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Magazine of the Directorate-General for the Environment

The Bali Roadmap

First steps to a new global climate change agreement

EUROPEAN COMMISSION

environment

editorial

Magazine of the Directorate-General for the Environment

When negotiators finally walked away from the table at the United Nations climate change conference in Bali last December, some looked a little shell-shocked. But the conference is increasingly being seen as a success, for it resulted in a broad consensus among 192 nations on drawing up a new global agreement to tackle climate change.

The key components of the agreement and the future steps are laid out in the feature article on pages four and five. The Bali Action Plan, seen as a strong starting point for the multiple rounds of negotiation between now and the Copenhagen conference in December 2009, covers all the main issues that the EU wants to see addressed in a global agreement – from mitigating emissions to mobilising finance in the fight against climate change.

Significant advances are being made in the EU with plans to usher in a low-carbon economy. The new climate action and renewable energy package provides a blueprint for lowering greenhouse gas emissions and proposes ways of sharing the effort among Member States. Implementation costs will be in the region of €90 billion, some 0.6% of the EU's annual GDP; the cost of no action on climate change could be enormous in comparison.

The Big Question in this issue is devoted to two environmental performance tools: the Eco-Management and Audit Scheme (EMAS) and the Eco-label. Organisations have had 12 years to sign up for these voluntary schemes, yet it appears that many are still not aware of all their benefits. The revisions are part of the new Sustainable Consumption and Production package launched in May.

ENVIRONMENT ONLINE

Do you want to know what the European Union is doing to protect the environment, what an integrated policy product is or how to qualify for an "eco-label"? Find out all this and more at DG Environment's website: **ec.europa.eu/environment/index_en.htm.**

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Environment for Europeans website:
ec.europa.eu/environment/news/efe/index.htm

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Europe needs a strong and unified voice

The European Commission has drafted proposals to strengthen efforts to preserve and protect whale species around the world. If approved by the Council in June this year, the proposals will oblige EU Member States to work together in the International Whaling Commission (IWC). Protection would become a priority, and the EU could head off any unscrupulous moves to lift the long-standing international moratorium on whaling.


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The EU is committed to protecting the whale and opposes the hunting of these majestic animals. Strict legislation like the Habitats Directive means that commercial whaling is banned in EU waters, and no vessel registered in the Community can engage in hunting elsewhere.

An international ban on commercial whaling was agreed by the IWC in 1985, and it is in force. Under the IWC framework, however, whaling can still continue if a signatory enters a reservation or an objection, or claims that it is in the name of science. Traditional whaling nations such as Japan are increasing the number of animals they take for "research" purposes. Some 30,000 whales have been slaughtered since the moratorium was introduced, mainly by Japan in the name of scientific inquiry, but also under objection by Norway and under reservation by Iceland.

Many scientists affirm that "scientific whaling" is no longer necessary as new technologies like GPS tracking make it easier to study whales without killing them.

In 2006, IWC members voted in favour of a non-binding declaration calling for a return to international whaling. This move will not in itself overturn the moratorium, but the European Commission is concerned that commercial whaling is being forced back onto the agenda.

While the numbers of many whale species are increasing again, reliable estimates are hard to obtain. The Blue whale population grew at over 8% a year between 1979 and 2004, for example, but the species' total population is still only around 2,300. In the Western North Pacific, Gray whale numbers may be as low as 120.

Coordinated action

The IWC is a forum where the Commission has only observer status at present. The twenty Member States that are parties to the IWC vote according to their national interests, and this results in a lack of coordination. The Commission proposals aim to put an end to this situation and ensure that Member States act jointly to conserve whales through an effective international regulatory framework that will increase protection around the world.

Coordinating activities in this way will also ensure coherence with other EU positions on wildlife protection. These positions are adopted through the Convention on International Trade in Endangered Species (CITES) and other international agreements.

The Commission hopes the Council will adopt its proposals in time for the next IWC meeting in Chile on 24 June 2008.

Goals for all EU Member States for the next IWC meeting in June

- To block moves to lift the commercial whaling moratorium
- To support the creation of whale sanctuaries
- To continue to support sustainable aboriginal subsistence whaling
- To address the practice of scientific whaling
- To limit the use of secret ballots in IWC voting procedures

"The EU is committed to protecting the whale and opposes the hunting of these majestic animals."

FIND OUT MORE

DG Environment – Species Protection pages
http://ec.europa.eu/environment/nature/conservation/index_en.htm

International Whaling Commission
http://iwcoffice.org/

First steps to a new global climate change agreement

A crucial new phase in the international battle against global warming has started as a result of the successful conclusion of December's United Nations climate change conference in Bali. After two years of informal discussions, the 192 countries that are members of the UN Framework Convention on Climate Change (UNFCCC) reached consensus to draw up a new global agreement to tackle climate change.

The conference also agreed on a 'roadmap' for the negotiations, setting out the main issues to be tackled, and fixed an ambitious end-2009 deadline for concluding the deal. The European Union played a leading role in the conference and achieved the breakthrough it was looking for.

A new global agreement is needed very soon as there are currently no arrangements for what should be done after the Kyoto Protocol's emission targets expire in 2012. This is of particular urgency given last year's assessment by the Intergovernmental Panel on Climate Change (IPCC), which showed that global warming is very likely to reach dangerous levels this century unless fast-increasing global emissions are cut sharply and rapidly.

Guided by science

The EU is adamant that the future agreement must be guided by the latest scientific knowledge. This means it must aim to limit global warming to an average of no more than 2°C above the pre-industrial temperature, because there is strong scientific evidence that irreversible and disastrous changes in the environment will become far more likely beyond this point. The IPCC's projections indicate that the global temperature will rise further, unless there is action to curb emissions. Under the median scenario the increase could be up to 4°C by 2100, and under the worst-case scenario as much as 6.4°C.

Keeping within 2°C will mean reducing global emissions to at least 50% below 1990 levels by 2050. Developed countries must take the lead since they are responsible for most of the emissions to date. That is why the EU is proposing that developed countries collectively cut their emissions by 30% by 2020 and by 60-80% by 2050.

The EU is ready to achieve a reduction of 30% if other developed countries commit to comparable efforts under the new agreement. It has made an unconditional pledge to cut its emissions by at least 20% by 2020 in order to reap the benefits, in terms of energy security and competitiveness, of becoming a highly energy-efficient, low-carbon economy. In January 2008 the European Commission put forward a major package of legislative proposals to implement these targets.

The international negotiations started in Bangkok at the beginning of April and are due to conclude at the UN climate conference to be held in Copenhagen in December 2009. The hope is that this will leave enough time for governments to ratify the new agreement, so that it can take effect by the end of 2012 when Kyoto's 'commitment period' ends. An intensive schedule is planned for the rest of the year, with meetings every quarter – twice the normal frequency of UN climate talks. The final negotiating session of 2008 will be at the next annual UN climate conference in Poznan, Poland, in December.

Stavros Dimas, the EU's Environment Commissioner, says the stakes could not be higher. "With the rate of global warming accelerating, it is no exaggeration to say that the negotiations are almost certainly our last chance. We must prevent climate change from reaching devastating levels over the coming decades, putting the lives of millions of people in danger and imposing a crippling burden on our economies," he noted recently.

Parallel-track talks

Like the informal discussions that have been going on since 2006, negotiations are taking place on two parallel 'tracks'. One track brings together all 192 Parties to the UNFCCC, who agreed in Bali to launch a "comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012." This process is known as the Bali Action Plan.

The other negotiating track groups the 178 Parties to the Kyoto Protocol. It focuses on drawing up post-2012 emission commitments for the developed countries that have such targets under Kyoto. Australia joined the Protocol during the Bali conference, leaving the United States as the only developed country outside the Kyoto framework. The idea is that the results of the two negotiating tracks will be brought together in Copenhagen to create a comprehensive global agreement for post-2012 action.

The question of how ambitious the future agreement should be will be a key point for the negotiations. This issue was only partially addressed in Bali. The document agreed on the 'Kyoto track' negotiations notes that achieving the lowest level of emissions in the scenarios assessed by the IPCC would require developed countries to reduce their emissions by 25-40% of 1990 levels by 2020. This is very much in line with the EU's proposal of a 30% cut by developed countries by 2020.

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DOWN THE ROAD FROM BALI

- **December 2008: Review of Kyoto Protocol at Poznan UN climate conference**
- **December 2009: Global agreement due to be concluded at Copenhagen UN climate conference; should enter into force before end of 2012**
- **December 2012: Kyoto Protocol's emission targets expire**

However, due to opposition by a number of developed countries, the Bali Action Plan contains no explicit level of ambition – though it does recognise that "deep cuts in global emissions will be required".

In other respects the Bali Action Plan provides a strong starting point. It covers all the key issues the EU wants to see addressed in a global agreement, grouping them under four broad headings: reducing emissions, adapting to climate change, transferring clean technologies from North to South, and mobilising finance to combat climate change.

For the EU, one of the key elements is the Bali Action Plan's recognition that all industrialised countries, including the US, have to take action to cut greenhouse gas emissions and that these efforts should be comparable. The Action Plan also marks the first time that developing countries have accepted that they too will need to take action as part of the global effort. Their combined emissions are projected to overtake those of industrialised nations by around 2020.

Deforestation

Slowing and eventually reversing deforestation is a major priority as it is responsible for around 20% of global emissions – more than all forms of transport. At Bali it was recognised that incentives need to be developed to help governments, particularly in tropical regions, to reduce deforestation and the associated emissions. A range of demonstration activities is being launched to try out different solutions over the next two years, so that the most effective ones can be included in the post-2012 agreement.

Strengthening and expanding the global carbon market is also vital, both to ensure that the deep emission reductions necessary can be achieved at least cost and to mobilise further investment in clean energy projects, particularly in developing countries. The EU's pioneering Emissions Trading System (ETS), which already accounts for some 80% of international carbon trading, should be a central pillar of the future global market. The Commission's recent proposals will reinforce this role by making the ETS more effective.

FIND OUT MORE

Climate change
http://ec.europa.eu/environment/climat/home_en.htm

UN Climate Change Conference 2007
http://ec.europa.eu/environment/climat/bali_07.htm

Reviewing the Kyoto Protocol

The Kyoto Protocol will be reviewed at the Poznan conference in December. The EU sees this as an important opportunity to build on experience with the Protocol so far and to strengthen it as a key element of the architecture of a post-2012 agreement.

The Bali outcome has provided a solid basis for the forthcoming negotiations. But it is clear that hard work will be required to reach an effective new global deal by the end of 2009, a deal that satisfies the sometimes widely differing interests and aspirations of 192 Parties. As Commissioner Dimas says, "The challenge is not just to reach a deal, but to ensure the agreement is ambitious enough to bring climate change under control."

"It is no exaggeration to say that the negotiations are almost certainly our last chance."

Europe moves towards a low-carbon economy

After last year's general commitments to legislation on climate change and renewable energy, the European Commission is now getting down to the details. The new proposals are the most ambitious measures on climate and energy the world has ever seen. They include a major reform of the Emission Trading System, fresh ideas for sharing the effort to reduce greenhouse gases among Member States, and targets for renewables that will radically shake up the energy market.


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In March 2007, the European Council called on the Commission to produce concrete proposals on how to reach the targets set out in the EU's energy and climate change package. Those targets include a commitment to cut greenhouse gases (GHG) by at least 20% by 2020 compared to 1990 levels, and a mandatory EU target of 20% renewable energy by 2020. The aim is to transform Europe into a low-carbon, energy-efficient economy.

The Commission proposals deliver a set of instruments that should keep Europe on track towards the targets. EU leaders at the March European summit clearly stated their wish to see the proposals on the statute books by early 2009, and will be pushing to have the package approved by the European Parliament and Council by the end of next year. Putting in place the measures to deliver on the commitments will set an example for the rest of the world, showing how prosperity can be achieved while lowering emissions.

Single carbon cap for Europe

The EU Emission Trading System (ETS), a key part of the Commission's climate change strategy, is designed to reduce emissions of greenhouse gases in electricity plants and major industrial installations by placing a limit on the amount of greenhouse gases emitted (the 'cap') and enabling emitters to buy and sell the emission allowances they require. The system, which began in 2005, is now in its second phase, and covers around 40% of all EU27 greenhouse gas emissions. That percentage will rise if the plans to extend the ETS are accepted.

For phase three of the ETS, which will run from 2013 to 2020, the Commission is proposing a major change. The separate caps currently in place for each Member State would be replaced by a single EU-wide cap on emissions, which would decrease every year.

Having a single regulated cap on emissions across the EU would mean that Member States no longer determine how many emission allowances they allocate to their companies. More allowances would be auctioned rather than given away, especially in sectors like the power sector that are not vulnerable to competition from outside the EU. Such sectors tend to include the value of allowances in their final product prices, even if the allowance was received at zero cost, generating windfall profits. This is remedied through auctioning.

The current ETS only covers carbon dioxide. The new proposals would extend it to include more greenhouse gases such as the nitrous oxide emitted in the production of fertiliser.

The new package also includes plans to include aviation in the system after 2013. Today the ETS covers some 10,000 industrial plants across the EU, among them power plants, oil refineries and steel mills. The system only applies to plants that emit more than 10,000 tonnes of CO_2 per year.

Effort sharing

The ETS covers approximately half of the EU's CO_2 emissions and 40% of total GHG emissions (including other GHG such as methane and nitrous oxide). This means that separate measures are also required for emissions from other sources, to ensure reductions across the board. Measures are therefore being proposed on several levels.

In non-ETS sectors such as agriculture, housing, transport and waste, the target is to reduce emissions to around 10% below 2005 levels by

Key proposals in climate action and energy package

- Amendment of the ETS, to include a single EU-wide cap
- Effort sharing among Member States for non-ETS sectors
- Directive promoting renewable energy

2020. To keep the effort sharing equitable, the Commission is proposing a specific target for each Member State based on the level of economic development in that Member State. Emission targets vary between –20% and +20%; Member States that are still catching up with their wealthier neighbours are allowed to increase their overall emissions.

"The aim is to transform Europe into a low-carbon, energy-efficient economy."

The package asks governments to spend some of the revenue from ETS auctioning on climate-related measures, to ease the introduction of green policies in a range of non-ETS sectors. EU-wide measures, such as the recently proposed regulation on carbon dioxide and cars, should also help bring down emissions in Member States. Revenue raised from auctioning could reach €50 billion annually by 2020.

A biofuels target is also included. By 2020, 10% of transport energy is to come from biofuels, for which the directive mentions clear sustainability criteria.

Renewables on the rise

Another key component of the package is the proposal for a directive promoting renewable energy. Today's renewable energy targets are indicative: the proposal is to make them mandatory in the energy mix by 2020.

Renewable energy currently makes a modest contribution to the energy mix, and accounts for just 8.5% of the EU's final energy consumption. The proposal raises that to 20% by 2020. Member States have separate targets here too, which are also calculated on the basis of relative economic development.

The potential for renewables varies from country to country, and the Commission proposals take account of this. The flexible system of Guarantees of Origin will enable Member States to move their investments in renewable energy to other Member States, where renewables can be produced at a lower cost. The system is optional and not intended to replace existing national renewable polices, but it has considerable potential. According to one Commission estimate, transferability in the renewables certificate trading market could generate savings of €8 billion.

A separate component of the package includes the creation of a legal framework for carbon capture and storage. The framework sets out safety and environmental guidelines for this promising technology.

While the EU has unilaterally agreed to a 20% reduction in its emissions, it sees a need for a more ambitious figure. The EU target will be raised to 30% if international partners accept a similar goal. Increased use of CO_2 credits from project-based mechanisms will be allowed under such an increase.

Cost and benefits

The proposals will require considerable investment in renewable energy and other GHG mitigation measures. The Commission estimates the up-front costs of the package to be in the region of €90 billion, equivalent to slightly less than 0.6% of GDP annually.

If that cost appears high, it should not be forgotten that implementing the package will bring major co-benefits. A significant reduction in air pollution will bring tangible improvements in health, and an expansion of EU renewable energy technologies will lower our dependence on energy imports (estimated at €50 billion), creating numerous jobs in exportable low-carbon sectors. Europe will consolidate its position as a global leader on climate change.

FIND OUT MORE

Climate action and renewable energy package
http://ec.europa.eu/environment/climat/climate_action.htm

EU Emission Trading System
http://ec.europa.eu/environment/climat/emission.htm

The future of EMAS

The Eco-Management and Audit Scheme (EMAS) and the Eco-label are EU tools for improving the environmental performance of organisations, products and processes. Launched back in 1995, their application has grown but they are still poorly known. The European Commission is revising both tools and wants more organisations to use them. Two industry partners recount their experience of using EMAS.

THE VIEWPOINT OF AN EMAS-REGISTERED COMPANY

Dr Michael Schemmer
Senior Director Occupational Health, Safety & Environment, Bombardier Transportation

"As the world's largest rail equipment manufacturer, Bombardier Transportation continually strives to improve the environmental performance of its processes and products. The company, which is headquartered in Berlin, Germany, has been a registered Eco-Management and Audit Scheme (EMAS) organisation since 1995.

EMAS has been extremely useful for us. Although only around one in four of our 42 sites are registered, this corresponds to 40% of our total number of European employees. We apply the main benefits of EMAS – such as auditing legal compliance, demonstrating improvements in performance, transparency for external parties, and links to product environmental performance – in all our facilities worldwide. Environmental legal compliance checks for individual non-EU sites are more expensive to do, because they are not integrated in the EMAS audit. On the product side, for example, our company produced the railway industry's first environmental product declaration (EPD) to be validated externally according to EMAS.

We believe EMAS could and should be improved. Some of its tools are not suitable for small firms, its link to products is still too weak and use of the scheme's logo remains restricted. To improve the current scheme's legal compliance, we recommend harmonising the accreditation and supervision for verifiers at a high level – as already happens in Germany and Austria. The scheme should also not become merely an environmental performance certification system. Provided no ranking systems are introduced, use of environmental key performance indicators (chosen from established standards such as the Global Reporting Initiative) would help to boost the image of EMAS as the best scheme on the market; this would increase its uptake and profile. For the same reason, EMAS should also be referred to more rigorously in EU and national legislation.

It would be a good idea to make the scheme mandatory for public bodies over a certain size and for organisations that receive EU funds. I would also suggest positioning EMAS as a one-stop solution for all environmental 'certification' issues, redrafting the regulation to make it easier for candidates to apply, and aligning and harmonising the scheme's procedures to standardise quality levels across Europe. Lastly, to highlight the benefits of EMAS to the public, why not provide better links between the scheme and products – through extended use of the scheme's label?"

The new EMAS proposal being scrutinised by the Commission is one of several initiatives linked under the Sustainable Consumption and Production package. The package also includes an Action Plan, Green Public Procurement and a further revision of the Eco-label regulation, whose flower logo adorns green products and services. If adopted, it should come into force by 2010.

EMAS registration requires organisations to evaluate, report and improve their environmental performance, which is verified and validated by an independent auditor. Participation is voluntary and extends to public or private organisations operating in the EU and the European Economic Area – Iceland, Liechtenstein and Norway.

A recent impact assessment underlined that the EMAS scheme stimulates organisations – originally just industrial companies, but since 2001 also services and public bodies – to make environmental improvements in areas such as waste, water and air pollution. It sets a high standard because it ensures legal compliance with environmental legislation and continual improvement of the environmental performance. It requires an environmental statement, which necessitates a validation procedure that must involve employees and has to be made publicly available.

Successful but poor uptake

Some 99% of the organisations that have signed up to EMAS report that they are happy with it and are making continual improvements in their environmental performance. Policymakers and regulators also see it as a useful tool for environmental management. But the scheme's uptake throughout the EU remains disappointing – with only 6,000 organisations registered.

The revision process for EMAS and Eco-label started in 2005. A study found that these schemes generate significant improvements in environmental performance and can lead to competitive benefits in terms of increased turnover, customer satisfaction and market share. But after 12 years of operation in Europe, both still suffer from a relatively low profile.

The authors of the study identified several barriers to the development of EMAS, including confusion about the way it works and legal requirements. Other problems include a lack of harmonisation for reporting systems, accreditation and verification, uneven promotion, marketing and support for the scheme among Member States, and the costs of implementation.

Coming improvements

The Commission believes that voluntary instruments are useful tools in the overall mix of environmental performance instruments, but that improvements are needed. EMAS needs to become more attractive and easier to implement, and several practical barriers need to be overcome. Improved legislation and more practical guidance about implementation will make the costs and benefits of these schemes clearer to organisations.

The planned improvements include advice on best available techniques for specific sectors. This year will also see the launch of practical brochures in all official EU languages, showing how a small business can become EMAS-registered for a reasonable cost in just 10 days. The publications are based on the EMAS Easy project.

"These schemes generate significant improvement in environmental performance and can lead to competitive benefits."

The Commission also plans more EMAS case studies, and will encourage Member States to provide greater financial incentives and more support to organisations interested in EMAS registration. ←

EMAS winners

- **Local authority in Kirklees, Scotland: three full-time staff on water purification**
- **Volkswagen, Wolfsburg: reduced fees on water conservation**

FIND OUT MORE

Eco-Management and Audit Scheme (EMAS)
ec.europa.eu/environment/emas/index_en.htm

European Association of Craft, Small and Medium-sized Enterprises
www.ueapme.org

Bombardier Transportation
www.transportation.bombardier.com

Global Reporting Initiative
www.globalreporting.org

THE BUSINESS ASSOCIATION VIEWPOINT

Cristina Marongiu
Senior Environmental Adviser, UEAPME

"Small and medium-sized enterprises (SMEs) make up 99.8% of European companies. These businesses struggle to keep up with ever-changing regulations. Indeed around three quarters of small firms are currently unaware of their environmental obligations and impacts, according to an October 2007 Communication from the European Commission.

The European Association of Craft, Small and Medium-sized Enterprises (UEAPME) believes that EMAS is a good tool to manage the environmental impacts of an organisation's activity. The scheme assists managers with clear allocation of responsibility, helps with the identification of potential for optimising cost-benefit balance and can improve a company's image.

However, the UEAPME suggests improvements in several areas. For example, when SMEs have to demonstrate that a management system is performing in accordance with the requirements defined in standards and regulations, the association insists that they should not have to document all procedures. The association believes that, in these cases, the verifiers should conduct the verification in such a way as not to impose unnecessary burdens on small organisations.

Official European guidance to verifiers on the verification of SMEs, particularly small and micro-businesses, states that not all EMAS procedures need to be documented and that procedures should be proportional. That is why the UEAPME agrees that local craft/trade chambers, SME organisations or other similar bodies should be allowed to carry out environmental audits. Indeed, audit and management reviews could be combined into one exercise – thus saving time and resources.

One of the main factors that discourages SMEs and craft businesses from participating in the scheme is the cost of implementing it. The association believes that EMAS could be made more attractive by linking the scheme to various incentives and rewards, such as tax credit and financial aids.

The UEAPME is an international non-profit body. As the European SME umbrella organisation, it has members representing over 11 million enterprises with nearly 50 million employees throughout Europe. It is a recognised European Social Partner."

Restoring nature's ebb and flow

River engineers are deliberately mimicking the effects of time and nature to restore the natural dynamics of a section of the Danube flood plain in Austria. The scheme is funded by the EU LIFE programme and focuses on a 3-kilometre stretch of the River Danube. It is designed to increase flood protection and conserve habitats and species dependent on a more natural river system, while enabling big barges to continue travelling along one of the world's busiest waterways.

With a total area of over 10,000 hectares, the Donau-Auen national park to the east of Vienna contains one of Central Europe's biggest and best-preserved regions of riverside lowland forest. But the section of the River Danube that passes through the park is also used intensively by river barges. This presented the park authorities with a considerable challenge: reconciling the need for nature conservation with the requirements of a modern navigable waterway.

"The solution that has been successfully tested for the last four years involves a global approach to river engineering."

The solution that has been successfully tested for the last four years involves a global approach to river engineering adapted to the specific requirements of this part of the River Danube. All the artificial elements that strengthen a 2.8-kilometre pilot stretch opposite the town of Hainburg on the left bank of the Danube have been removed, and nature is being allowed to take its course.

Natural river banks

The objective was to restore the natural structure of the river bank through erosion and accretion. Engineers wanted to allow the river to erode the existing steep bank to form a gently shelving shallow shore with localised cliffs where the bank had collapsed. Shingle and mud banks, collapsed sections of bank and other elements of the flood plain landscape, which had become rare, would then form once again on the main course of the River Danube.

Specific actions were also planned for the national park flood plains near the town of Orth. By deliberately steering national park visitors towards less sensitive areas away from the river, project participants hoped to create conditions favourable to recolonisation by large bird species such as white-tailed eagles and cormorants.

Improved ecology

The four-year project involved restoration work on a scale hitherto unseen on a large European river, a remarkable achievement given that the Danube east of Vienna is one of Europe's busiest shipping lanes. This work vastly improved the river dynamics and the ecological situation of the habitats and species within the project area. At least two new bird species – the sand martin (Riparia riparia) and the common tern (Sterna hirundo) – are now breeding in the area. Both are typically found on natural river banks and gravel banks.

Many other species living on natural flood plains will also benefit from the project, including fish, amphibians and insects. Closure of some of the forestry roads has made access to remote areas of the project site much more difficult, and this is expected to enhance the breeding success of large birds. The project also contributed to flood protection in the cities of Hainburg (Austria) and Bratislava (Slovakia).

Restoration of the river banks to a natural state began in July 2002. This project is part of a wider EU programme, LIFE-Nature, under which an earlier project in the national park concentrated on reconnecting cut-off river branches to the main river.

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FIND OUT MORE

Restoration of Danube river banks project website
www.donauauen.at

The state of nature

Biodiversity loss isn't just about species becoming extinct. It is also about the potential disappearance of countless ecosystem services vital for our survival, which the natural world provides for free. Two years ago the European Commission set itself the ambitious target of halting the loss of biodiversity in Europe by 2010. A progress report has just been published, looking back on the first 18 months.

In May 2006, the EU committed itself to halting biodiversity loss by 2010, and produced a detailed action plan to that end. A first report has now been completed that assesses implementation of the plan. It looks at EU-wide action during the 18 months that followed its adoption, and highlights both the good news and the tough challenges ahead.

On the positive side, the EU continues to develop its Natura 2000 network of conservation areas, the heart of the Community's biodiversity policy. In 2007, the network grew by 90,000 square kilometres – equivalent to the size of Portugal – through the addition of more than 4,250 sites across Europe, including sites in the ten countries that joined the EU in 2004. Sites from Romania and Bulgaria will be added in 2008.

Internationally, the Commission is continuing its efforts to promote implementation of the UN Convention on Biological Diversity (CBD). It is also addressing trade in illegal timber.

"The 'business as usual' scenario will probably not deliver on existing biodiversity goals."

But it's not all good news. Ensuring that biodiversity has a central place in bilateral development cooperation and in EU trade policies remains a constant challenge. The progress report also underlines the difficulties of measuring the effectiveness of biodiversity work, and of integrating biodiversity goals into other sectoral policies and creating links with climate change goals.

Climate change

Healthy ecosystems offer one of the best defences against the disruption to our natural world that will be brought by climate change. The report thus emphasises the need for practical implementation of the EU Biodiversity Action Plan, while acknowledging the risks for biodiversity of any climate change adaptation and mitigation measures.

Other EU biodiversity initiatives are now being prepared. They include a complete 'health check' on certain species and habitats in the Habitats Directive, for publication in 2009, and new European red data lists of threatened species.

Measures in hand

The Commission is preparing a framework on invasive alien species, which may include an early-warning system on this major threat to European biodiversity. Businesses across Europe are also becoming more involved in meeting the 2010 target, following a conference held in Lisbon last November. This will result in a new EU business and biodiversity technical support platform.

According to the report, most of the progress to date is connected with existing EU commitments, particularly in implementing nature and other environmental legislation. Most sobering of all is the implication that the 'business as usual' scenario will not deliver on existing biodiversity goals.

The proximity of 2010 means that the EU faces huge challenges in integrating its biodiversity targets into policy for areas such as agriculture, regional development, energy and transport, fisheries and trade. To remedy this, the Commission is stepping up efforts to develop a broader biodiversity agenda. This includes more communication to engage further public and business interest in the issue.

Three more annual reports will be published on progress towards implementing EU biodiversity goals, looking at work at both Community and Member State levels. The full report is available on the website below.

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FIND OUT MORE

DG Environment – biodiversity pages
http://ec.europa.eu/environment/nature_biodiversity/index_en.htm

SEBI 2010 – Streamlining European Biodiversity Indicators
http://biodiversity-chm.eea.europa.eu/information/indicator/F1090245995

Zooming in on fine particles

A new air quality directive will offer Europeans greater protection from exposure to particulate matter – tiny atmospheric pollutants generated mostly by industry and transport. The legislation will set binding standards for fine particulates for the first time, while offering Member States greater flexibility in their efforts to cut levels of larger particulates.

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Air pollution reduces life expectancy and causes serious health problems, including chronic bronchitis, respiratory problems and asthma. The enormous cost to the European economy in terms of human health is estimated to be somewhere between €427 and €790 billion a year. This new air quality legislation will reduce exposure to fine particulates which, together with ground-level ozone, are responsible for the premature death of around 370,000 persons across the EU every year.

The directive forms a central plank of the European Commission's 2005 Thematic Strategy on Air Pollution, which aims to develop realistic targets to improve the environment and human health before 2020. It streamlines existing EU air quality legislation and is being adopted by the Council at the time of writing.

"For air quality to improve, measures must be taken at community, national, regional and local levels."

Cleaner urban areas

While science does not at present enable us to set exposure limits with absolute certainty, there is ample evidence of the need to cut particle emissions. The Commission believes that its exposure reduction targets provide a more rational approach, as they focus more closely on urban background concentrations of particulates. This approach is more appropriate for large population areas such as towns and cities.

Particulate matter is classified into PM10, airborne particles smaller than 10 micrometres, and fine particles PM2.5, which are smaller than 2.5 micrometres (a micrometre is one millionth of a metre). The smaller PM2.5 particles are known to pose a greater risk to human health, although both are harmful.

Under the new legislation, Member States must ensure that PM2.5 concentrations do not exceed 25 micrograms/m3 by 2015 throughout their territory, and they also have a more stringent obligation to ensure that concentrations in urban areas are below 20 micrograms/m3 by 2015. The directive also calls for PM2.5 cuts in the region of 20% by 2020, in comparison to the urban exposure levels recorded in 2010.

A flexible approach

Existing EU air quality legislation sets standards for large particulates (PM10), which are currently not being respected in 26 Member States. The new directive acknowledges the difficulty European countries face in reaching the PM standards, and the Commission is introducing a more flexible approach to allow for this. Member States may postpone full compliance with the PM10 limit values for up to three years in parts of their territory, but they must demonstrate that the implementation of EU pollution legislation is well under way and that they are taking all appropriate measures to tackle air pollution.

The Commission and the Member States are working together to improve implementation of the directive. This may require agreeing a revised implementation timetable. Particular attention is being paid to helping Member States exchange best practices in air pollution abatement.

For air quality to improve, measures must be taken at community, national, regional and local levels. The Commission is also preparing community measures such as emission standards for new vehicles to reduce fleet emissions. It is, however, up to Member States to implement more focused measures such as low-emission zones in cities, by banning the most polluting vehicles from entering inner-city areas.

FIND OUT MORE

DG Environment – air quality pages
http://ec.europa.eu/environment/air/index.htm

Low-emission zones in Europe
http://environmentzones.eu

EEA report: Air pollution in Europe 1990-2004
http://reports.eea.europa.eu/eea_report_2007_2/en

Making international trade work for green goals

Negotiating multilateral agreements on liberalising trade in environmental technologies such as wind turbines, energy efficient lamps and waste recycling equipment is long and arduous. There is a growing international consensus that liberalisation would enable developing countries to have access to cheaper and more effective technologies to tackle the challenges they face in vital areas like wastewater treatment and climate change.

"Liberalisation could enable developing countries to have access to cheaper and more effective technologies to tackle the environmental challenges they face."

©EC

For the past five years, the European Community has being pushing hard to reduce or eliminate import tariffs and non-tariff barriers on environmental technologies, as part of the broader negotiations on the liberalisation of world trade in the World Trade Organisation's Doha Round. This work has been led by the European Commission's Trade Directorate-General and supported by DG Environment. Other members of the Organisation for Economic Co-operation and Development (OECD) such as the United States and Japan have also made an active contribution to the negotiations.

Trade barriers

The tariffs applied to environmental technologies in OECD countries are already low, generally around three or four percent. But average tariff levels are much higher in low and middle-income economies and least developed countries, where they are often between eight and ten percent. Some individual technologies face stiff import tariffs of up to 30% – and this constitutes a genuine impediment to trade. Other barriers, such as complicated customs procedures, technical specifications and public procurement requirements, can be equally dissuasive.

According to a recent study by the World Bank, eliminating high tariffs and removing non-tariff barriers could boost global trade in these technologies by as much as 14%. Coupled with demand-side measures such as environmental legislation or taxation, this growth in trade would therefore bring considerable environmental benefits.

Ongoing negotiations

Progress in the World Trade Organisation (WTO) talks in Geneva is hindered by developing countries' fears of being flooded by imported environmental technologies. China, for instance, is currently the world's leading exporter of fluorescent lamps and energy-efficient lighting, and is keen to protect its domestic producers from foreign competition. WTO negotiations focus on all forms of protectionism and are not limited merely to the environment.

Despite the difficulties, substantial progress has been made in better identifying technologies that can be properly classified as environmental. This is no mean feat, given the potential range of products involved. The initial list proposed included some 480 tariff lines and technologies. But this was gradually reduced by around two thirds and a consolidated list was finally agreed in 2006. Many items on the list, among them renewable energy technologies, have a direct application in the fight against climate change, as was highlighted in the study by the World Bank. This led the European Commission to renew its efforts to achieve a breakthrough in the trade talks on environmental technologies at the Bali climate change conference last November.

Whether such a breakthrough can be achieved over the next few months remains to be seen. Progress in this area of the negotiations ultimately depends on progress in the Doha Round as a whole. But multilateral talks are not the only weapon in the armoury, and the Commission is also exploring the scope for liberalising trade in environmental technologies in the context of the numerous bilateral and regional free trade agreements currently being negotiated, with Asian countries for example.

FIND OUT MORE

EU Multilateral Environmental Agreements
http://ec.europa.eu/trade/issues/global/environment/pr071207_en.htm

DOHA mandate on multilateral environmental agreements (MEA)
http://www.wto.org/english/tratop_e/envir_e/envir_negotiations_e.htm

The environment is on everyone's mind

The state of the environment is a major and growing concern for Europe's citizens. They are increasingly aware of its impact on their lives and support EU-wide action to protect it. These are the main conclusions of a Eurobarometer survey on attitudes to the environment. It also revealed a worrying disparity between green intentions and real action.

Eurobarometer surveys are among the most powerful tools we have for gauging the concerns of EU citizens. This latest study quizzed some 27,000 citizens in all Member States about their attitudes to the environment. It found that a vast majority, over 95%, agree that protecting the environment is "important", with two thirds of respondents saying it is "very important".

The green consumption gap

Three quarters of survey respondents are ready to buy green products, even if they cost more. But only 17% had done so in the month before the survey.

The survey highlights a growing realisation that environmental problems are global in nature. Europeans clearly believe that global problems need global solutions. Some two thirds (67%) prefer to see decisions on the environment made jointly within the EU rather than at national level. This preference is reflected in the large number (82%) of respondents who recognised a need for harmonised European environmental legislation.

Climate change

Climate change headed a list of people's top five environmental concerns. An absolute majority of 57% (up from 45% in 2004) cited this problem ahead of water pollution, air pollution and man-made disasters as their top concern.

Nearly 80% said they would like to see the EU help countries outside the European Union improve their environmental standards. A similarly high percentage, 78%, thought the EU should allocate more money to protection of the environment, even if this meant economic 'sacrifices' in other areas.

When asked about their quality of life, Europeans responded that economic factors have the greatest impact, followed by the state of the environment and then social factors. In 2004, the environment and social factors shared second place with 72%. Three years on, following the extensive debate on climate change, the environment was cited by 80%, relegating social factors to third position (76%).

"There is a worrying disparity between green intentions and real action."

Joint responsibility

Ninety percent of citizens agree that the primary responsibility for protecting the environment should lie with big polluters, although almost as many (86%) feel they also have a role to play as individuals. 'People power' was most evident in the Netherlands, UK, Denmark, Greece and Germany, with the highest proportions believing in individuals' responsibility to make a difference.

Most Europeans said they had done something for the environment recently, which is a new finding, and on average they had taken 2.6 measures in the past month. The top three were recycling waste, lowering energy consumption and cutting water consumption. But a woefully low percentage had made 'active' choices such as using the car less or buying environmentally friendly products (17%). The best intentions, it seems, rarely translate into concrete actions.

The survey was conducted in late 2007. It complements a recent Eurobarometer survey into Europeans' attitudes to biodiversity.

FIND OUT MORE

Eurobarometer, Attitudes of European citizens towards the environment
http://ec.europa.eu/public_opinion/archives/ebs/ebs_295_en.pdf

Eurobarometer, Attitudes of European citizens towards the issue of biodiversity
http://ec.europa.eu/public_opinion/flash/fl_219_en.pdf

agenda

MAY//JUNE

7-9 May 2008
CARBON EXPO 2008, Cologne, Germany. The fourth international trade fair and conference for the emerging CO_2 market will bring together companies, service providers and government representatives that are involved in this market.

www.carbonexpo.com

12-16 May 2008
Fourth meeting of the Parties to the Cartagena Protocol on Biosafety, Bonn, Germany. The meeting will address the role of the Protocol in harmonising international standards on the handling, transport, packaging and identification of genetically modified organisms (GMOs).

www.cbd.int/biosafety/default.shtml

20-21 May 2008
Fourth Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context – the 'Espoo (EIA) Convention', Bucharest, Romania.

www.unece.org/env/eia/eia.htm

22 May 2008
International Day for Biological Diversity. This year the IBD celebrates the links between agriculture and biodiversity.

www.cbd.int/ibd/2008/

24-26 May 2008
G8 Environment Ministers Meeting, Kobe, Japan. This meeting will focus mainly on the themes of climate change, biodiversity and the '3Rs' (Reducing waste, and Reusing and Recycling resources).

www.env.go.jp/earth/g8/en/index.html

19-30 May 2008
Ninth meeting of the Conference of the Parties to the Convention on Biological Diversity, Bonn, Germany. Participants will assess progress towards the target of reducing global biodiversity loss by 2010.

www.cbd.int/default.shtml

3-6 June 2008
Green Week, Brussels, Belgium. This year's theme is 'Only one Earth, don't waste it!' The Green Week 2008 will highlight waste management, sustainable consumption and production.

ec.europa.eu/environment/greenweek/home.html

5 June 2008

World Environment Day. Climate change is the main theme of this event, as expressed by its slogan: 'Kick the Habit! Towards a Low Carbon Economy'. The main international celebrations will be held in New Zealand.

ec.europa.eu/environment/greenweek/home.html

9-11 June 2008
Water Pollution 2008, Alicante, Spain. The 9th International Conference in the series on Modelling, Monitoring and Management of Water Pollution will provide a discussion forum for scientists and managers working in different aspects of water pollution.

www.wessex.ac.uk/conferences/2008/water08/index.html

11-13 June 2008
Third Meeting of the Parties to the Aarhus Convention, Riga, Latvia. The meeting is expected to consider the adoption of a long-term strategic plan for the Convention.

www.unece.org/env/pp/

TO FIND OUT ABOUT RECENT LEGISLATIVE PROPOSALS GO TO:

eur-lex.europa.eu/en/index.htm

Science for Environment Policy – DG Environment News Alert Service

In addition to Environment for Europeans, DG Environment also offers more specialised news services. Science for Environment Policy is a free news alert service that provides up-to-date scientific information on the environment. Every week, half a dozen articles present a selection of research projects and scientific findings. The service also includes some 10 thematic issues each year centred around a specific policy-related environmental domain, such as biofuels or sustainable consumption.

Subscribe now to the News Alert Service:

ec.europa.eu/environment/integration/research/research_alert_en.htm

news in brief...

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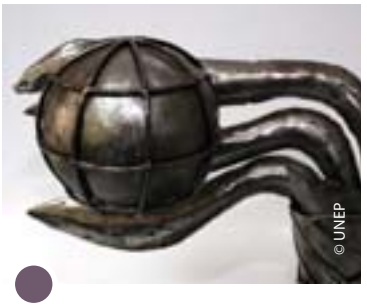

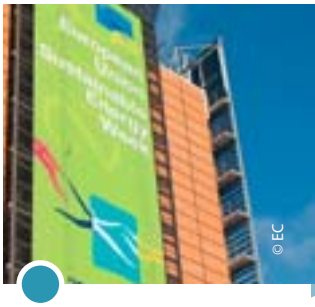

STREAMLINING THE SHARING OF ENVIRONMENTAL DATA

In February 2008, the European Commission proposed the basis for a future Shared Environmental Information System (SEIS). This would integrate – in a decentralised and electronic network – several existing instruments for collecting environmental data, such as WISE, EIONET and GMES. The system would reduce the reporting burden on organisations and facilitate the dissemination of relevant and reliable information to policymakers and citizens.

SEIS would bring numerous benefits, including real-time information on the environment. It would also avoid duplication of data gathering and reduce monitoring and reporting costs. Improvements to policymaking and implementation would be noted in areas like water shortage prevention, ecosystems and biodiversity preservation, and adaptation to climate change. European citizens, it is hoped, would become more involved in environmental information processes, because they would receive such information more quickly and in their own language. The EU would provide financial support through the Research Framework Programmes, LIFE, the Competitiveness and Innovation Programme, and the Structural Funds. The Commission will present an implementation plan for SEIS later this year.

Find out more:

Shared Environmental Information System website
http://ec.europa.eu/environment/seis/index.htm

CLIMATE CHANGE IS KEY FOR UNEP'S 2008 CHAMPIONS OF THE EARTH

The United Nations Environment Programme (UNEP) recently designated this year's seven Champions of the Earth for their environmental achievements. Most of them are linked to tackling climate change.

At a ceremony held in Singapore on 22 April, the Champions of the Earth prizes were awarded to personalities from around the world who have shown outstanding leadership on environmental issues. This year's winners include Dr Balgis Osman-Elasha, a Sudanese member of the Intergovernmental Panel on Climate Change, Helen Clark, New Zealand's Prime Minister, Dr Atiq Rahman, an international specialist on sustainable issues from Bangladesh, Timothy E. Wirth, the US-based President of the United Nations Foundation and Better World Fund, Liz Thompson, a former Minister of Energy and the Environment of Barbados, Abdul-Qader Ba-Jammal, a former Prime Minister of Yemen, and Prince Albert II of Monaco.

Find out more:

UNEP Champions of the Earth website
www.unep.org/champions/

CLEAN SKY PROJECT TAKES OFF

The 'Clean Sky' Joint Technology Initiative (JTI) was launched on 5 February to support the development of cleaner, quieter and more efficient aircraft. By 2020, the European Commission expects the project to lead to a 50% reduction in carbon dioxide (CO_2) emissions and an 80% reduction in nitrogen oxide (NO_x) emissions, and a halving of external noise from aircraft movements.

Clean Sky aims to balance competitiveness, innovation and the environment. It is the largest European research project ever undertaken, and has a total budget of €1.6 billion, with equal contributions from industry stakeholders and the European Commission's 7th Framework Programme (FP7) for research. JTIs are a new funding instrument under FP7 and Clean Sky is the second such initiative to be set up. It brings together more than 80 organisations from 16 countries, including companies, research centres and universities.

Find out more:

Clean Sky website
www.cleansky.eu

EU SUSTAINABLE ENERGY WEEK 2008 HIGHLIGHTS CIVIL SOCIETY AND LOCAL ACTORS

During the second European Union Sustainable Energy Week, more than 100 public and private organisations staged over 70 events in eight countries under a common banner: 'Take a week to change tomorrow'.

The main goal was to exchange experiences and ideas about tackling climate change through energy efficiency and renewable energy. Between 28 January and 1 February, meetings, debates and showcases relating to energy issues alternated with other events, such as the Sustainable Energy Europe Awards 2007/2008 and the launch of the Covenant of Mayors, an ambitious project undertaken by the cities and towns of Europe to face climate change. High-level conferences also stressed the important role that civil society organisations and the private sector can play in making a success of European energy and climate change policy.

Find out more:

EU Sustainable Energy Week website
www.eusew.eu/index.cfm

Publications Office
Publications.europa.eu