NIB BULLETIN
NORDIC INVESTMENT BANK
NOVEMBER 2009

Keep on turning

Modernising Finland's hydropower plants

COP 15

Putting a price on our future

PHOTO: JOHANNES JANSSON/NORDEN

Find a way to price emissions

The UN Climate Change Conference in Copenhagen is rapidly approaching, and different kinds of tensions are growing. It seems that we all agree on the target, but we do not agree on how to get there. Even more importantly, a collective effort is emerging to avoid the necessary adjustment costs, and in many quarters decision-makers are demanding external financial support as a prerequisite for participation in activities dealing with climate change.

The situation in the world economy is adding to the economic concerns. It is evident that measures in these fields are, despite all the lip service, high on the cost-cutting lists, and it is estimated that investments in renewable energy will fall by two-thirds in 2008-2009.

The fact that it is thought to be too expensive to invest in measures mitigating climate change and at the same time also too expensive NOT to invest, as claimed in the *Stern Review on the Economics of Climate Change,* shows that there is something fundamentally wrong in the relative prices of emissions. They do not reflect the externalities related to climate change, and we should not expect them to do so without resolute policy measures.

It is only when carbon emissions are properly priced that we can see the trade-off between the long and the short term. Needless to say, if no price is placed on emissions, or the price is too low, outlays targeted to reduce emissions will appear as costs and not as investments. This is also true for the situation in emerging economies, where it seems on the basis of current relative prices unfeasible to invest in best available, but undoubtedly rather expensive, techniques.

Many countries try to get around this by applying different kinds of support schemes. This is, however, neither an effective nor a lasting solution. These schemes are typically temporary in nature and they lack transparency. Hence, they do not provide a proper guide to R&D. Also, they rest on the assumption that the providers of support have a crystal ball and can judge which solutions should be supported, despite the fact that many solutions are just evolving and others not yet known. Moreover, the subsidies are not free, and the cost burden is distributed in the economy in a highly opaque way.

Hence, we need to be able to provide the markets with a price on carbon emissions, which in a relatively short period of time reflects the true external costs of emissions. This is a global task and thus the biggest challenge facing the Copenhagen conference.

October 2009
Johnny Åkerholm, President and CEO

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COVER PHOTO
Installation of new turbine in Pirttikoski hydropower plant.
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PHOTO: PAMELA SCHÖNBERG/NIB

Where the water flows

Hydropower generated from the rivers of Lapland is crucial in Finland's strategy to expand its production of renewable energy.

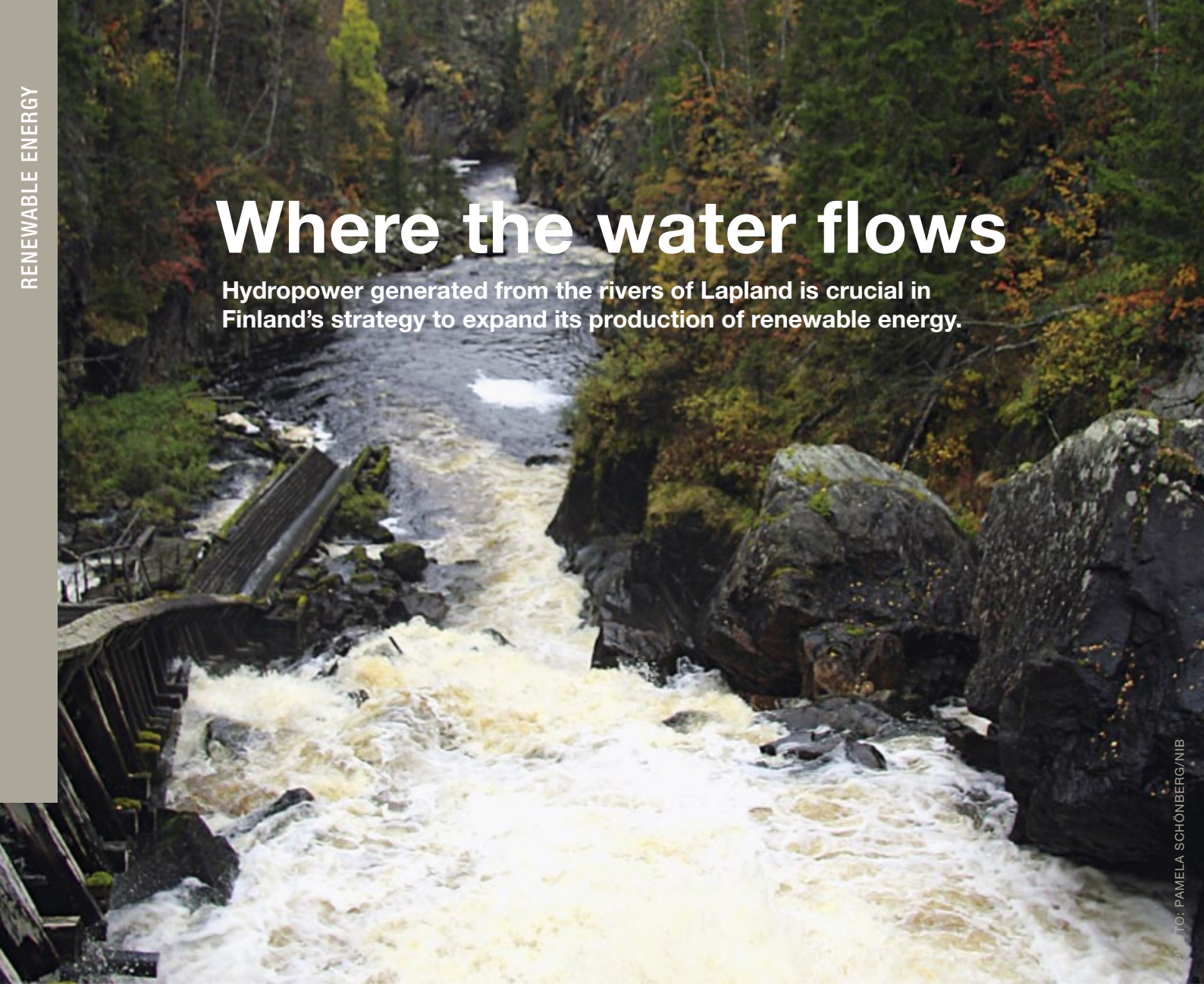


PHOTO: PAMELA SCHÖNBERG/NIB

The sun is shining in a perfectly blue sky over the serene river and lake landscape of Finnish Lapland. It is a late September day, and the surrounding countryside is showing its finest autumn colours to the visiting NIB crew. We are standing on the bank of the longest river in Finland, the Kemijoki, admiring the beautiful mountains reflected in the calm waters.

But the peace and quiet exists only on the surface. Underground, directly below us, a giant water turbine is running at full capacity. We are about to visit Finland's largest tunnel hydropower plant, Pirttikoski, run by the Finnish hydropower company Kemijoki.

MASSIVE CONSTRUCTION

Inside the plant, 60 metres down by elevator, the sound of heavy construction work almost drowns out the voice of our guide, Kemijoki Director Kari Jokinen. He tells us that the fifty-year-old turbines in the plant are swallowing their last gallons of water this year. They are now being replaced by modern, state-of-the-art equipment. One of the two turbines in the plant is already being replaced, and the other one still in use will be replaced next summer.

The installation of the new turbines is part of a renovation programme that Kemijoki started already in 1996. All of the company's hydropower plants are being renovated and the machinery replaced. Pirttikoski and its neighbouring plant Vanttauskoski are the last two under construction.

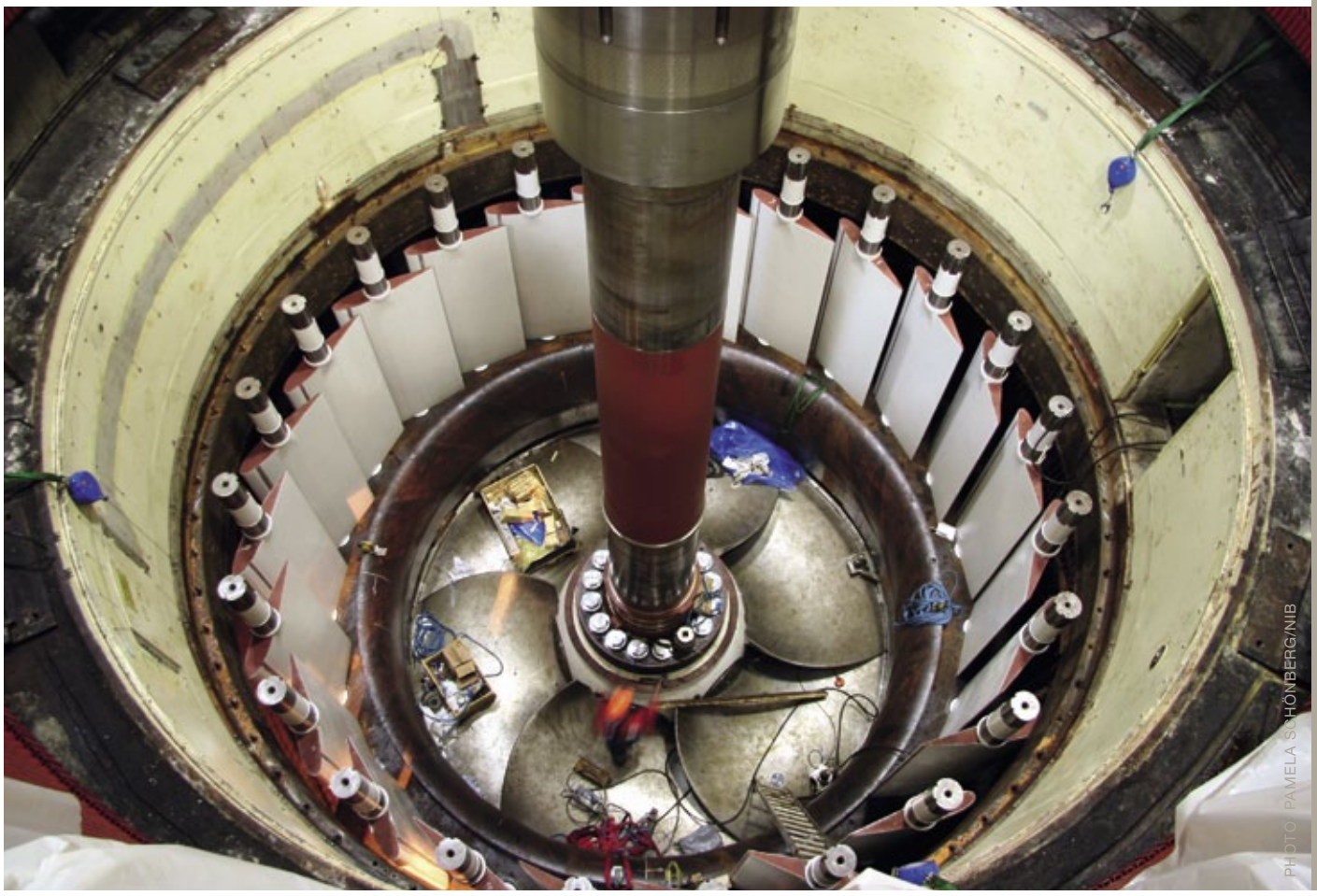
"The life cycle of a hydropower plant is about 40 to 50 years and when this renovation project is completed, we will have started a new cycle for our plants," says Mr Jokinen.

The new generators will increase the plant's output of renewable and emission-free energy by 20-40%. The increase in output will be enough to recoup the investment.

MORE GREEN ENERGY NEEDED

In 2008, the Finnish government submitted its new national energy and climate strategy to parliament. The strategy is Finland's answer to the European climate action and renewable energy package, in which the EU has committed itself to reduce greenhouse gas emissions by 20% by 2020.

The country-specific target for Finland is for renewable energy production to cover 38% of the end use of energy within the same time limit. This will put



The first new turbine is now being installed in the Pirttikoski plant.

pressure on green energy producers such as Kemijoki. In 2008, renewable energy accounted for about 27% of the total end use.

"Finland's role in the strategy is extremely challenging," says Aimo Takala, CEO of Kemijoki.

"Finland will need to turn over every stone there is to reach this goal, and Kemijoki is contributing by adding more hydropower capacity. But hydropower alone will not be sufficient to meet the new requirements for renewable energy production. Finland will also have to develop substantial production capacity in wind power and biofuels."

Kemijoki is Finland's largest producer of hydroelectric power. The company owns twenty hydropower plants connected to three river systems in Finland. Sixteen power plants and eight dams are operated along the river Kemijoki, which has given its name to the company. The aim of the Kemijoki company is not to maximise its profits, but to supply hydropower to its owners at cost price. The Finnish state is the major stakeholder with half of the company's total share capital, while private owners account for the other half.

GREEN EFFECTS

The variable and unstable nature of wind power makes hydropower a requisite complement as a power source. Wind and other weather conditions cannot be regulated; when the wind is not blowing, there is no output from the wind power plants.

"Hydropower production, on the other hand, is superior in balancing power output, since water can be stored in dams and used when needed. The output from the turbines can be changed within seconds, compared to other power plants that need hours to increase or decrease the produced power," explains Mr Takala.

The replacement of the turbines in the Kemijoki plants will result in a considerable increase in the output of such flexible, green energy in Finland. But Mr Takala points out that there are several positive environmental effects of the project:

"The new turbines will not need any hydraulic fluids for lubrication, only air and water. This will eliminate the risk of oil leakage into the environment."

A PERFECT MATCH

NIB has participated in the financing of the renovation programme with a loan of EUR 25 million to Kemijoki. Sebastian Påwals, Senior Manager at NIB, says that the environmental effects of the project are important for the Bank:

"Clearly, there are substantial reductions of greenhouse gas emissions to be gained from investments like this, since any increase in renewable energy production crowds out fossil fuel production."

But he also points out that the Kemijoki loan in fact fares well vis à vis both of the Bank's operational mandates—to ▶

PHOTO: KEMIJOKI OY

enhance the environment and competitiveness.

"The operational idea of Kemijoki, to supply its owners with hydropower at cost price, increases the competitiveness of the owner companies. And the new technology in the plants will make production even more cost-efficient. So mandate-wise, this is a very strong project for NIB, and we are happy to participate."

Mr Takala agrees that the cooperation has been rewarding. He points out that NIB's involvement provided the project with added value:

"For us as a company it is important to have international financial institutions like NIB as partners. It gives credibility to the project. And it is also of great value to us that NIB assesses the projects, for example from an environmental point of view. It gives us a certain merit—apart from the direct financial side of the cooperation," he comments.

And according to Mr Påwals, more NIB-financed investments in green energy production can be expected in the future.

"The European climate action sets new standards for emission-free energy production, and NIB is pleased to assist in financing relevant investments. Projects like this are really almost tailor-made for us," he concludes. ■

PHOTO: PAMELA SCHÖNBERG/NIB

Kemijoki CEO Aimo Takala says that the renovation project will result in increased power output and environmental benefits.


PHOTO: KEMIJOKI OY

PIRTTIKOSKI—A PIECE OF FINNISH INDUSTRIAL HISTORY

The Pirttikoski plant was built between 1956 and 1959. The plant's turbines were placed 60 metres underground, in order for the water to fall from a sufficient height. The water was then channelled through a 2.5–kilometre–long tunnel before being rejoined with the Kemijoki river.

The building of the plant was a project of enormous proportions for Finland in those days. The heavy drilling and blasting work in the tunnel was carried out by 2,000 men labouring around the clock. A whole community of workers with their families, a total of about 4,000 people, was established around the plant construction site in Pirttikoski.

Today, the residential area in the Pirttikoski village is mostly deserted, as most of the maintenance work of the plant is done remotely from the city of Rovaniemi.


PHOTO: PAMELA SCHÖNBERG/NIB

The construction work is well under way, 60 metres underground, in the Pirttikoski plant.

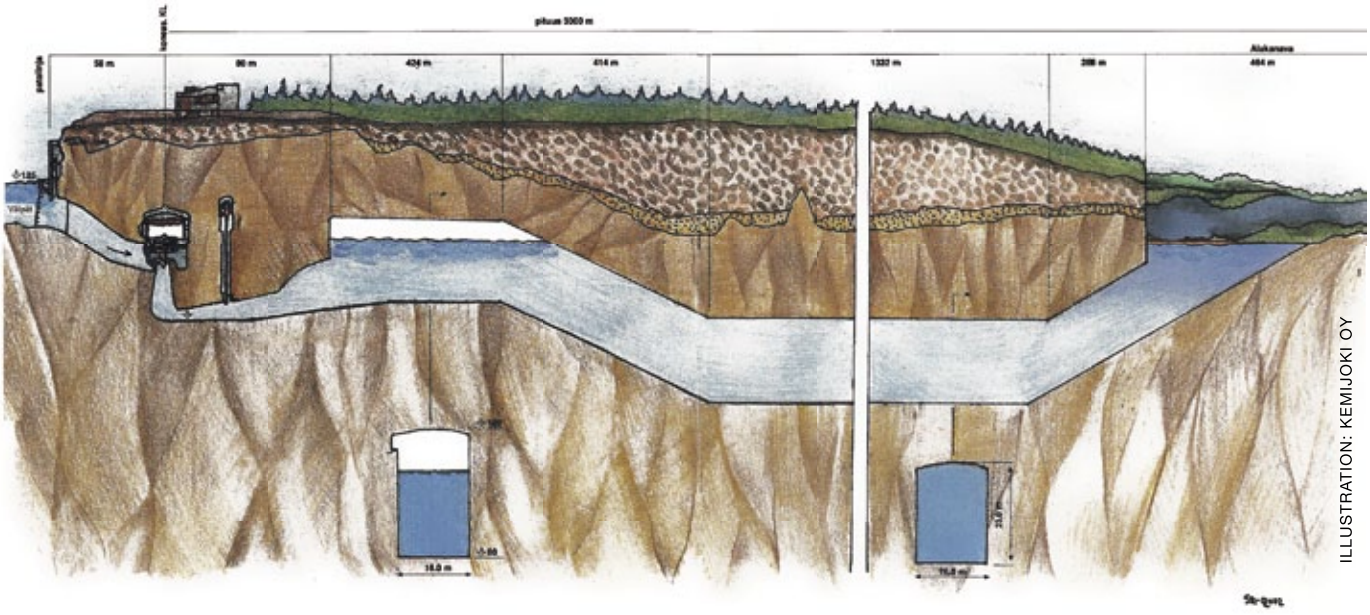


ILLUSTRATION: KEMIJOKI OY

The turbines in the Pirttikoski plant are placed 60 metres underground and the water is channelled through a 2.5-kilometre-long tunnel.

Putting a price on our future

The most important weapons in the fight against the climate crisis are economic, says Klas Eklund, Sweden's well-known climate economist, in an interview with the NIB Bulletin. He calls for a uniform price on carbon emissions worldwide and better skilled finance personnel to help build a greener economy.

Mr Eklund's appeal to the world's decision-makers due to gather at the UN Climate Change Conference in Copenhagen (COP 15) in December 2009 is clear: "We need to get a global deal against climate change as soon as possible or the consequences will be fatal."

Uncertainty and long time horizons, Mr Eklund continues, delay responses to the climate crisis. "The financial crisis has been acute and people have seen the collapse happening. The bankruptcy of the global climate, on the other hand, is a slower process. So some people still find solace by hoping in future solutions. And too many politicians do not normally care about what will happen long beyond their terms," he says.

Mr Eklund hopes putting a price on carbon emissions will be at the top of the delegates' agenda at COP 15.

"Instead of having one carbon tax system in China, another in the US and yet another in the EU, we should ideally have one system regulated by a global authority," he explains.

However, the starting point for COP 15 is challenging and Mr Eklund does not expect the meeting to actually reach such a conclusion. There is still no preliminary agreement on how much we should reduce emissions.

"The EU has promised to decrease its emissions by 20%, based on 1990 levels, by 2020, while the US has promised nothing more than a net zero per cent decrease. China, however, is demanding that the rich countries decrease emissions by 40% before they expect China and other poorer nations to follow," Mr Eklund says, highlighting the gap of 40 percentage points between the two biggest polluters in the world.

The economist raises two key prerequisites that should form the basis of a successful climate conference: worldwide scope and carbon pricing. Emissions should ideally have the same price everywhere to avoid carbon leakage from rich nations' moving their "dirty industries" to poorer nations with lower carbon taxes.

COP 15 would need to look at climate aid and global finance deals, as a standardised price for carbon emissions would be unfair to the poor countries. Either way, COP 15 must be both deeper and broader than the Kyoto Protocol, the previous effort to reach a worldwide agreement against global warming.

HOPENHAGEN

Copenhagen, upcoming host to the world's biggest climate conference, has nicknamed itself Hopenhagen and proudly declares itself "the most important city in the world in 2009" in connection to the event. Mr Eklund is concerned about the concrete outcome of the meeting.

"We have to keep hopes high, but I am afraid we will merely get a skeleton deal in Copenhagen," he remarks.

Mr Eklund recently met with Chinese officials and economists at a top-level climate seminar in Beijing and is optimistic about China's efforts in the long run. "I see a new awareness of the threats of climate change, and also a new willingness to push for a transition to a low-carbon society. No doubt the next five-year plan will include ambitious targets for a greener China," he says.

Mr Eklund's colleague, Sir Nicholas Stern, author of the *Stern Review on the Economics of Climate Change*—who also participated in the recent seminar in China—warned earlier this year that the world cannot afford to allow COP 15 to become another eternal negotiation system like the World Trade Organization.

ECONOMIC TOOLS

Carbon pricing is linked to other economic tools against climate change. The more expensive it is to base production on fossil fuels, the stronger the incentive could be to invest in green technology.

"I am an economist, so I focus on price mechanisms; but putting a price on carbon should be done in combination with investments in R&D," Mr Eklund argues. He cites the current research on Carbon Capture Systems (CCS) as a good example.

CCS faces scepticism on safety issues and for possibly prolonging the life of coal, but Mr Eklund feels there are more arguments on the plus side.

"There are poor nations that will still rely on coal for a long time, and we cannot prohibit any country from using fossil fuels. The two-degree target, the increase in global warming that most scientists agree is the maximum our Earth can handle, is much more likely to be met with CCS technology," he points out.

ECO INVESTMENTS

Mr Eklund agrees when Mr Stern calls the climate crisis the biggest market failure of all time, and says that the threat of global warming provides a perfect opportunity for economists to regain some of the status they have lost due to the financial crisis.

"The International Energy Association has estimated that some USD 50 trillion needs to be invested to make the energy sector less dependent on fossil fuels during the next few decades. Financial institutions like the Nordic Investment Bank will face the huge task of channelling the investments. In addition, savings and bond trading are areas where both commercial banks and international financial institutions will be important players," he explains.

The economist continues on the challenges in his profession: "Once there are political decisions on carbon taxes or cap-and-trade systems, we can start calculating the return on green tech projects and let our analyses affect stock markets and credits. Then economists and financial analysts should make sure that the good players are rewarded while laggards are punished with higher market rates. The financial sector can then contribute to a greener market economy."

Mr Eklund has recently published a book on climate change, *Vårt klimat,* (Our climate) outlining possible ways to alleviate global warming. In the book, Mr Eklund discusses another economic means of handling emissions, the Clean Development Mechanism (CDM). This is an arrangement under the Kyoto Protocol which allows net global greenhouse gas emissions to be reduced at a much lower global cost, as industrial nations can reach their targets by financing emission reduction projects in countries where costs are lower. However, in recent years, criticism against the rather cumbersome mechanism has increased.

"I believe this is one way the Nordic and Baltic regions could collaborate to cut emissions without decreasing industrial output. However, this system will only work if receiving countries put a ceiling on emissions," Mr Eklund says.

"Growth the way we know it today—based on fossil fuels—cannot go hand in hand with a greener environment. Global warming is a sign that economic growth is not sustainable at the moment. With economic tools like carbon pricing and the CDM, and by always striving to find new and improved mechanisms, it is possible to make growth sustainable," he concludes. ■

PHOTOS: PER-ANDERS JÖRGENSEN

KLAS EKLUND

Prior to his position as senior economist at SEB focusing on the global economy and climate, Eklund worked as chief economist in the same financial institution between 1994 and 2007. He started his career as a teacher and researcher in macro economy at the Stockholm School of Economics in 1975. He was the economic policy adviser to the Swedish Minister of Finance, Kjell-Olof Feldt, between 1982 and 1984 and to Prime Ministers Olof Palme and Ingvar Carlsson between 1984 and 1987. He has served on various boards for research institutions on the environment and climate and in the early 1990s chaired the Swedish Government's Commission on Productivity. He has acted as an adviser to Sweden's EU Presidency and is currently a member of the European Commission's Group of Economic Policy Advisers, chaired by the Commission's President.

Fund ensures post-2012 carbon trading

As the expiration of the emission reduction agreement of the Kyoto Protocol approaches, interest in the Post-2012 Credit Carbon Fund is clearly increasing. The Fund sends strong signals to companies and investors that credit trading will continue after the Kyoto Protocol ends.

The commitments under the Kyoto Protocol, the international agreement on decreasing greenhouse gas emissions, will end in 2012. In December this year, the UN Conference on Climate Change in Copenhagen (COP 15) will seek to agree on the continuance of emission reduction activities beyond the Kyoto Protocol. Before new commitments have been agreed on, it is unclear which regulations and rules will be applied after 2012. This uncertainty is constraining the mobilisation of financing for projects through emissions trading.

Together with NIB, the European Investment Bank (EIB), Kreditanstalt für Wiederaufbau, Instituto de Crédito Oficial and Caisse des Dèpots have set up the Post-2012 Carbon Credit Fund, jointly investing EUR 125 million. The aim of the Fund is to ensure that emission reduction trading will extend beyond 2012, even if there is no agreement in place yet.

"For the future it is essential that the emissions trading continues, and that we can further engage developing countries in this market," says Harro Pitkänen, Senior Director at NIB.

The Fund will acquire carbon credits from environmentally sustainable projects in developing and transition countries and trade them onward to companies within the European Emissions Trading System. The Fund only purchases carbon credits deliverable from the beginning of 2013.

STRONG SIGNALS NEEDED

Christopher Knowles from the European Investment Bank, who also chairs the Fund's Supervisory Committee, explains the Fund's raison d'être:

"The strength of the Carbon Credit Fund is that it is backed up by well-known financial institutions, which gives the Fund good credibility in the market. The Fund can send a strong signal to companies and investors that credit trading will continue also after the end of 2012 even if a new international agreement has not yet been concluded by then," he says.

CARBON CREDITS

Trading emission reductions is one way of ensuring further investments that contribute to reducing greenhouse gas emissions, mainly from industry. In the European Emissions Trading System, authorities set a cap by issuing a certain number of emission rights to companies which, if their actual emissions are lower, can sell the rights to other companies that need them to meet their own targets. Companies that reduce their emissions can profit by selling the rights and companies that need more emission rights will have to buy more rights on the market. It is, therefore, good business to reduce emissions and investments will be made where it is most cost-effective, reducing the total cost of climate change mitigation.

Companies can also purchase carbon credits issued by the United Nations to projects located in developing and transition countries, i.e. outside the European Emissions Trading System.

PHOTO: LINDA LINDFORS/NIB

Markus van der Burg, Christopher Knowles and Urs Brodmann think that some kind of consensus will be reached at the Climate Change Conference in Copenhagen on how to continue mitigating climate change.

INCREASING INTEREST

Urs Brodmann of First Climate, a company that focuses on structuring carbon transactions and which is advising the Fund Manager, says that all in all five so-called emission reduction purchase agreements have been signed, and another five are imminent. He gives some examples of projects that have already signed agreements with the Carbon Credit Fund.

"We have bought carbon credits from various projects involving, for example, the building of a wind farm in China, waste management in Nigeria and a landfill in Mexico. They will all help climate change mitigation by reducing carbon dioxide emissions on a global level. On top of this, they will also bring various local benefits," Mr Brodmann explains.

Markus van der Burg of Conning Asset Management, the Fund Manager of the Post-2012 Carbon Credit Fund, adds:

"We can clearly see that the interest in the Fund is increasing as we are getting closer to 2012. The market is becoming increasingly aware that the Fund can provide payment certainty to projects such that the value of their carbon credits will not fall even after the expiration of the Kyoto protocol," he says.

The gentlemen are carefully optimistic about the results of COP 15. Though the outcome is rather uncertain, they all think that some kind of consensus will be reached on how to continue mitigating climate change through carbon reduction trading also after 2012. However, negotiating such an agreement is likely to extend beyond the Copenhagen conference. ■

DEALING WITH CLIMATE CHANGE

Greenhouse gas emissions from industries and individual consumption are heating the world and changing its climate. By dealing with negative environmental impacts today, we are mitigating climate change that may threaten our way of life tomorrow.

NIB is committed to supporting actions for combating and adapting to climate change. The Bank assesses the carbon emissions of all projects it finances and identifies their potential for reducing emissions. NIB welcomes opportunities to finance investments promoting:

- renewable energy;
- energy efficiency;
- cleaner production technologies reducing greenhouse gas emissions;
- the upgrading of power networks and other infrastructure to cope with the effects of climate change, such as extreme weather conditions.

In addition to NIB's investment in the Post-2012 Carbon Credit Fund, the Bank's loans to Horns Rev II, the world's largest offshore wind turbine park being built in the North Sea, and the wind farm Rødsand II on the island of Lolland in Denmark, are examples of projects that aim to mitigate climate change. The clean, renewable energy generated by the new parks' 180 turbines will be enough to power 400,000 homes.

NIB also financed the upgrade of hydropower plants in Sweden and Finland, which will help increase the output of renewable and emission-free energy. The increasing efficiency of existing hydropower plants will help reduce reliance on fossil fuel-based electricity production. In Norway, a high-grade silicon metal factory for the solar cell industry has been financed with a NIB loan. Modern technologies used in the production process consume significantly less energy than traditional methods, lowering production costs as well as air and water emissions.

CLEERE, which stands for Climate Change, Energy Efficiency and Renewable Energy, is a NIB lending facility with a framework of EUR 1 billion. Funds for the facility are earmarked within the Bank's ongoing lending activities. Since CLEERE was launched in February 2008, loans under this facility have been provided for about 25 environmental projects with a total commitment of over EUR 750 million.

Enzyme production at Novozymes' fermentation factory in Kalundborg, Denmark.

Fuel for debate

When hundreds of politicians and decision-makers gather in Copenhagen in December for the UN Climate Change Conference, many of their cars will be tanked on bioethanol. Denmark's enzyme technology company, Novozymes, has provided the enzymes needed to produce the waste-based biofuel, hoping it will also provide fuel for the climate debate.

"People intuitively understand that energy based on biomass, wind and solar power is good for the environment. The challenge is to make people realise that these alternatives are economically feasible in the very near future," explains Camilla Kinch Jensen, Head of Investor Relations at Novozymes, from her office at the headquarters in Copenhagen.

"We want the public and the politicians to understand that it is possible for cars to run on biofuel made from waste. It is not just a dream. It will not take 30 years to get the technological breakthrough, it is happening now," Ms Jensen adds enthusiastically.

BIG BUSINESS

In June 2009, NIB and Novozymes signed a loan agreement totalling EUR 30 million to finance research and development (R&D) in enzyme technology for biofuel production relying on waste and residues from crops, known as biomass.

The NIB financing will be used to ensure that the bioethanol campaign being carried out during the climate conference will not just remain a PR stunt. The aim of the R&D project is to produce enzymes that can convert biomass into bioethanol in an affordable manner and to reach a broad market. Today the production process is very expensive.

"The goal of this research is to make bioethanol production based on biomass a big industry. To make it commercially viable," Ms Jensen says, adding that the NIB loan will help in the final push towards this goal. Novozymes plans to have the technology for making bioethanol based on biomass commercially relevant by 2010.

Bioethanol based on biomass is a very environmentally friendly biofuel. Not only are enzymes needed for the conversion of biomass, but with the use of enzymes, the conversion process can also become increasingly energy- and resource-efficient. Biofuel based on waste is able to reduce carbon dioxide emissions by as much as 90% compared to fossil fuels.

"It is important to remember during the current debate surrounding bioethanol, soaring food prices and energy crops, that in order to reduce the carbon footprint of global transportation we should turn to bioethanol. It is one of the few alternatives to oil today and will continue to be in the coming years. Further into the future, however, the world will need a lot of different technologies to accommodate upcoming needs and reduce the use of oil," says Ms Jensen.

MORE FOR LESS

Novozymes invests 14% of its turnover into R&D, a high percentage compared to chemical companies and other enzyme producers.

"Innovation is the core of our business and is the key to our lead position. Our competitors are both enzyme and chemical producers," she says and cites an example from everyday life: "The public can spare the environment and save money by washing on lower temperatures. Enzymes work well at lower temperatures, unlike most chemicals. To get the same washing results at lower temperatures, enzymes in the detergents are simply needed."

According to Ms Jensen, the huge potential of the future bioeconomy could fall victim to the current economic crisis, unless governments and financial institutions act to support the development of biotechnology solutions more vigorously, particularly in the fields of agriculture and energy.

"In order to address global climate and resource problems, biotechnology in agriculture and industry should be supported and not decreased due to economic crisis or the belief that the climate crisis is coming in the remote future. Governments need to trigger research in this field and channel the investment financing through institutions like NIB," Jensen concludes, with a clear challenge to the delegates attending the upcoming climate conference. ■

On the road to Copenhagen: The Danish enzyme technology company, Novozymes, has provided enzymes to produce waste-based biofuel for the cars to be used by the delegates at COP 15.

Region gets a strategy

It takes at least 40 hours to travel 1,000 kilometres from Helsinki to Warsaw by train. The Baltic Sea is one of the most threatened marine ecosystems on the planet. The Baltic countries' power grids are still essentially isolated from the rest of the EU. The Baltic Sea region needs integration, a common approach, a strategy.

The Baltic Sea region is the focus of the Swedish EU presidency in July–December 2009. It logically puts the adoption of the European Union's Baltic Sea Strategy, proposed by the European Commission, at the top of the current presidency's agenda. The agreement on the strategy is expected by the end of 2009.

The strategy aims at coordinating action by the EU and EU member countries as well as international organisations and financial institutions to promote a more balanced development of the region. The strategy has four main objectives: to improve the marine environment, enhance prosperity, make the region more accessible and attractive and improve safety and security.

Sweden is favouring the strategy during its presidency "not only because the Baltic Sea is important for our economy and the well-being of our citizens, but also because the status of the Baltic Sea depends very much on EU policies and legislation," says Anders Alm of the Swedish Ministry of the Environment.

Mr Alm is sure that the political will to address the environmental degradation of the Baltic Sea is very strong in Sweden. Together with climate issues, this is the highest environmental priority for the government.

WHY IS SUCH A STRATEGY NEEDED?

As the immediate reason for developing a regional strategy, its authors name the "increasingly visible degradation of the Baltic Sea itself but also the need to address the disparate development

FOUR PILLARS FOR THE BALTIC SEA REGION

The European Commission adopted a Communication on the EU Strategy for the Baltic Sea Region on 10 June 2009. This is the first time that a comprehensive strategy, covering several community policies, is targeting a macro-region. As part of the strategy, an indicative action plan has been proposed that covers the following priorities under each of these four pillars:

SUSTAINABILITY

- To reduce nutrient inputs to the sea to acceptable levels;
- To preserve natural zones and biodiversity including fisheries;
- To reduce the use and impact of hazardous substances;
- To become a model region for clean shipping;
- To mitigate and adapt to climate change.

INCREASE PROSPERITY

- To remove hindrances to the internal market in the Baltic Sea region;
- To exploit the full potential of the region in research and innovation;
- Implementing the Small Business Act: To promote entrepreneurship, strengthen SMEs and increase the efficient use of human resources;
- To reinforce sustainable agriculture, forestry and fishing.

MAKE THE REGION MORE ACCESSIBLE AND ATTRACTIVE

- To improve the access to, and the efficiency and security of, the energy markets;
- To improve internal and external transport links;
- To maintain and reinforce the attractiveness of the Baltic Sea region in particular through education, tourism and health.

SAFETY AND SECURITY

- To become a leading region in maritime safety and security;
- To reinforce protection from major emergencies at sea and on land;
- To decrease the volume of, and harm done by, cross border crime.

Source: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Baltic Sea Region

paths of the countries in the region and the potential benefits of more and better coordination."

"Since the enlargement of the European Union in 2004, the challenges the Baltic Sea region is facing have escalated. Environmental threats, gaps in economic development and insufficient transport infrastructure can only be addressed through better coordination and joint action. The EU is well-placed to facilitate these efforts," says Ann-Kerstin Myleus, Deputy Head of Unit at the European Commission's Directorate General for Regional Policy (DG Regio).

When the proposal for the EU strategy for the Baltic Sea region was finally made public, it had been preceded by some 18 months of preparation, led and coordinated by DG Regio. Many parties have been involved in building and debating it since the initiative for the strategy was taken in 2006. The implementation is now also being shared by many.

"With political commitment at the highest level within the EU we stand a great chance of meeting global challenges and opportunities—and being a strong global competitor. It will be easier to influence EU policies and to ensure that they, when needed, are adapted to the specific circumstances of the Baltic Sea region. I am convinced that the strategy is the next step for EU cooperation around the Baltic Sea, and that it will serve as a model for regional cooperation in Europe," says Thomas Johansson, Team Director of the Baltic Sea Unit at the Swedish international aid agency—Sida.

ENVIRONMENT A PRIORITY IN CRISIS?

Mr Alm acknowledges that it is more difficult to find financing for environmental investments during a financial crisis.

"On the other hand, investing in the environment is investing in the future," he says and continues: "The socio-economic aspects and values of the marine environment are things Sweden will put in the forefront."

In a recent study, the Swedish Environmental Protection Agency established that out of 24 ecosystem services—or the natural resources and processes essential for human life—supplied by the Baltic Sea, only ten are working at an optimal level. Ecosystem services such as the provision of food and recreation are in poor condition. Seven, including the maintenance of biodiversity and the capacity of the sea to recover, are highly threatened.

"The costs of environmental investments should be considered in relation to what we would lose if these ecosystem services, for instance, climate regulation or the detoxification of waste, would collapse. In this perspective, investing in the environment is good business," says Mr Alm. ▶

IMPLEMENTING THE STRATEGY

The strategy proposes an action plan of 80 flagship projects organised under 15 priorities (see the fact box). The action plan includes such initiatives as the removal of phosphates in detergent in order to reduce nutrients released into the sea and a plan to connect the Baltic countries to European power networks. The Rail Baltica project to build a railroad connecting Warsaw to Tallinn with a target speed of 120 kph (up from about 25 as of now), a joint maritime surveillance system and a fund for innovation are other examples of what's in the new strategy's action plan.

In 2007–2013, the Baltic Sea region will benefit from more than EUR 50 billion of investment support under the EU cohesion policy and other funding.

A ROLE FOR IFIs?

The strategy needs the support of international financial institutions (IFIs), such as NIB, the European Investment Bank and the European Bank for Reconstruction and Development.

In tune with the objectives now also integrated in the EU strategy, in early 2008 NIB established the Baltic Sea Environment (BASE) lending facility with a framework of EUR 500 million as a financing source for projects with a positive effect on the Baltic Sea. The facility is aimed at assisting in the implementation of the Baltic Sea Action Plan adopted by the Baltic Marine Environmental Protection Commission—HELCOM.

Like the environment, NIB's other focus sectors—energy, transport and innovation—are directly linked to the priorities of the EU Baltic Sea strategy.

"Apart from providing financial resources, the IFIs are good at going from ideas to concrete actions and projects," Mr Alm says. For the time being, it looks like there will be a considerable number of project ideas in the national action plans which need to be implemented.

"We really have the momentum to save the Baltic Sea. Our knowledge about the problems is sufficient to act, we know what we need to do and there are plenty of financial institutions and donors willing to help. We should really take this opportunity to invest in the future of the Baltic Sea!" says Mr Alm.

THINK BIG, THINK REGION

The hopes are high that the strategy will pave the way for a better and happier region around the Baltic Sea, the EU's Mare Nostrum. Now that eight out of the nine countries around the Baltic Sea are EU members, this region is in an unprecedentedly good position to develop synergies and best practices in dealing with the environment.

"The area could be a model of regional cooperation where new ideas and approaches can be tested and developed over time as best practice examples," the strategy states.

The adoption of the strategy thus only marks the beginning. Thomas Johansson of Sida hopes that the political decision-makers in each country around the Baltic Sea will start thinking regionally when planning ahead. He advocates for more contacts and better awareness in the region:

"Awareness is a prerequisite for reaching a stage in which we intuitively see ourselves as a macro-region. We need to build relations to solve common problems—problems that actually can be described as possibilities for development and cooperation."

Anders Lindholm of DG Regio also underscores the need for better awareness of the co-dependency in the region: "This goes across all the sectors, both for the environment, which is the most obvious, but also for prosperity."

"We still see that it is hard to work together in a coordinated manner and take full advantage of all the opportunities. We will learn how to make better use of existing resources, institutions, policies and legislation. This is what we are trying to achieve with the Baltic Sea strategy," Anders Alm of the Swedish Ministry of the Environment concludes. ■

PHOTO: NEFCO

Despite the financial crisis and cutbacks in the municipal and state budget financing of the Neva Programme in St. Petersburg, the project is moving forward. The city has pledged to offset the budget reduction in the coming years.

The Neva Closure of Discharges of Untreated Wastewater Programme, or the Neva Programme, is a large-scale project to build a sewage collection tunnel reducing direct discharges of wastewater from St. Petersburg waterworks into the river Neva.

The joint financing by NIB, the European Bank for Reconstruction and Development and the European Investment Bank totals EUR 60 million. Loan agreements were signed with the Russian water and sewage utility Vodokanal of St. Petersburg in May 2009.

The programme is expected to deliver 98% efficiency in wastewater treatment by 2015 by closing off 370 points of direct discharge. It is already under implementation and Vodokanal has so far carried out extensive work, such as the completion of the first tunnel leg, taken into operation in October 2008.

NIB is the lead bank in structuring the financing for the programme under the umbrella of the Northern Dimension Environmental Partnership (NDEP), which coordinates the financing of urgent

During and after algae blooming, as a result of direct discharges of wastewater, the amount of oxygen in the water can drop below a critical level, which threatens plant and animal life in the sea.

Neva Programme will withstand no delays

environmental investments in Northwest Russia.

To find out how the project is proceeding—amidst the storm in the financial sector and the Russian economy as well as globally—we met with the Vice Governor of St. Petersburg, Alexey Sergeyev, and the Manager of NDEP, Jaakko Henttonen.

The Vice Governor acknowledges that the economic crisis has had an impact on budgeting for city infrastructure projects. "As a result, the construction of some parts of the main sewage collector has slowed down," Mr Sergeyev says. However, the sewage collector technology does not allow for any delays in implementation. The IFI financing is, therefore, essential for keeping the programme on track.

"We are optimistic about the future. I'm sure the cutbacks in the programme budget for 2009 will be offset by larger injections in the coming years, so that the programme will be completed on schedule," Mr Sergeyev continues.

Mr Henttonen stresses that Vodokanal of St. Petersburg has an impressive track record of investments with an international financing base and is well acquainted with the necessary procurement requirements as well as project management.

"Vodokanal is a leading water utility company in Russia and has been awarded for their excellent performance. In this respect, I have full faith in Vodokanal's leadership to meet the objectives set for the Neva Programme both time-wise and technically," he says.

The entire investment programme has been divided into two parts. Part A is now fully financed and planned to be completed by the end of 2012. This part provides for increasing the wastewater treatment to 2 million cubic metres a day in compliance with Helsinki Commission recommendations. Part B is aimed at achieving a maximum environmental effect by closing off an additional 60,000 cubic metres a day of direct untreated wastewater discharge into the river Neva and the Gulf of Finland.

"This part will be implemented when the financing is available. We are currently working on raising financing for Part B. The city and Vodokanal of St. Petersburg are determined to implement the investment programme to the fullest extent," says Mr Sergeyev.

The full interviews with Alexey Sergeyev and Jaakko Henttonen are available on NIB's website: www.nib.int ■

PHOTO: ST. PETERSBURG GOVERNMENT

Alexey Sergeyev, Vice Governor of St. Petersburg: "The programme will be completed on schedule."

PHOTO: NDEP

Jaakko Henttonen, NDEP Manager: "I have full faith in Vodokanal's leadership."

Trendy travelling by tram

"There has been a dramatic change in the way people perceive public transport in Helsinki. There is also a strong political will to support this development. And in both cases it is especially rail transport that is becoming the trendy way to travel."

These are the words of Matti Lahdenranta, Managing Director of Helsinki City Transport. He adds that this is the trend in most other cities in Europe as well. One major cause is concern about climate change.

Focus is being directed from buses towards rail transport for several reasons. Mr Lahdenranta gives a few examples: it is more convenient to travel by tram or metro—the motion is smoother, the ride is less bouncy, there is less noise. And there are no direct emissions into the city air.

A long-term goal of the City of Helsinki is to replace all buses in the city centre with trams and the metro. Trams have been part of the city view for over a hundred years.

"Rail services have a higher status in people's minds. Trams are seen as a more sophisticated means of public transport than buses," adds Mr Lahdenranta.

CLOSE COOPERATION

For several years, the cities of the Helsinki metropolitan area have been developing public transport in close cooperation and the common efforts are on the rise. The basic starting point for the development of public transport is rail services: trams, metro, and trains.

"There are 1.3 million inhabitants in the Helsinki metropolitan area and its surrounding municipalities. We have to focus on the sustainable development of the traffic circulation in general. If everyone drives his or her own car, there will not be much traffic, only traffic jams. It is therefore very important that other means of travelling are facilitated in this area," he says.

In 2014 the metro line will be extended by 14 kilometres westwards. The new metro cars will be fully automated. Also the existing cars, as well as the entire traffic control system, will be upgraded accordingly. The current control

PHOTO: HKL

LONG-TERM LOAN

The City of Helsinki is investing some EUR 143 million in rail services in the coming years. NIB has provided a loan of EUR 50 million to the city for investments in 40 new low-floor trams and 48 new metro cars. The trams will replace old ones from the 1970s. The new metro cars will be taken into service on the expanding metro line. The value-added of NIB's loan is the very long-term funding, 30 years.

system was taken into use in the early 1980s, when the metro was introduced to the citizens of Helsinki.

Mr Lahdenranta is enthusiastic when he describes the new metro cars. "The automation will improve passenger safety as the risk of human mistakes will decrease. The platforms will be closed with platform screen doors and the doors will only open when the metro stops at the station. The trains will be shorter and the average time between departures will be decreased, from 4 minutes to 2.5 minutes," he says.

OFFER ALTERNATIVES!

An eternal question in discussions about the use of public transport services versus the private use of cars is whether improvements in public transport are really worth the cost. With a background education as a traffic engineer, and working his entire career with public traffic issues, Mr Lahdenranta has clear thoughts on this issue: the more opportunities you offer, the more people will seize them.

In fact, Mr Lahdenranta does not see public transport as opposing other means of traffic.

By improving public rail transport, also cars and buses benefit.

"They are all part of the entire traffic system. Even though we are investing in public transport, a lot of improvements are also being made in the road network. The one does not exclude the other. It is about increasing people's comfort and well-being, protecting the environment and supporting commerce and industry," he concludes. ■

PHOTO: PAUL WILLIAMS

Matti Lahdenranta of Helsinki City Transport says we need to focus on the sustainable development of the traffic system.

From waste to wealth

The energy company Eidsiva Energi is constructing a new waste-to-energy plant in eastern Norway that will produce bioenergy based on local waste.

PHOTO: ORD&HANDLING A/S

Tormod Botheim (right), Head of renewable energy department, Eidsiva Bioenergi AS, inspects the construction site for the new waste-to-energy plant.

The waste-to-energy plant will be able to produce approximately 200 GWh of energy, thereby doubling the district heating network capacity.

"We expect to be able to utilise as much as 70% of the energy in the waste as heating and electricity," says Tormod Botheim. He is head of the renewable energy department at Eidsiva Energi's own bioenergy company, Eidsiva Bioenergi AS. He adds that the extension of the regional district heating system will enable new users to hook up to the system and gain access to the new cost-effective and environmentally friendly energy alternative.

WASTE OF ENERGY

"Without the right infrastructure and customers, many waste incineration plants let the energy generated go straight out through their chimneys. Proximity to users of energy, like industry, is key in running a waste-to-energy plant," Ola T. Dahl, Head of Eidsiva Bioenergi's Hedmark region, explains. He says that the new plant, named Trehorningen, already has a customer base for 50 GWh of district heating energy.

Trehorningen is strategically located in the Hamar municipality, where a significant part of the households producing the waste and the consumers of the generated heat, such as district heating and industry, are located. Upon completion by the end of 2011, the plant will treat up to 72,000 tonnes of waste a year. The waste incineration plant will have a turbine with the capacity to produce 40 GWh of electricity per year in addition to the generation of steam for local industry and the production of heat for the district heating system.

"Bioenergy has a huge growth potential in Norway and we feel confident that we can make the new waste-to-energy plant profitable," Mr Dahl says, adding that public support and propitious financing, like the loan from NIB, are playing an important part in reaching this goal.

ENERGY FROM WASTE

"Norway has been spoilt by easy access to hydropower and oil. As much as 60% of the electrical power is used for heating. This is a waste of "noble" energy. Electrical power is the cleanest form of energy and the only form that can be used to run machines, computers and other high-tech appliances. Norwegians should keep warm by using warm water, the least noble form of energy, which is easily generated from bioenergy," Mr Dahl says.

"Transmission capacity to other countries must increase so that the surplus of electricity can be exported to coal-dependent countries in Europe to reduce greenhouse emissions on the whole continent," he adds.

According to the Norwegian think tank Climate Benefit, the export of 30 TWh of wind power and hydropower per year could reduce CO_2 emissions by up to 30 million tonnes if it replaces coal-fuelled power production in Europe. It equals more than half of all greenhouse gas emissions in Norway.

"The public debate on renewable energy is mainly focused on hydro, solar and wind. However, bioenergy is an important element in efforts against greenhouse gas emissions, as it is a carbon-neutral form of energy," concludes Mr Botheim. ■

PHOTO: RAGNHILD B. ABRANTE/EIDSIVA ENERGI AS

"Bioenergy has a huge growth potential in Norway," says Ola T. Dahl, Head of Eidsiva Bioenergi's Hedmark region.

LOANS AGAINST CLIMATE CHANGE

In order to alleviate climate change, it is critical to turn energy production away from oil, coal, and gas towards renewable sources of energy like the sun, wind, water, and biomass. NIB aims to finance projects that contribute to this development and the EUR 40 million loan agreement with Eidsiva Energy is one example. The bioenergy project is in the A category of NIB's environmental analysis system (see interview on opposite page).

Hilde Kjelsberg, Vice-President and Head of the Credit and Analysis Department at NIB

Integrated environmental procedures reduce financial risks

Hilde Kjelsberg, Vice-President and Head of the Credit and Analysis Department at NIB, explains how her department assesses the environmental impact of NIB's potential projects.

How is the environmental significance of a project measured?

"The Bank has a transaction team responsible for all new loan proposals, and within that team we have dedicated analysts, who cooperate and assess the projects from different angles. This is a good way of evaluating a project as it highlights that any environmental liabilities can directly influence the bottom line and other risks of the project."

"NIB's environmental categorisation system for projects is similar to the systems used by other international financial institutions, such as the EBRD and the World Bank Group. Loan applications are categorised into four different groups, according to their potential environmental impact."

What are the categories?

"Category A projects have the potential for making an extensive environmental impact and must undergo a full environmental impact assessment (EIA). These projects are made publicly available on our website for a period of 30 days before a final decision on financing is taken, so our stakeholders can give their opinions. NIB finances five to eight category A projects per year." (Read more about a category A project in Norway on opposite page.)

"Category B projects have the potential for making a moderate environmental impact and must undergo a partial EIA. For the projects in the remaining categories, we decide the need for information on a case-by-case basis."

What is an environmental impact assessment (EIA)?

"EIAs are usually carried out by independent consulting firms, on behalf of the respective companies, and include project descriptions; policy, legal and administrative frameworks; environmental impacts; as well as monitoring and management plans. The EIA process is regulated by EU and national legislation. NIB utilises the EIAs in its own assessment process."

What are the other means of evaluating projects considered for funding?

"Environmental audits are conducted in conjunction with company acquisitions or in projects where possible environmental liabilities have been identified. An environmental audit is required for projects in which there is an obvious risk of the project sponsor facing costs of environmental damage, such as contaminated soil or polluted groundwater."

"All category A projects are monitored, as well as other projects with an identified need for follow-up. The monitoring is carried out either by personnel from the environmental unit in my department or by independent environmental experts."

Why do we need the system?

"As an IFI offering long-term financing, we need to look at all the important risk aspects, financial and environmental, from a long-term perspective. The environmental sustainability of a project must be long-lasting."

"I am proud to work in a bank with such an explicit environmental mandate, where the environmental analysis is integrated in the total risk assessment process. I believe this puts NIB at the forefront of the banking sector. NIB has worked with environmental appraisals for a long time, using the EU's environmental legislation as a guide. However, our environmental requirements were further emphasised in our revised environmental policy adopted in 2008. This policy and related procedures will continue to be developed in the Bank on an ongoing basis." ■

PHOTO: NINA NÄSMAN/NIB

The new bioenergy plant constructed by Keravan Lämpövoima is due to be ready for commercial use in late 2009.

Shrinking eco-footprints

In Kerava, a city on the outskirts of the Helsinki metropolitan area, two huge facilities are taking form. One is a recycling centre being expanded and the other a new biopower plant. Both facilities will help reduce carbon dioxide emissions and both have received long-term loans from NIB.

Keravan Lämpövoima is building a new biofuelled combined heat and power plant, due to be ready for commercial use in late 2009. The project is partly financed with a NIB loan of EUR 31.5 million.

With three-fourths of the country covered by forests and woodland, there is seldom a shortfall of wood chips and forest residue in Finland. These biomasses found their way to the energy sector in the 1990s, and now new biopower plants are appearing in various corners of the country. Finland is one of the leading countries in the world in utilising bioenergy. The building of a new biopower plant in the city of Kerava is further strengthening this trend. What makes this project special is that it brings bioenergy to the Finnish capital region for the first time.

The new power plant will generate heat and electricity mainly using wood-based fuels and peat, and is, despite the energy sources' brown colour, a very green alternative to the current gas-based energy production in Kerava. According to Risto Mäkinen, Managing Director of Keravan Lämpövoima, gas is no longer as feasible a fuel option as in the past, as import prices keep rising and deliveries remain uncertain.

GREEN AND SECURE

"The security of domestically sourced energy was appealing to the project from the start and environmental considerations have played an important part since the beginning of technical planning," says Mr Mäkinen.

While the energy mix is very flexible, the production will in the beginning be made up of around 40% wood-based fuels and 60% peat. Some peat is always needed for steady wood combustion, but according to Mr Mäkinen, it will be ra-

tioned to a minimum: "the key focus lies in utilising biofuels to the greatest extent possible."

The new power plant is expected to meet 75% of the district heating demand of the city of Kerava and provide 25% of the total electricity acquired by Keravan Energia.

More recycling —less waste

Lassila & Tikanoja (L&T), one of Finland's biggest companies in waste management, is expanding its existing recycling plant in Kerava. Some 75,000 square metres, the equivalent of ten football fields, have been cleared and enormous facilities are being built. NIB has contributed to the financing of the project with a loan of EUR 15 million.

When the whole plant is ready in 2010, the plant's capacity will nearly triple, from 170,000 tonnes of waste to some 450,000 tonnes per year. Luckily, it is not the amount of waste produced that will increase that much in the coming years, but a matter of directing more waste to recycling, as well as taking into use new technology.

The plant's activities are focused on recycling waste materials from commerce and industry, including the building, retail and service sectors. Also paper and cardboard waste from commerce and households are processed.

ALL WOOD IS BEING REUSED

The new line for receiving wood-based waste is already up and running and can process 30 tonnes of waste wood and green waste per hour. Arto Nivalainen, Director of L&T's Environmental Services, explains the qualities of the new line:

"We receive all kinds of wood from industry, painted or otherwise treated. This reduces the quality of the wood's reusability. But in the cleaning process pieces of metal and other extra material are separated from the wood. When the wood comes out of the process it is as clean as used wood can be and ready to be burned in biofuelled power plants," says Mr Nivalainen.

Not all power plants, however, are built in such a way that they can use chips made from used or treated wood, due to the filtering technology in the plant. This is why L&T's wood processing line is also able to process so-called clean wood such as forest residue.

ONE OF A KIND

Another processing line can receive construction and demolition waste as well as commercial and industrial waste from which, for example, stone, metal, glass, and plastic are separated and processed into reusable material. The new line, a so-called combination line, will be able to process almost all kinds of waste and is likely to be the only of its kind in Europe. Mr Nivalainen explains:

"In Central Europe, recycling plants are usually built for one sort of waste only. In Finland, there is not so much waste that it would be efficient to keep a single-waste plant up and running. We need to concentrate our activities on bigger entities, ensure high efficiency and thereby strengthen our competitiveness," says Mr Nivalainen.

"The amount of waste being reused on this site will increase from the current 75% to 90%. Most of the waste is reused or processed into biofuels and other burnables that can be used by power plants. Only a very small amount is taken to the dump site," says Jyri Nummela, Production Director of L&T.

Mr Nivalainen's dream is that 100% of waste would be recycled. "Maybe this could be a reality already in 10 years," he concludes. ■

STRONG MANDATE FULFILMENT

Both projects reflect NIB's two mandates; to strengthen competitiveness and to enhance the environment. Lassila & Tikanoja's recycling plant will further strengthen the company's competitiveness. Keravan Lämpövoima's power plant will boost the city's electricity production capacity, as well as provide end-users, households and business alike, with low-priced energy.

The projects will also enhance the environment by decreasing carbon dioxide emissions. Fuels from recycled products and burnable waste can replace conventional fossil fuels in energy production.

Arto Nivalainen and Jyri Nummela at L&T's new line for receiving wood-based waste, which can process 30 tonnes of waste wood and green waste per hour.

Construction work in the city district of Nõmme.

New sewage pipe eases daily life

Through a sewage network extension partly financed by NIB, the water utility Tallinna Vesi is connecting some 3,500 households to Tallinn's wastewater treatment system.

In many of the old city districts of Tallinn, houses are still not connected to the city's water and sewage network. The wastewater is collected in private septic tanks, and then transported by car to collection points.

The use of septic tanks, with regular draining and cleaning, is as inconvenient for the users as it is hazardous for the environment, because of the risks of leakage or spills. Thus, many homeowners in the city are certainly pleased now that Tallinna Vesi is expanding their water and wastewater network to reach some 3,500 new households.

A total of 100 kilometres of new sewage pipes are being laid down, and additionally some 30 kilometres of storm water pipes and 10 kilometres of water pipes.

FINANCING FROM NIB

The network extension project started in 2007 and more than one third of the new pipes have now been laid down. NIB has participated in the financing of the project with a loan of EUR 20 million to Tallinna Vesi. Its CEO, Ian Plenderleith, sees the financial cooperation with NIB as important for the company.

"NIB was able to offer us financing over a longer time period than other lenders would have done. The financing package we agreed on is very suitable, and matches our cash outflows and inflows. And, of course, NIB is a secure lender, which at this point in time is a great benefit to us as a company."

The project, which will be completed in 2011, is part of a service agreement signed between the City of Tallinn and Tallinna Vesi. According to Mr Plenderleith, the project brings significant environmental benefits to the city, but also direct financial benefits to the clients.

"The current system with septic tanks is approximately two and a half times more expensive for the homeowners than it will be having the sewage treated by us."

"And as a homeowner in Tallinn myself, I'm looking forward to the new sewage pipes reaching my own property—making the daily life here so much easier for me and my family, as it will for some ten thousand other residents of Tallinn," Mr Plenderleith concludes. ■

PHOTOS: PAMELA SCHÖNBERG/NIB

"The new sewage pipes will make life easier for thousands of residents of Tallinn," says Ian Plenderleith, CEO of AS Tallinna Vesi.

The Vilnius southern bypass is part of an international transport corridor.

PHOTOS: CITY OF VILNIUS

City loan to Vilnius

The Lithuanian capital, Vilnius, has received NIB financing totalling EUR 20 million for important transport infrastructure projects as well as renewing its public transport fleet.

The new 15-year-maturity loan has been granted for financing the city's investment programme planned for 2009. Most of the loan has been used for the construction of the Vilnius southern bypass and the reconstruction of main streets. The southern bypass, a four-lane road, is part of the international transport corridor IXB, linking Kiev and Minsk, via Vilnius, to the Lithuanian port of Klaipeda on the Baltic Sea. The road will help significantly reduce the flow of transit traffic through the city.

The city has bought 100 new buses and 70 trolleybuses complying with EU environmental regulations.

"The effect of upgrading the road infrastructure and renewing the public transport fleet is obvious: the emissions have decreased several times. The new buses and trolleybuses are also attractive. The feedback from the city's inhabitants on the improvements is very positive," explains Vilnius City Mayor Vilius Navickas.

This is the first NIB loan to the Lithuanian capital. The Bank's involvement in financing a municipal investment programme in Vilnius is aimed at facilitating the further economic development of the city.

"A distinguishing feature of NIB is professionalism and efficiency. The project appraisal was rather quick and well performed. We are pleased with NIB's contribution to the implementation of the city's large-scale investment programme," Mr Navickas says. ■

PHOTO: LIETUVOS GELEZINKELIAI

Improving rail traffic in Lithuania

NIB has provided a EUR 15 million loan to the Lithuanian state rail infrastructure operator AB Lietuvos gelezinkeliai (Lithuanian Railways). The loan is earmarked to co-finance the company's investment programme for 2009–2011.

"With the loan received from NIB, our company is set to upgrade the core railway infrastructure. The investment programme is aimed at improving rail traffic safety and bringing the rail transport infrastructure into line with EU standards," says Stasys Dailydka, Director General of AB Lietuvos gelezinkeliai.

The scope of the NIB-financed projects will include branches of Trans-European Rail Corridor IX, connecting Ukraine and Belarus to the Lithuanian sea port of Klaipeda as well as the ports of Russia's Kaliningrad Oblast. The company will also continue developing the Lithuanian part of Trans-European Rail Corridor I, connecting the Baltic countries via Warsaw to the rest of the EU. NIB's financing will also be used for the acquisition of four heavy-weight-track motor cars.

"By increasing the speed and throughput, the Lithuanian railways will become more environment-friendly," says Mr Dailydka.

In order to speed up the trains, the Lithuanian rail operator is installing new signalling, telecommunication, power supply, and hot axle-box detection systems. This will help reduce the risks of accidents and damage caused to the environment.

The main environmental issues are rather typical for infrastructure projects: land issues, the mitigation of transport impacts on sensitive areas, and leakage from the rolling stock. Lietuvos gelezinkeliai is dealing with them directly, by implementing railway drainage and surface water treatment systems, and by outsourcing contaminated soil and hazardous waste treatment to specialised companies.

AB Lietuvos gelezinkeliai maintains all of Lithuania's 1,766 kilometres of railways and 109 railway stations. ■

Visit us in Moscow!

In September NIB opened new premises in Russia's capital. From now on, NIB's General Representative for Russia, Igor Kovtun, is located in the premises of the World Bank.

"The idea of NIB premises in Moscow came about after Igor had joined the Bank two years ago. We are pleased with the central location of the new premises and its affiliation with another international financial institution," says Søren Kjær Mortensen, Senior Director, Head of Europe and Eurasia at NIB.

The new premises will provide meeting facilities and working stations for NIB staff visiting Moscow as well as for NIB's sister organisations if need be.

Russia remains a focus country and an important partner for NIB. The Bank's lending in this country is directed to projects in the environmental, infrastructure and energy sectors. NIB is the lead bank in a number of high-priority environmental projects within the Northern Dimension Environmental Partnership.

"With an increased focus on these activities, the new premises in Moscow will largely facilitate NIB's closer interaction with Russia's authorities and counterparties," says Mr Mortensen. ■

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NIB's General Representative for Russia, Igor Kovtun.

APPOINTMENTS AT NIB

New staff

Mika Erkkilä (FI) has been appointed Senior Country Analyst in the Country and Bank Analysis Unit at the Credit and Analysis Department. He joins NIB from a position as Economist at the Bank of Finland. His previous employment includes Nordea and SEB.

Kamal Grossard-Amin (DK) has been employed as Chief Funding Manager in the Funding and Investor Relations Unit at the Treasury Department. He joins NIB from a position as Vice President (Senior Dealer), Debt Capital Markets Origination at Danske Bank Copenhagen.

Johanna Tyyskä (FI) has been appointed Legal Counsel in the Institutional and Administrative Affairs Unit at the Legal Department. She has previously worked as Legal Counsel at the Nokia Corporation and as an Associate in the Helsinki and New York offices of White & Case LLP.

Internal appointments

David Bäck (FI) has been appointed Corporate Analyst at the Credit and Analysis Department.

Liisa Salminen (FI) has been appointed Senior Manager at the Lending Department. She is currently employed in the Work-out Unit.

Want to know more about NIB?

VISIT OUR WEBSITE WWW.NIB.INT

We work hard on keeping the website up to date, relevant and useful for our customers, owners, the media and other stakeholders. The website displays NIB's statutory documents and policies, explains the eligibility criteria for receiving a NIB loan and reports on recent developments. The site features searchable databases of NIB's loans and in-depth stories on selected financed projects.

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