, Annual Report and Sustainability

Report), information available through the Carbon Disclosure Project, as well as information collected through a questionnaire of Milieudefensie (Dutch branch of Friends of the Earth) that was sent to companies in March 2006. The information collected on each company is summarised in fact sheets in Annex 1 and Annex 2. We note that these data fact sheets were, given the scope of this project, not reviewed by companies and may therefore not be fully accurate or complete. The analysis and fact sheets are meant to provide an assessment of current climate change practice of relevant banks based on publicly available information. Given that the quality of public reporting is sometimes poor, the findings and fact sheets should not be interpreted as providing a fully complete and accurate description of the status quo.

¹¹⁰ These banks have been selected in co-operation with Friends of the Earth Netherlands because they have recently developed a climate change policy and because of their size.

¹¹¹ The Banker (www.thebanker.com)

¹¹² J.P. Morgan Chase, climate change policy, website, 10 April 2006.

¹¹³ Goldman Sachs, environmental policy framework, website, 10 April 2006.

¹¹⁴ Citigroup, CSR report 2005 and its website on Corporate Citizenship/Environment (www.citigroup.com, 10 April 2006)

¹¹⁵ HSBC website, www.hsbc.com, 10 April 2006

¹¹⁶ Estimated price of EUR 13.50 per tonne of CO₂ has been used.

¹¹⁷ HSBC website, www.hsbc.com, 10 April 2006

¹¹⁸ Bank of America, Environmental Report 2004

¹¹⁹ The SiRi Pro database provides among others ratings for more than 1100 companies on several sustainability themes, including environment. For more information see <http://www.siricompany.com/services.shtml#1>. The information in this database is based on public reports for the year 2004.

¹²⁰ 'Most likely', as the data on the other 100 banks have not been systematically updated yet in SiRi Pro.

¹²¹ J.P. Morgan Chase, climate change policy and commitment, www.jpmorgan.com, 10 April 2006.

¹²² J.P. Morgan Chase, climate change policy and commitment, www.jpmorgan.com, 10 April 2006.