



UNEP

GRID

Arendal

UNEP/GRID-Arendal Annual Report 2001

Greeting from UNEP's Executive Director, Klaus Töpfer and Børge Brende, Norway's Minister of the Environment

In December 2001, GRID-Arendal was designated as an official UNEP Centre, becoming UNEP's key centre for producing information for decision-making.



I am delighted that GRID-Arendal and its skilled and highly professional staff have become a full-fledged UNEP centre. It will now be seen as a model of how a non-profit body, with strong Government support, can make an important and effective contribution to the work of the United Nations. UNEP/GRID-Arendal is now better positioned to meet new and emerging challenges in the field of environmental information. I am confident that this new official designation signals a significant milestone in the development of UNEP's capacity and reputation for providing timely, high quality environmental information, for use by the UN, governments, key decision- and policy-makers, civil society and the general public.

International environmental governance for sustainable development, must be strengthened and the leading role of the United Nations acknowledged. It is necessary to give the UN the strength to become a powerhouse for the environment. In this respect it is crucial to invigorate the United Nations Environment Programme (UNEP). I am pleased that the Global Ministerial Environment Forum/Special Session of UNEP Governing Council held in Cartagena in February 2002 agreed that further consideration should be given to strengthening UNEP's scientific base also through the Intergovernmental Panel for assessing Global Environmental Change, a Strategic Plan of Action for Implementation Support and last but not least, an agreement to improve the financing of UNEP. Our support to GRID-Arendal is part of our efforts to strengthen UNEP's capacity to undertake these new challenges.

Klaus Töpfer
Executive Director
UNEP

Børge Brende
Minister of the Environment
Norway

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On the cover:

This Landsat 7 satellite image of the Lena Delta won the 1st prize from the International Cartographic Association at the International Map Exhibition in Beijing in 2001. On August 12, 1996, the Russian Republic of Sakha (Yakutia) significantly expanded the Lena Delta State Nature Reserve. At 14,330 square kilometres, the Lena Delta was already one of the largest and most important nature reserves in the Arctic. With a new size of 61,320 square kilometres, the expanded Lena Delta Reserve is now the largest protected area in Russia and one of the largest in the world.

GRID-Arendal and the Norwegian Mapping Authority's Environmental Unit produced the satellite image map.



This annual report used to store milk and juice.

It has been printed on recycled milk and juice cartons. The entire paper production process has sustainability and a clean environment as a goal: Few chemicals are used, the water is reused and the use of electricity is kept to a minimum.

Annual highlights

In its 13th year of operation GRID-Arendal became an official UNEP Centre with a focus on information for decision-making.

During 2001, further steps were taken to strengthen our support to UNEP when GRID-Arendal was designated an official UNEP Centre by Dr. Klaus Töpfer, Executive Director of UNEP, during his visit to Oslo in December.

Under this agreement GRID-Arendal will, in addition to being UNEP's Key Polar Centre, also become UNEP's Key Centre for Information for Decision-making. The specific objectives and tasks of this decision will be elaborated during 2002.

Among our 2001 results and achievements, we would like to highlight:

- Our prominent role in the preparation of the Inter-governmental Panel on Climate Change (IPCC) Third Assessment Report;
- Our increased co-operation with the Secretariat for the Climate Change Convention in Bonn and with the Secretariat of the Aarhus Convention in Geneva, paving the way for further co-operative projects to be agreed upon during 2002;
- Our role as one of UNEP's key partners in the development of UNEP's main web portal to environmental information: www.UNEP.Net;
- Our preparation of the Arctic sections of UNEP's Global Environment Outlook (GEO-3) to be launched in May 2002;
- Our 1st Prize awarded at the International Map Exhibition in Beijing for the satellite map of the Lena Delta, which was prepared in co-operation with the Norwegian Mapping Authority;
- Our 3rd Prize for "Climate Change GIS" awarded at the global ESRI/National Geographic Society contest on GIS applications.

Staff development initiatives and teambuilding exercises were important elements of our annual goals and performance indicators for 2001. We are very pleased that we are able to attract and retain very competent and highly motivated staff from many different countries, as well as register wide international attention and a large number of highly qualified applicants to our vacancy announcements.

We would like to thank our growing network of partners, donors, users and the leadership and staff within UNEP for the progress made during 2001. In particular, we would like to express our special gratitude to our Board members for their sage advice and guidance on how to ensure a continuingly stronger institutional performance.



Handwritten signatures in black ink, corresponding to the names below. The signature on the left is 'Leif E. Christoffersen' and the one on the right is 'Svein Tveitdal'.

Leif E. Christoffersen
Chairman of the Board

Svein Tveitdal
Managing Director

Report of GRID-Arendal's Board of Directors

As a follow-up to the formulation during 2000 of an operational strategy for GRID-Arendal for the period up to year 2005, the Board of Directors of GRID-Arendal discussed and approved during 2001 vision and value statements for the foundation. During 2001, the Board also considered the strategic importance of environmental education and agreed that resources should be used to examine the merits of GRID-Arendal working closely with the United Nations University (UNU) for such a purpose. Through partnership arrangements with national and international academic institutions, GRID-Arendal would explore the idea and feasibility of establishing a new node of the UNU in Arendal. Such a node could offer internationally relevant courses through remote education (Virtual University) that are built on GRID-Arendal and other UNEP products and services.

The Board also focused attention on the ongoing communication tasks, which GRID-Arendal agreed to take on at the request of UNEP with regard to the UNEPnet/Mercure communications systems. Since the present agreements officially came to an end in 2001, the Board made it known to UNEP that GRID-Arendal should not continue to carry out these functions, unless they remained effective and cost-competitive and unless a new long-term project agreement was wanted by UNEP. At the end of the year it became clear that UNEP was being offered attractive communication services through the UN in New York so that GRID-Arendal's role should be terminated during 2002.

GRID-Arendal has also provided technical support to UNEP in the formulation of a worldwide Information and Communication Strategy for UNEP and agreed to a continuation of these services. The Board found it important to ensure closer operational links with UNEP and agreed with the

two proposals from UNEP to designate GRID-Arendal as an official UNEP Facility and to establish the foundation as a key center (of excellence) for information services.

The second meeting of the GRID-Arendal Board-appointed Advisory Panel took place in June. It continued to focus attention on how to measure and ensure the impact of environmental information on decision-making processes.

The Board also discussed the use of core funding and encouraged GRID-Arendal management to concentrate such funding on innovative approaches to key strategic issues. It also considered issues related to bringing about closer linkages between annual work programs and budgets. It continued to explore options related to a further strengthening of the management capacities of the foundation.

The GRID-Arendal strategy sets forth how GRID-Arendal can provide environmental information, communications, and capacity building services for information management and assessment related to the UN system, particularly the United Nations Environment Programme. While most of GRID-Arendal's activities are operated from its headquarters in Arendal, it continues to conduct some key activities from office locations in Stockholm, Sweden and from Geneva, Switzerland. Its office in Ottawa, Canada has been discontinued, and it has established a modest technical support service unit to UNEP in Nairobi, Kenya. The Board is fully satisfied that the foundation has a sound organisational structure and effective management.

The working conditions within the foundation were found to be good. The sick leave in 2001 amounted to 1% of the total working days. There were no injuries to staff in 2001, and there were no significant damages to the equipment of the foundation.

Leif E. Christoffersen
Chairman of the
GRID-Arendal Board
Norway

Eva Thörnelöf
Deputy Director
MISTRA/Foundation for
Strategic Environmental Research
Sweden

Hanne Kathrine Petersen
Director
Danish Polar Center
Denmark

Anu Pärnänen-Landtman
Councillor
Global Environmental Affairs
Department for International
Development Cooperation
Unit for Sectoral Policy
Ministry of Foreign Affairs
Finland

Øystein Dahle
Board Chairman of the
World Watch Institute
Washington
Norway



Lars Kristoferson
Secretary-General
World Wide Fund for
Nature (WWF)
Sweden

Timothy W. Foresman
Director
Division of Early Warning
and Assessment
UNEP Headquarters
Kenya

Kari Elisabeth Fagernæs
Head
Section of Environmental
Assessment
Norwegian Pollution
Control Authority
Norway

Hans Alders
Commissioner of the
Queen
Province of Groningen
The Netherlands

Odd Rogne
Executive Secretary
International Arctic
Science Committee
Norway

There were regular staff meetings between staff and management where issues concerning working conditions were discussed. The GRID-Arendal staff participated in a job satisfaction survey in 1998, 1999 and 2001. The results from these surveys indicate that the overall job satisfaction index rose from 67% in 1998 to 71% in 1999. The result remained the same in 2001. Areas that according to this survey should be considered for improvement include stress, teamwork and feedback to staff.

Consistent with its overall institutional objective, we are pleased to report that the foundation does not conduct activities that damage the environment, as defined by the Norwegian accounting law. As with similar organisations, GRID-Arendal uses energy, creates waste, consumes paper, and uses hazardous chemicals (e.g. in copying machines). However, efforts are being made to raise awareness among staff and reduce its ecological footprint through a "green office" policy. GRID-Arendal's policy is to use environmentally friendly materials and to reduce the accumulation of waste. The GRID staff tries to use environmentally friendly forms of transportation when possible. GRID-Arendal conducts activities that traditionally involve extensive international travel. The foundation has two video-conferencing studios

and encourages staff to utilise this means of communication whenever convenient to help reduce staff travel.

It is the Board's view that the annual accounts give a fair view of the foundation's position as of end 2001. The project portfolio has been solid throughout 2001 and the cash flow has been good. The result for the year was NoK 2 465 002 compared with NoK 2 114 661 during the previous year.

The Board has concluded that the result for the year of NoK 2 465 002 will be added to the retained earnings. These earnings will be used solely to support the mission statement and long-term goals of the foundation.

As a non-profit foundation, a main financial goal of GRID-Arendal is to have an equity level equivalent to about half of the fixed operational cost. With the financial result achieved this year we note that it is now 55%. The Board considers the foundation to have a sound financial structure. The Board concludes that the foundation has a sound basis for continuing operations and for planning further strategy-relevant operational activities for several years into the future.

March 13, 2002



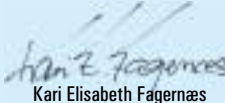
Leif E. Christoffersen



Hans Alders



Øystein Dahle



Kari Elisabeth Fagernæs



Tim Foresman



Lars Kristoferson



Hanne Kathrine Petersen



Anu Pärnänen-Landtman



Odd Rogne



Eva Thörmelöf

Financial statement

Balance (NoK) as of 31.12.2001		31.12.2001	31.12.2000
FIXED ASSETS			
MACHINERY AND EQUIPMENT	Note 2	697 421	453 378
SHARES, GEODATASENTERET A/S		100 000	100 000
PENSION FUNDS	Note 4	97 422	425 536
TOTAL FIXED ASSETS		894 843	978 914
CURRENT ASSETS			
ACCOUNTS RECEIVABLE TRADE	Note 5	13 534 757	4 849 829
OTHER RECEIVABLES		781 562	259 569
WORK IN PROGRESS	Note 6	4 648 377	4 709 911
INVESTMENTS IN SHARES	Note 7	1 648 141	1 924 242
BONDS	Note 7	300 000	629 174
PETTY CASH AND BANK ACCOUNTS	Note 8	8 975 232	6 627 602
TOTAL CURRENT ASSETS		29 888 069	19 000 327
TOTAL ASSETS		30 782 912	19 979 241
EQUITY			
PAID IN CAPITAL			
FOUNDATION CAPITAL		500 000	500 000
TOTAL PAID IN CAPITAL		500 000	500 000
RETAINED EARNINGS		11 738 157	9 273 155
TOTAL RETAINED EARNINGS		11 738 157	9 273 155
TOTAL EQUITY		12 238 157	9 773 155
SHORT TERM LIABILITIES			
ACCOUNTS PAYABLE TRADE		1 071 187	902 471
EMPLOYEE TAXES WITHHOLD, PAYABLE			
SOCIAL SECURITY ETC.		1 002 585	896 045
ACCRUED SALARIES AND VACATION FEES		1 366 317	1 008 630
OTHER CURRENT LIABILITIES		447 051	536 450
ADVANCE	Note 9	14 657 614	6 862 491
TOTAL SHORT TERM LIABILITIES		18 544 755	10 206 086
TOTAL EQUITY AND LIABILITIES		30 782 912	19 979 241

Notes

Note 1

BASIC PRINCIPLES - ASSESSMENT AND CLASSIFICATION - OTHER ISSUES

The financial statements, which have been presented in compliance with the Norwegian Companies Act, the Norwegian Accounting Act and Norwegian generally accepted accounting principles in effect as of 31 December 2001, consist of the profit and loss account, balance sheet, cash flow statement and notes to the accounts. In order to simplify the understanding of the balance sheet and the profit & loss account, they have been compressed. The necessary specification has been provided in notes to the accounts, thus making the notes an integrated part of the financial statements.

Profit and Loss Account (NoK)		2001	2000
OPERATING REVENUES			
OPERATING REVENUES		39 345 885	28 982 348
TOTAL OPERATING REVENUES		39 345 885	28 982 348
OPERATING EXPENSES			
PROJECT COSTS		16 428 813	11 640 567
PERSONNEL COSTS	Note 3	14 469 555	10 865 765
DEPRECIATION	Note 2	353 818	210 777
OTHER OPERATING EXPENSES		6 512 226	5 366 188
TOTAL OPERATING EXPENSES		37 764 412	28 083 297
OPERATING RESULT		1 581 473	899 051
FINANCIAL INCOME AND EXPENSES			
FINANCIAL INCOME		1 249 666	1 345 374
FINANCIAL EXPENSES		-366 137	-129 764
NET FINANCIAL ITEMS	Note 7	883 529	1 215 610
RESULT FOR THE YEAR		2 465 002	2 114 661

The financial statements have been prepared based on the fundamental principles governing historical cost accounting, comparability, continued operations, congruence and caution. Transactions are recorded at their value at the time of the transaction. Income is recognised at the time goods are delivered or services sold. Costs are expensed in the same period as the income to which they relate is recognised. Costs that cannot be directly related to income are expensed as incurred.

When applying the basic accounting principles and presentation of transactions and other issues, a "substance over form" view is taken. Contingent losses that are probable and quantifiable are taken to cost.

ACCOUNTING PRINCIPLES FOR MATERIALS ITEMS

Revenue recognition

Revenue is normally recognised at the time goods are delivered or services sold.

Cost recognition/matching

Costs are expensed in the same period as the income to which they relate is recognised. Costs that cannot be directly related to income are expensed as incurred.

Fixed assets

Fixed assets are entered in the accounts at original cost, with deductions for accumulated depreciation and write-down.

Assets are capitalised when the economic useful life is more than three years, and the cost is greater than NoK 15 000,-. Operating lease costs are expensed as a regular leasing cost, and are classified as an operating cost.

Depreciation

Based on the acquisition cost, straight-line depreciation is applied over the economic lifespan of the fixed assets.

Accounts Receivables

Trade receivables are accounted for at face value with deductions for expected loss.

Pension liability and pension costs

The company has a pension plan that entitles its members specific future benefits, called defined benefit plans.

Net pension cost, which consists of gross pension cost, less estimated return on plan assets adjusted for the impact of changes in estimates and pension

plans, are classified as an operating cost, and is presented in the line item payroll and related cost.

Note 2

MACHINERY AND EQUIPMENT

Purchase Value 01.01.01	NoK 3 023 989,-
Added this year	NoK 597 862,-
Accumulated depreciation 31.12.01	NoK 3 621 851,-
Book Value 31.12.01	NoK 697 421,-
Depreciation this year:	NoK 353 818,-

Note 3

SALARY COSTS

	2001	2000
Salary and holiday pay	NoK 10 733 783,-	NoK 8 543 454,-
Employer's contribution	NoK 1 559 628,-	NoK 1 272 727,-
Other personnel costs	NoK 2 176 144,-	NoK 1 049 548,-
Total	NoK 14 469 555,-	NoK 10 865 765,-
Average no of employees	35	30
Salary to Managing Director in 2001	NoK 588 571,-	
Fee to Chairman of the Board in 2001	NoK 33 000,-	
Fee to other Board members in 2001	NoK 102 000,-	

The audit fee for 2001 was NoK 39 000,-. Fees for other services provided by the auditor totalled NoK 29 500,- that related to individual project audits.

Note 4

PENSION FUNDS

The premium for the year, NoK 796 105,- was charged as personnel costs. The yield from the pension premium fund of NoK 136 702,- is included under financial income. In addition the pension funds included pension funds paid for the Managing Director.

Value 01.01.01	NoK 425 536,-
Premium paid from value	NoK 559 702,-
Pension Managing Director	NoK 94 700,-
Yield	NoK 136 702,-
Value 31.12.01	NoK 97 422,-

Note 5
ACCOUNTS RECEIVABLE TRADE

Accounts receivables are included in the accounts at face values. Unpaid accounts of NoK 550,- are debited during the year to the profit and loss account.

Note 6
WORK IN PROGRESS

Work in progress carried out and costs incurred, not invoiced at the year-end, related to 29 projects, and costs incurred amounted to a total of NoK 4 648 377.

Note 7
SHORT TERM INVESTMENTS

<i>Unit trust</i>	<i>No. of units</i>	<i>Purchase cost</i>	<i>Market value</i>
Skandia Grønt Norden	1 525,22215	NoK 992 063,-	NoK 611 116,-
Skandia Miljøinvest	24 265,6368	NoK 992 063,-	NoK 1 126 763,-
Earthprint Ltd	3500	NoK 44 961,-	NoK 44 961,-

The Unit trust fund, Skandia Grønt Norden, is written down to its market value, and the loss of NoK 321 062,-, is included under financial expenses. Skandia Miljøinvest and Earthprint Ltd are valued at their purchase cost.

Bond
Market value

Buskerud Energi NoK 300 000,-

Note 8
PETTY CASH AND BANK ACCOUNTS

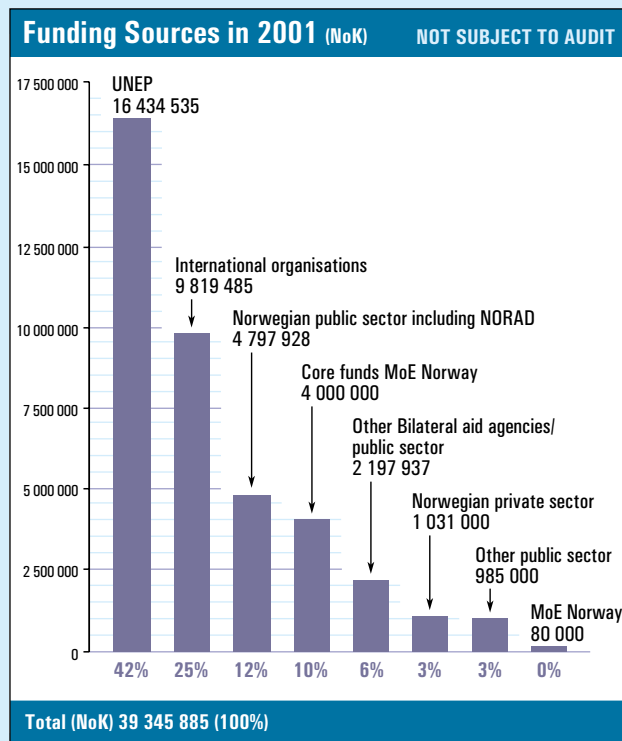
NoK 446 452,- of the total cash at bank is restricted to meet the liability arising from payroll taxes withheld.

Note 9
ADVANCE

Work in progress invoiced on account and advances at the year-end related to 45 projects and amounted to a total of NoK 14 657 614,-.

Cash Flow Statement (NoK)	2001	2000
CASH FLOW FROM OPERATING ACTIVITIES		
RESULT OF THE YEAR	2 465 002	2 114 661
DEPRECIATION	353 818	210 777
WRITE-DOWN OF FIXED ASSETS	321 062	59 885
CHANGES IN INVENTORY, ACC RECEIVABLES AND ACC PAYABLE	-659 555	-3 753 374
CHANGES IN OTHER BALANCE SHEET ITEMS	180 952	566 847
NET CASH FLOW FROM OPERATING ACTIVITIES	2 661 279	-801 204
CASH FLOW FROM INVESTING ACTIVITIES		
PURCHASE OF TANGIBLE FIXED ASSETS	-597 862	-378 110
PROCEEDS FROM SALE OF OTHER INVESTMENTS	329 174	0
PURCHASE OF OTHER INVESTMENTS	-44 961	-116 117
NET CASH FLOW FROM INVESTING ACTIVITIES	-313 649	-494 227
NET CHANGES IN CASH AND CASH EQUIVALENTS	2 347 630	-1 295 431
CASH AND CASH EQUIVALENTS 01.01	6 627 602	7 923 033
CASH AND CASH EQUIVALENTS 31.12	8 975 232	6 627 602

As of 12.2001 1 USD = NoK 9,03
1 EURO = NoK 7,98





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To the GRID - Arendal Foundation

AUDITOR'S REPORT FOR 2001**Respective Responsibilities of Directors and Auditors**

We have audited the annual financial statements of the GRID - Arendal Foundation on pages 8-10 as of 31 December 2001, showing a profit of NOK 2.465.002. We have also audited the information in the Board of Directors' report on pages 5-7 concerning the financial statements, the going concern assumption, and the proposal for the appropriation of the profit. The financial statements comprise the balance sheet, the statements of income, cash flows and the accompanying notes. These financial statements and the Board of Directors' report are the responsibility of the Foundation's Board of Directors and Managing Director. Our responsibility is to express an opinion on these financial statements and other information according to the requirements of the Norwegian Act on Auditing and Auditors.

Basis of Opinion

We conducted our audit in accordance with the Norwegian Act on Auditing and Auditors and auditing standards and practices generally accepted in Norway. These standards and practices require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant accounting estimates made by management, as well as evaluating the overall financial statement presentation. To the extent required by law and auditing standards and practices an audit also comprises a review of the management of the Foundation's financial affairs and its accounting and internal control systems. We believe that our audit provides a reasonable basis for our opinion.

Opinion

In our opinion,

- the financial statements have been prepared in accordance with law and regulations and present the financial position of the Foundation as of 31 December 2001, and the results of its operations and its cash flows for the year then ended, in accordance with accounting standards, principles and practices generally accepted in Norway
- the Foundation's management has fulfilled its obligation in respect of registration and documentation of accounting information as required by law and accounting standards, principles and practices generally accepted in Norway
- the information in the Board of Directors' report concerning the financial statements, the going concern assumption, and the proposal for the appropriation of the profit is consistent with the financial statements and comply with the law and regulations.

Arendal, 13 March 2002
KPMG AS

Torger H. Høist

State Authorized Public Accountant

Note: This translation of the Norwegian statutory Audit Report has been prepared for information purposes only

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& Thornton

Stout
Lieberman
Friedberg
Kohn
Bassett



Key Polar Centre for UNEP

As the Key Polar Centre for UNEP a main focus for GRID-Arendal is the Arctic region. In 2001 we worked closely with Arctic Council working groups, Arctic Parliamentarians, indigenous peoples and polar researchers to produce environmental information for and about the Arctic region.

UNEP's Environmental Outlook on the Arctic

The forthcoming UNEP Global Environment Outlook report for 2002 looks at environmental problems from a regional perspective. The Arctic sections of this report were developed in co-operation with representatives from the Arctic Council, indigenous peoples, governmental agencies and independent experts and then compiled by GRID-Arendal.

The UNEP Global Environment Outlook Project addresses five questions answered in the GRID-Arendal polar sections:

- What are the major regional and global environment problems, both current and emerging?
- What are the major demographic, social, and economic driving forces behind the observed problems and trends?
- Where are we heading if we continue doing business as usual?
- Where do we want to be heading?
- What is being done to address environment concerns and what can be done in the future to move forward on the path of sustainable development?

The Arctic: the world's thermometer

The Arctic is one of the first regions to show visible effects of climate change according to most climate scenarios. Changes are expected to be rapid and severe. Contaminants produced in many nations arrive in the Arctic via wind and water currents. The level of persistent organic pollutants (POPs) as well as heavy metals accumulated in animals and plants, which are used as traditional foods, are alarming problems in the Arctic.

A rich diversity of indigenous peoples, adapted to life in one of the harshest environments on earth, is a striking feature of the Arctic. Both traditional lifestyle and biodiversity is dependent on a healthy ecosystem including large tracts of undisturbed nature. These wilderness areas are now at risk of being divided into small, less diverse pieces by infrastructure development, which supports the exploitation of natural resources.

These issues were identified as key features of the Arctic at an expert meeting in Arendal, where the Arctic content of the coming GEO-3 report was discussed.

Environmental threats in the Arctic:

- POPs
- Heavy metals
- Radioactivity
- Biodiversity loss
- Climate change affecting ecosystems
- Land use, fragmentation
- Resource exploitation

Fishing is a major subsistence activity in the Lena Delta region (see cover photo).



Ten years of Arctic Environmental Protection Cooperation

In June, the Finnish town of Rovaniemi hosted the celebration of the 10th anniversary of the Arctic Environmental Protection Strategy (AEPS). The AEPS was the starting point of a new area of co-operation on Environment and Sustainable Development in the Arctic. As a tribute, the World Wide Fund for Nature (WWF), the Arctic Centre in Rovaniemi and UNEP/GRID-Arendal produced the exhibition "Arctic Rings of Life" featuring key environmental values and challenges of the Arctic. The key role of the Arctic Indigenous Peoples was emphasised.



"The Arctic is the world's last huge mainly pristine nature system. The challenge is to secure sustainable development in this region, without compromising the value of the unique nature", Klaus Töpfer, Executive

Director of UNEP, said to the ministers of the eight Arctic countries.



"Ten years ago in Rovaniemi, climate issues were more or less neglected. Only the NGOs raised their critical voices. Today, we are standing on firm scientific ground in dealing with challenges pertaining to

climate variability and change. According to the most recent report of the International Panel on Climate Change it is likely that the biggest temperature changes will take place in the Arctic", Paavo Lipponen, Prime Minister of Finland, said on climate change and its effects in the Arctic.

The world's last large wilderness area

Jointly with UNEP's World Conservation and Monitoring Centre (WCMC), we identified and made an overview of the 25 largest wilderness areas in the Arctic for the WWF. The maps give a visual impression of the state of the environment in this part of the world. The Arctic has been increasingly exposed to industrial exploitation as well as tourism. The growth in oil, gas and mineral extraction, transportation networks and non-indigenous settlements are increasingly affecting wildlife and the welfare of indigenous peoples across the Arctic. A considerable number of species of birds, mammals, and plants have already faced changes in their populations or breeding success. The wilderness maps and the derived poster (next page) is one example of several joint products and projects with, among others, the Arctic Council working group on Conservation of the Arctic Flora and Fauna (CAFF), WCMC, and WWF. These projects are aimed at informing policy-makers on key issues related to ecosystem health and management challenges in the Arctic.

Tracking man-made footprints in nature

In Rovaniemi we presented an analysis of the impact of human activity on the Arctic. The report highlighted that in comparison with most other areas of the world, the Arctic remains a well functioning ecosystem.

"Our greatest challenge today is to plan better for our common future. And one of our chief problems lies in communication and foresight. We simply need to clearly visualise and com-

unicate the long-term impacts of the growth in human resource use in a manner that is understandable", the UNEP Executive Director said in the foreword of the report.

The Global Methodology for Mapping Human Impacts on the Biosphere (GLOBIO) gives a scientific overview of human impacts on the environment. As part of this project, we produced a report focusing on the Arctic. A separate web site, www.globio.info, explains the GLOBIO methodology as developed in co-operation with different partners.



The findings in the GLOBIO project reveal that within 50 years, more than half of the Arctic land area may be impacted by human activities. This will most likely result in a substantial increase in environmental problems affecting habitats, biodiversity, food production, fresh water resources and health.

Arctic project development

We support Arctic collaboration through the development of Global Environment Facility (GEF) projects. These projects forge international co-operation and finance actions that address biodiversity loss, climate change and international waters. One such project is the Integrated Ecosystem Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in the Russian Arctic (ECORA). The aim of the project is to develop and implement integrated ecosystem management strategies in the Arctic. This project is developed in co-operation with the Russian Federation and the Arctic Council's working group on Conservation of Arctic Flora and Fauna (CAFF). A new proposal focusing on climate change effects on biodiversity in the Russian Arctic and adapting to these changes is being developed in co-operation with the Arctic Council Working Group on the Arctic Climate Impact Assessment (ACIA) and the Russian Federation and Academy of sciences.

Polar bear footprints in Hiorthamn, Adventfjorden on Spitsbergen/Svalbard.



Arctic information on the Internet

The Arctic Internet portal was the first operational portal that was launched as part of UNEP's main portal to environmental information, UNEP.Net. For more information go to: www.unep.net/arctic.

Access to information about how permafrost is responding to rising temperatures is crucial when countries in the Arctic will have to adapt to the impacts of global warming. Many global and Arctic scientific programmes have developed important datasets that now are being made easily accessible through GRID-Arendal's new interactive map service. This service provides easy access to, among others, a map of the current extent of permafrost (illustrated in blue). This map will act as a baseline of the Arctic's frozen soils. To interact with the maps, go to: maps.grida.no/arctic.



"I do not think it is radical to say that the map will become progressively less blue in the coming years", said Svein Tveitdal, Managing Director of GRID-Arendal.



Some interactive map themes:

- Topography
- Human impact
- Population density
- Land cover
- Protected areas
- Ecoregions
- Permafrost
- Geology
- Solar radiation
- Precipitation
- Soils

Oden, the Swedish icebreaker, sailed the Arctic Ocean with GRID-Arendal staff on board. Our staff observed how Norway collected data for future definition of marine boundaries according to the UN Convention on the Law of the Seas.



Photo Halfdan Carstens



Towards decision-making and public awareness

An important role for us is to help UNEP and our partners in communicating environmental issues. Ways to get this message across include raising public awareness and reaching decision-makers. We also provide direct support to international decision-making processes such as environmental conventions.

Support to conventions

Environmental conventions and Multilateral Environmental Agreements (MEAs) are important vehicles, bringing environmental issues to the international agenda. By supporting convention secretariats in communicating their information to the public, GRID-Arendal contributes to a better acceptance and consequently faster implementation of environmental conventions. GRID-Arendal supported the *Aarhus Convention* in developing a mechanism for servicing parties in need of assistance in implementing the convention. The purpose of the convention (covering the region of the UN Economic Commission for Europe (UNECE)), is to ensure access to information, public participation in decision-making and access to justice in environmental matters. We assisted as trainers in a workshop explaining the Convention in the Caucasus. For the UNECE, we

helped organise a meeting in Yugoslavia where representatives from different conventions explained the purpose and status of major global and European conventions to the Yugoslav government and NGOs.



Kofi A. Annan, Secretary-General of the United Nations said about the Aarhus Convention: *"Although regional in scope, the significance of the Aarhus Convention is global. It is by far the most impressive elaboration of principle 10 of the Rio Declaration, which stresses the need for citizen's participation in environmental issues and for access to information on the environment held by public authorities. As such it is the most ambitious venture in the area of 'environmental democracy' so far undertaken under the auspices of the United Nations."*

GRID-Arendal supported the *Convention on the Protection of the Marine Environment of the Baltic Sea Area (HELCOM)* in making easier access to environmental data and information from the Baltic sea region on the Internet, including the development of an interactive WebGIS featuring information on environmental hotspots, see maps.grida.no/hotspots and general environmental map information on the region, see maps.grida.no/baltic

Climate change can cause extreme weather events. In an effort to meet this challenge, 35 countries signed the Kyoto Protocol to limit greenhouse gas emissions. GRID-Arendal produced a set of emission graphics in co-operation with the secretariat of the *United Nations Framework Convention on Climate Change (UNFCCC)* for the 7th Conference of the Parties (COP-7) to the Convention, held in Marrakech, Morocco. The graphics show that many Annex 1 countries must make more effort to reach their commitments under the Protocol. To learn more about these graphics please go to: www.grida.no/db/maps/collection/climate6

Roads are often built through forests for industrial purposes, such as mineral exploitation, oil and gas interests. Uncontrolled development results in deforestation with subsequent erosion and loss of biodiversity. In 2001, GRID-Arendal produced maps and a report on the global methodology for mapping human impacts on the biosphere. International media such as *The Financial Times* and CNN ran our story.



Photo UNEP/George V. Carding

GRID-Arendal in the spotlight

Newspapers, TV and web sites are increasingly important tools in communicating the environmental message. We supply the media with information and story ideas, and we ask the readers to interact.

Our relations to the international media became stronger because of this constant flow of information from UNEP Headquarters to the media.

We are working closely with UNEP's media office in Nairobi to draw attention to Norway and the Nordic countries in UNEP's press releases and news, and to profile UNEP's information in the Nordic media. An example of this work is an article on the environmental disaster in Mesopotamia, where 90 per cent of the Mesopotamian marshland was lost due to damming and drainage. The media coverage resulted in well-written articles appearing in both Norwegian and Danish newspapers.

The Norwegian engineering community makes use of our information directly within their weekly magazine, *Teknisk Ukeblad*. In 2001 the magazine printed seven articles written by our staff, on topics ranging from the Aarhus Convention to climate change. The circulation of *Teknisk*

Ukeblad is 86000, which means that our messages have reached a broader audience. In 2002 we will continue to feed this magazine with articles.

We will also continue our now three-year old environment news web site, *MiljøNytt*. The site gathers all the main environmental news daily from more than 25 Norwegian newspapers and eight in Sweden, Denmark and Finland. News updates have improved in efficiency, bringing the freshest news to the site at 7.45 am every morning.



The Norwegian Environment Minister, Børge Brende, uses *MiljøNytt* in his everyday job. He says: "*I use MiljøNytt every morning to keep updated about environmental news in Norway. MiljøNytt provides me with a fast and broad overview of the topical environmental debate here and in our neighbouring countries. The web site is very useful to me in my work as Environment Minister.*"

The *MiljøNytt* concept has been expanded to apply to 11 countries in Africa, and is called Earthwire/Africa. The Internet template was designed in 2001 and 40 regional newspapers are scanned for environment articles on the site.

Impact of environmental information in 2001

Impact of Environmental Information on Decision-making Processes and the Environment, a GRID-Arendal Occasional Paper, explored interactions between information produced and the difference it may make in the real world; what the options are for increasing the impact of public environmental information; and where the influence of environmental information work has its limitations. The Paper has been very popular among environmental information reporters and specialists from UNEP and many other organisations.

GRID-Arendal supported UNEP's Division of Early Warning and Assessment in organising a panel discussion 'Information for Decision-Making: What is the impact of environmental information in the real world?', held as an event at UNEP's 21st Governing Council meeting. The panel featured participants from the international community, businesses, and public groups. The event has drawn much attention from country delegates.

A range of case studies on the impact of environmental information, drawn from the experience of GRID-Arendal and partner organisations, was continued. It featured a record

of UNEP's Balkan Task Force experience in reaching out to international media regarding an assessment of the post-conflict environmental situation in the region. Based on that and similar experiences, we are now developing a 'media tool kit' to incorporate into our capacity building programmes for national environmental assessments and reporting.

We hosted a workshop on environmental communication for GRID-Arendal, and invited experts from our partner organisations to learn tricks and techniques of effective communication. Experts included representatives from UNEP, Ogilvy Public Relations Worldwide, the Universities of Brussels and London, the International Institute for Sustainable Development, and the Regional Environmental Center for Central and Eastern Europe (REC). For more information go to: www.grida.no/impact.



Mary McKinley, REC's Communications Manager, said about this workshop: *"Thanks very much. My brief trip report generated so much interest here that I know my colleagues will be glad to look at the info on your site. I myself am printing out some of the slides and posting them around my office."*

UNEP's Balkan Task Force identified this fertilizer plant in Vlorë as an environmental "hot-spot" in Albania.





Photo UNEP/renan.P. Bittencourt

Strengthening institutions and information systems

A major role for GRID-Arendal is to help our partners strengthen their capacity to produce and distribute environmental information. We help strengthen and support environmental reporting in Norway, Central and Eastern Europe, Africa, Latin America and Asia.

Helping cities inform citizens

A well-known product is our Cities Environment Reports on the Internet (CEROI), which we expanded in 2001 to include cities as different as Geneva in Switzerland to Dushanbe in Tajikistan. CEROI is a programme, which helps cities put their environmental information on-line, with the help of a user-friendly reporting software. The end product shows the actual environmental situation in the city, the causes and consequences of that situation, as well as what action has been taken. GRID-Arendal provides technical, methodological and fundraising support. CEROI now consists of cities on the continents Africa, Europe and Asia, and we expect more to come in 2002 with the planned addition of Latin America and the Caribbean.

We also worked closely with the European Environment Agency (EEA) to adapt CEROI tools to European needs and European common indicators. Several of the European cities will be published on CEROI in 2002. For more information go to: www.ceroi.net

More State of the Environment reports have been added to the CEROI web page in 2001. Here cities report on e.g. access to clean drinking water; what is the level of air emissions; and what has and will be done about these issues. By filling in the same indicators, every country, city and municipality will be able to tell the public about the state of the environment, and compare data and solutions.

Building capacities in countries and regions

We supported the production of environmental information in Central and Eastern Europe and the Newly Independent States under the Environment and Natural Resources Information Networks Programme (ENRIN). ENRIN's role is to enhance the capacities of national institutions in developing countries and countries with economies in transition. In 2001 we helped Estonia, Albania, Romania, the Former Yugoslav Republic of Macedonia and Uzbekistan in producing user-friendly *State of the Environment (SoE)* reports, all of which are available on the Internet at www.grida.no/enrin.

Technical and managerial support has been given to the production of SoE reports in China and South Africa. In South Africa, SoE reports are produced both for the country as a whole and for different provinces. In both countries the support has developed into the establishment of UNEP-compatible national environmental information centres.

Work has commenced for Africa as a whole through the development of a new UNEP Programme to strengthen the capacity of African countries in environmental information management and in providing support to national, regional and global environmental assessments.

Selected workshops hosted or co-ordinated by GRID-Arendal in 2001:

Capacity building and participation of Russia's indigenous peoples in the sustainable development of the Arctic. 28-31/1, Kirkenes.

Information for Decision-Making: What is the impact of environmental information in the real world? 6/2. Nairobi.

Launch of UNEP.Net. 8/02. Nairobi.

Workshop on Transboundary GIS databases and their applications in the Baltic Sea region. 19-20/2. Stockholm.

Workshop of the Electronic Tools for the Aarhus Convention Task Force. 8-9/3. Arendal.

EEA working group on SoE guidelines and reporting. 22-23/3. Copenhagen.

SoE workshop for Norwegian counties including Publikit training. 29/3, 19/4 and 16/11. Oslo.

Workshop on a Virtual University for Environmental Sustainability. 24-25/4. Arendal.

Workshop on Mercure status and future situation. 21-22/5. Arendal.

Seminar on the accessibility, use of, and user demand for air quality information in Moscow. 5/6. Moscow.

Training in State of the Environment reporting on the Internet. 5-8/6. Bahamas.

Annual seminar of GRID-Arendal's Advisory Panel on the impact of environmental information on decision-making processes. 11/6. Arendal.

UNEP/DEWA's workshop on Global Environment Outlook and Integrated Environmental Assessment. 2-6/7. Arendal.

Workshop on Information Management and Reporting on the Environment and Sustainable Development in the Caspian Sea Basin. 5-7/7. Baku.

Workshop on the Arctic parts the GEO report. 30-31/7. Arendal.

ICT workshops with all UNEP Divisions evaluating UNEP's current ICT status and future needs. August-September. Nairobi.

Workshop on UNEPnet/Mercure. Five-year evaluation and future plans. 24-28/9. Arendal.

EEA working group on SoE guidelines and reporting. 11-12/10. Brussels.

Communication of environmental information workshop. 22-23/10. Arendal.

Second Aarhus Convention regional workshop for the South Caucasus region. 14-18/11. Yerevan.

Publikit Training Course for GIWA on scaling and scoping Electronic Reports. 23-25/11. Arendal.

For the Global International Water Assessment (GIWA) programme we conducted extensive training and provided technical assistance to five GIWA regions.

Last year of Mercure/UNEPnet telecommunications project

2001 was the last year of our successful five-year satellite communications project, UNEPnet/Mercure. Through easier access to the Internet, email, satellite phone lines and video-conferencing, the project intended to bridge the digital divide that exists between the developing world and the developed world. More than 5000 people depended on UNEPnet/Mercure for day-to-day dissemination of environmental information amongst partner locations. The project was closed because new and more easily accessible

Photo Lawrence Hislop





UNEPnet/Mercure satellite dishes in Arendal, Norway (left) and Nairobi, Kenya (right).

communications technology emerged over these five years in the countries connected to Mercure.

The Evaluation Report on UNEPnet/Mercure by consultants John Gilbert (John Gilbert and Associates) and John Townshend (Earth Quality Consultants) stated: *"UNEPnet has played an important role in the functioning of UNEP's environmental information systems ensuring that electronic connectivity could be established for many UNEP-sponsored establishments. This role was particularly important in the early days of the global internet when expertise, especially in developing countries, was often very limited."*

With the expertise gained in the Mercure project, we developed an Information and Communications Technology Strategy (ICT) for UNEP. The strategy is aligned with UNEP's vision, mission and programme of work. It is geared towards allowing UNEP to release the potential held within the organisation's information, processes, people and systems, thereby helping UNEP to fulfil its mandate and charter.

ICT is increasingly the medium through which modern human networks function, and it is vital that UNEP makes full use of all that ICT has to offer.

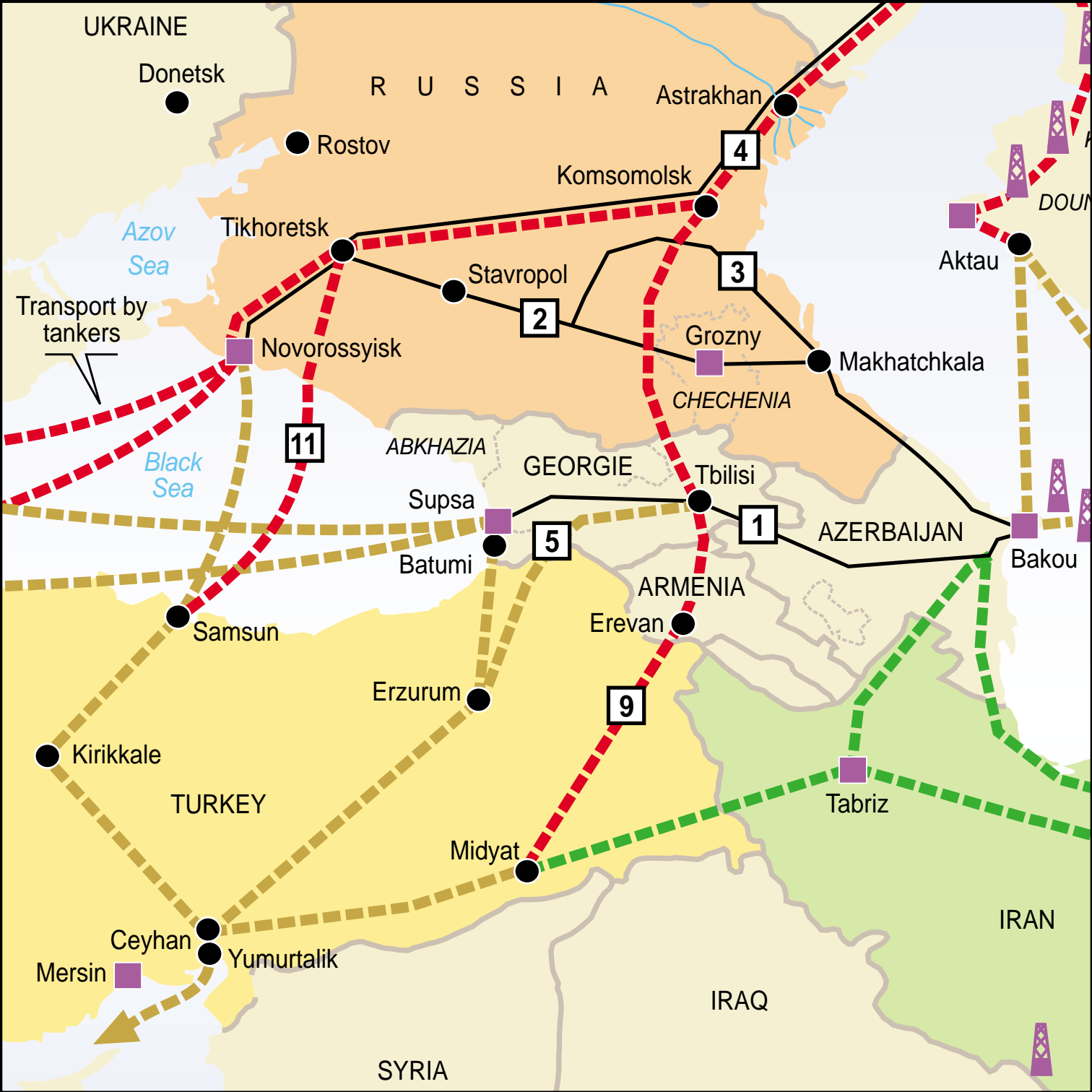
Global Virtual University

The United Nations University (UNU) in Tokyo, the United Nations Environment Programme (UNEP) in Nairobi, Agder University College (AUC) and UNEP/GRID-Arendal in Norway have embarked on a joint initiative to develop the "Global Virtual University", GVU, as an on-line e-learning programme with a global outreach.

This joint proposal represents a concrete follow-up action to the October 1998 UNESCO World Conference on Higher Education. It also builds upon the recommendations made by participants in the April 2001 workshop entitled "Virtual University for Environmental Sustainability" co-organized by UNU, UNEP, AUC, Arendal municipality and UNEP/GRID-Arendal, Norway.



Hans van Ginkel, Under Secretary General UN, and Rector UNU: *"It is envisaged that the UNU-branch in Norway will work closely with the Agder University College, other Norwegian universities and a network of partner universities from South and North to develop courses and a Master degree program within the field of Environment and Development. The study will function as an on-line e-learning program with a global outreach. The core topic of the program focuses on strategic approaches to the integration of environment and development goals. The target audience will be universities and students in developing countries, and I believe the initiative will contribute in an efficient manner to address the increasing digital divide in the area of modern education. The program will comprise both individual courses and more comprehensive study programs."*



Environmental information products

GRID-Arendal produces specialised products that help provide access to the best available environmental information. Our technical expertise enables us to create dynamic web sites, multimedia CD-ROMs and interactive maps and graphics, filled with information on the latest environmental trends around the world.

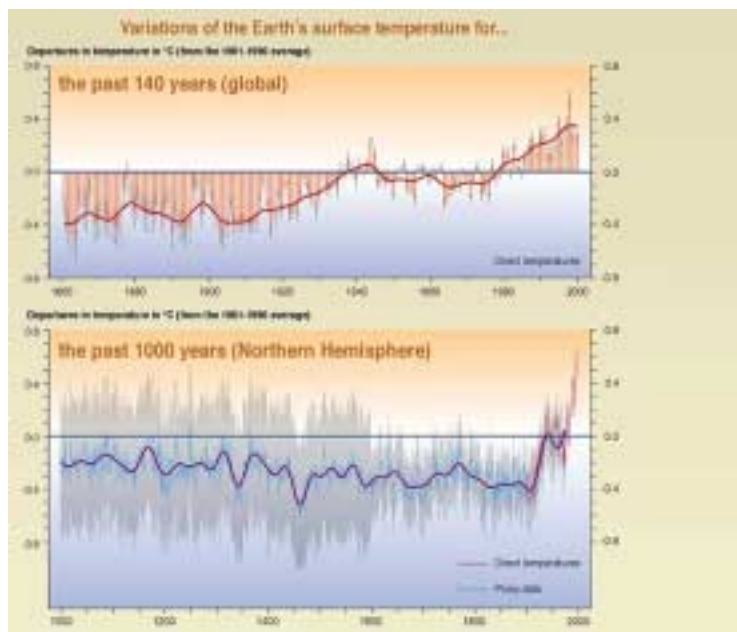
Cartography and graphic design

In support to UNEP and other UN organisations, we help transform statistical information and complicated texts into understandable graphics.

In 2001 we created the layout for the International Panel on Climate Change (IPCC) *Climate Change 2001 Synthesis Report* and the *Global Methodology for Mapping Human Impacts on the Biosphere* (GLOBIO) report, among others. We produced more than 200 maps and graphics, which, in one way or another, illustrated an environmental trend. Subjects covered include climate change, poverty and water management.

For The Global International Water Assessment (GIWA) we made around 30-40 figures illustrating the report on the State of the Environment of the Black Sea and the neighbouring countries. Water pollution and eutrophication (increase of nutrients in waterways) were the two main features covered by this graphical exercise.

But it's with the IPCC working groups that the cartographic studio of GRID-Arendal has given its most extensive contribution. The cartographer in charge of the presentation of the figures in the Climate Change 2001



One of the graphics that GRID-Arendal contributed to the IPCC Synthesis Report.

report followed the working groups closely all over Europe. He assisted the working groups in all stages of the drafting, advising them on the best way to graphically present the data. The resulting figures are now presented in all major international climate change meetings.

Web products

In 2001 we worked closely with the Intergovernmental Panel on Climate Change (IPCC) to help extend the outreach of their latest reports on climate change. We converted their publications into Internet and CD-ROM products, which were distributed at major international conferences. The publications are co-located on a special GRID-Arendal web site that also includes graphics highlighting the causes and impacts of climate change. For more information go to: www.grida.no/climate

UNEP's main web portal to environmental information, UNEP.Net, was launched in 2001 after extensive co-operation between the six UNEP Centres and UNEP Headquarters. Besides supporting the main technical platform, GRID-Arendal also created some of the main areas of content including the Arctic, Climate, and Freshwater portals. For more information go to: www.unep.net

The ChooseClimate Interactive Java Climate Model web site allows users to experiment with complex climate change processes by allowing people to choose from a variety of factors that affect climate and then instantly observe the corresponding impact on the environment. The underlying calculations are based on emission scenarios used in the IPCC Third Assessment Reports. For more information go to: climatechange.unep.net/jcm

Another example of our web work is the Baltic On-Line Interactive Geographical and Environmental Information Service (BOING) project, which is an interactive reporting tool with maps and databases, focused on eutrophication in the Baltic Sea. For more information go to boing.fimr.fi or www.grida.no/baltic

In 2001, GRID-Arendal in co-operation with UNEP's Division of Technology, Industry, and Economics (DTIE), initiated a joint project where GRID-Arendal provided the



The changing climate

Changing rain patterns leading to widespread flooding in some regions of the world while inflicting drought on others will be one of the scenarios we can be experiencing more often if the climate changes. These are the predictions from the scientists at the International Panel for Climate Change (IPCC).

The climate has always been changing, but the concern for present climate change is the speed with which the earth will warm up. The IPCC forecasts that in 100 years we can expect the world to be warmer by 1,4 - 5,8 °C.

The reason for the rapid heating is the human burning of fossil fuels such as coal, oil and gas. These fuels contain carbon. Burning them creates carbon dioxide gas. Carbon dioxide gas traps solar heat in the atmosphere. As more carbon dioxide is added to the atmosphere, solar heat has more trouble getting out. If this goes on long enough, the average temperature of the atmosphere will almost certainly rise. GRID-Arendal's vital climate graphics have been produced to explain the phenomenon.

Photo UNEP/Renan P. Bittencourt

Internet infrastructure and content management for the Sustainable Alternatives Network (SANet). The overall objective of this project is to set up and operate a "Technology Transfer Network" with the ultimate goal of speeding up the transfer of sustainable alternative technologies in developing-country markets. For more information go to www.sustainablealternatives.net

EarthPrint

EarthPrint, UNEP's official on-line bookshop, which GRID-Arendal manages in co-operation with SMI Limited, experienced a doubling of sales in 2001. Continuous promotion through electronic and paper-based marketing has led to this success as well as a new range of environmental publications.

The EarthPrint web site introduced new thematic categories to make search easier. General improvements to the order process, site speed and on-line security led to a re-launch in the middle of the year. In 2001 the customer base grew rapidly to over 4000 shoppers. The outlook for 2002 is another doubling of sales. For more information, go to: www.earthprint.com

Selected web sites GRID-Arendal helped develop in 2001:

Arctic Portal. For UNEP.Net Environment Network. www.unep.net/arctic

BOING (Baltic On-line Interactive Geographical and Environmental Information Service). In co-operation with the Finnish Institute of Marine Research (FIMR). boing.fimr.fi

ChooseClimate: Interactive Java Climate Model. Matthews, Ben in co-operation with Danish Energy Agency and UNEP/GRID-Arendal. chooseclimate.org/jcm

Climate Change Portal. For UNEP.Net Environment Network. climatechange.unep.net

Climate web site. www.grida.no/climate

Electronic tools for the Aarhus Convention Task Force Workshop web site. www.grida.no/enrin/aarhus

Freshwater Portal. For UNEP.Net Environment Network. freshwater.unep.net

GLOBIO (Global Methodology for Mapping Human Impacts on the Biosphere). With the GLOBIO Secretariat. www.globio.info

Interactive maps web site. maps.grida.no

Norwegian Environmental Assistance. With the Norwegian Pollution Control Authority (SFT), ed. environment.norad.no

Poverty mapping homepage. www.povertymap.net

Second regional South workshop on the Aarhus Convention. www.grida.no/enrin/aarhus/yerevan

State of the Environment (SoE) of the city of Kosice, Slovakia. www.ceroi.net

SoE Russia 1998. ceeri.ecoinfo.ru/state_report_98/eng/introduction.htm

SoE Tajikistan. www.grida.no/enrin/htmls/tadjik/soe2000

CD-ROMS:

Post-Conflict Environmental Assessment and State of Environment Report of FYR (Former Yugoslav Republic) of Macedonia and Albania. In collaboration with UNEP Balkans Task Force and national institutions (National Environmental Agency in Tirana and ECAT-TIRANA, and the Ministry of Environment and Physical Planning in Skopje).

Environment in Estonia, Romania and Uzbekistan. Attachments to UNECE's Environmental Performance Reviews.

Worldwatch CD-ROM. For the Worldwatch Institute.

Selected GA Publications and Contributions to Publications 2001:

Arino, O. and Plummer, S. (eds.) 2001. "Along Track Scanning Radiometer World Fire Atlas. Validation of the 1997-1998 Active Fire Product". IGBP/DIS (International Geosphere-Biosphere Programme/Data and Information System) Working Paper No. 24. 67 pages. 4-page contribution by Langaas, S. Online at: shark1.esrin.esa.it/ionia/FIRE/DOCS/validation_report.pdf

Bjørke, Å. and Kullerud, L. (UNEP/GRID-Arendal) and Hesjedal, O. (Scandinavian Seminar Group), compilers. Graphics by Rekecewicz, P. BCS [Bachelor of Circumpolar Studies] 100: The Circumpolar World: Module 8: Environment, Climate Change, and Pollution. 30pp. University of the Arctic 2002.

Bjørke, Å. and Tveitdal, S. *Aralsjøen en økokatastrofe. Tøvær på tundraen. Århuskonvensjonen – rett til informasjon. Mesopotamia – Babylons våtmarker forsvinner. Arktis under press – GLOBIO. Endelig i havn – klimaportal lansert i Marrakesh.* Articles in Teknisk Ukeblad.

Denisov, N. and Christoffersen, L.E. *Impact of Environmental Information on Decision-Making Processes and the Environment.* GRID-Arendal's Occasional Paper 01-2001. 49pp. Online at: www.grida.no/impact/papers/fullimpact.pdf

Lindgren, K. and Langaas, S. 2001. *Cost Benefit Analysis of Large Area Land Cover Information Derived from Earth Observation Data. Theories, approaches and cases with recommendations for future Cost Benefit Analysis of large-scale land cover information projects in the Baltic Sea Region.* BALANS Project Report, GRID-Arendal, Norway. 32 pages. Online at: ftp.grida.no/sindre/balans/cba.pdf

C. Nellemann et al. 2001. GLOBIO. *Global Methodology for Mapping Human Impacts on the Biosphere: The Arctic 2050 Scenario and Global Application.* UNEP/DEWA/TR.01-3. [Division of Early Warning and Assessment/Technical Report]. "Environment Information and Assessment Technical Report". The Report includes scenarios on potential future development in the Arctic. Contribution from GRID-Arendal: Aschehoug, M., Kullerud, L., Rouaud, J., Støen, O.G., Tveitdal, S. Online at www.globio.info/region/polar/globio-reporthires.pdf

Watson, R.T. and the Core Writing Team. *Climate Change 2001: Synthesis Report.* A Report of the Intergovernmental Panel on Climate Change. Graphics by Rekecewicz, P. The summary for policymakers is available online at www.grida.no/climate/ipcc_tar/syr/001.htm

Who uses GRID-Arendal?

From a high school student researching a term paper on how green Oslo is, to a government minister who needs to get clear-cut graphics on the level of greenhouse gases in Poland – anyone who has an interest in environmental issues can benefit from our expertise and graphic information.

Many of our reports and software developments are aimed at government personnel and ministers. We write reports for them, conduct workshops and training programmes and offer general support in setting up and using our environmental information systems. However, our information can be and is used by anyone who wants to have more knowledge about environmental issues.

In 2001 we initiated an Optional Online Omni-Present Survey (OOOPS) to learn more about our users and web products. We invited people to rate the usefulness of web pages and leave written comments. We received 36,000 ratings and 9,000 comments. The survey indicates that our largest group of users is academics – university professors, researchers and students. These are also our most satisfied users, along with non-governmental organisations. Intergovernmental agencies and primary/elementary schools are our least satisfied users. Among the highest rated areas of our web site are the Climate Change, GEO-2000, Maps & Graphics and the information from the former Eastern European countries, the ENRIN, areas.

Quotes from OOOPS

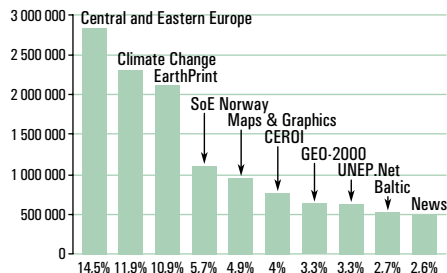
- *To help my students look at the impact of energy usage*
- *Interest within organisation*
- *Research for dissertation*
- *For Masters level assessed essay at Oxford University*
- *To tell the others in the class about the ozone layer*
- *Improve my background knowledge*
- *Discussions with friends and colleagues*
- *To give a lecture on climate change issues to students at a college*
- *For a report*

Web site usage statistics

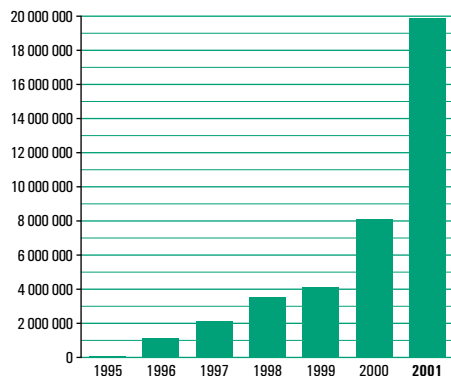
GRID-Arendal's web site traffic increased tremendously last year. The total number of visits to our web site increased by 87 per cent, from 1.2 million to 2.2 million visits, and the average number of pages viewed per visit increased by 73 per cent, from 5.1 to 8.7 pages per visit. The net effect of more visitors looking at more pages was that the total number of web pages viewed in 2001 more than tripled over last year, from 6 million to 19.5 million pages.

Internet statistics

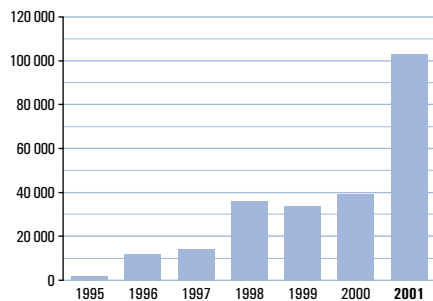
Pages most accessed



Overall hits



On-line distribution of maps and datasets



User Feedback Form

How did you obtain GRID-Arendal's Annual Report?

- Mail
 Personal handout
 Workshop/meeting
 Internet

Other

How useful did you find the following features?

- Board and financial report not useful very useful
- Polar activities
- Towards decision-making...
- Strengthening institutions...
- Environmental information products
- Staff presentation
- Missions and values
- Rio to Johannesburg

What do you think about this Annual Report?

- Informative
- Easy to read
- Understandable
- Use of graphics

What would you like to see in future issues of GRID-Arendal's Annual report? (What can be improved?)

Please add me/my institution to your Annual Report mailing list

Yes No

Name
 Title
 Institution
 Address
 Phone/Fax
 E-mail

If you prefer, you can use our on-line service to fill out this form. Please go to www.grida.no/about/AR2001/feedback.

affix
stamp
here

UNEP/GRID-Arendal
Service Box 706
N-4808 Arendal
Norway

alternatively fax your reply to +47 3703 5050

Mission statements

The mission of UNEP:

"To provide leadership and encourage partnership in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations."

The mission of UNEP's Division of Early Warning and Assessment (DEWA):

"To keep under review the state of the global environment, assess global and regional environmental trends, and provide early warning information on environmental threats."

GRID-Arendal contributes to UNEP's Division of Early Warning and Assessment.



Tim Foresman, Director of UNEP-DEWA:

"GRID-Arendal is UNEP's key centre with regards to building not only premier environmental information networks, but also in assisting developing nations reach their potential for using this network to build their capacity for assessing the environment and improving their options for sustainable development."

All respondents to this survey will receive a UNEP/GRID-Arendal information product free-of-charge.

The mission of GRID-Arendal:

"GRID-Arendal provides environmental information, communications, and capacity building services for information management and assessment. Established to strengthen the United Nations through its Environment Programme (UNEP), our focus is to make credible, science-based knowledge understandable to the public and to decision-making for sustainable development."

GRID-Arendal values

GRID-Arendal adopts the United Nations Core Values as the shared principles underpinning our work and guiding the daily actions and behaviours of our staff, the Core Values being:

Integrity

- Demonstrates the values of the United Nations in daily activities and behaviours;
- Acts without consideration of personal gain;
- Resists undue political pressure in decision-making;
- Does not abuse power or authority;
- Stands by decisions that are in the Organisation's interest, even if they are unpopular;
- Takes prompt action in cases of unprofessional or unethical behaviour.

Professionalism

- Shows pride in work and in achievements;
- Demonstrates professional competence and mastery of subject matter;
- Is conscientious and efficient in meeting commitments, observing deadlines and achieving results;
- Is motivated by professional rather than personal concerns;
- Shows persistence when faced with difficult problems or challenges;
- Remains calm in stressful situations.

Respect for Diversity

- Works effectively with people from all backgrounds;
- Treats all people with dignity and respect;
- Treats men and women equally;
- Shows respect for and understanding of diverse points of view and demonstrates this understanding in daily work and decision-making;
- Examines own biases and behaviours to avoid stereotypical responses;
- Does not discriminate against any individual or group.

In addition to these three UN core values, we adopt a fourth value reflecting our affiliation with the United Nations Environment Programme (UNEP):

Environmental Commitment

- Actively disseminates information on the environment based on scientific knowledge of high quality;
- Promotes environmental awareness by agenda-setting "green" thinking and innovation among staff and within projects with partners and stakeholders;
- Practices environmentally friendly office routines;
- Funds an internal project on a continual basis dedicated to promoting internal and external environmental knowledge and commitment.

UNEP/GRID-Arendal Staff 2001



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From Rio to Johannesburg

Ten significant years have passed from the groundbreaking Earth Summit in Rio de Janeiro in 1992 to the pending World Summit on Sustainable Development in Johannesburg in 2002.

The outcome of Rio 1992 was the Rio Declaration and Agenda 21, which were adopted by more than 178 nations. GRID-Arendal's work relates to many of the areas outlined in the two documents.

We have progressed from creating the first electronic State of the Environment report for Norway to supporting 41 countries in making their own reports. We have helped 14 cities all over the world to produce their own environmental reports on the Internet. We are now working on reports for counties and provinces. We have produced extensive web sites, reports, and graphics and provided our workshop expertise to help communicate about the environment in the Arctic area, Central and Eastern Europe, and the Baltic region. We are also presenting new initiatives for Africa and South America in Johannesburg.




All along we have worked closely with our international and invaluable partners in UNEP, governments, regions, scientists, NGOs and other organisations.

GRID-Arendal will present new and better services at the summit in Johannesburg. Here the focus will be on turning plans into action. GRID-Arendal is looking forward to doing our bit in the future.

Rio de Janeiro 1992

Rio Declaration
Agenda 21

Electronic State of the Environment report Norway 1992

-  Information for decision-makers
-  Organising the cyberspace
-  Strengthening networks of institutions

Johannesburg 2002

Integrated environmental reporting from local to global (support to GEO 3)

Sets of vital graphics – for children and ministers

UNEP.Net

African environmental news portal, Earthwire/Africa

Africa environmental information network

Poverty mapping

UNEP's northern exposure

National reports from Eastern Europe on-line
Cities environment reports

Support to Global Environmental Outlook 1
Support to Global Environmental Outlook 2000

Nordic environment graphics
Vital climate graphics

GRID-Arendal's web site
Regional, national, thematic information on-line

Norwegian environmental news portal, *Miljønytt*

Environmental information networks in Eastern Europe
Building capacities in South Africa and China

Spatial information for agricultural research
Consortium for spatial information

Key Polar Centre of UNEP

GRID-Arendal Outlook 2002

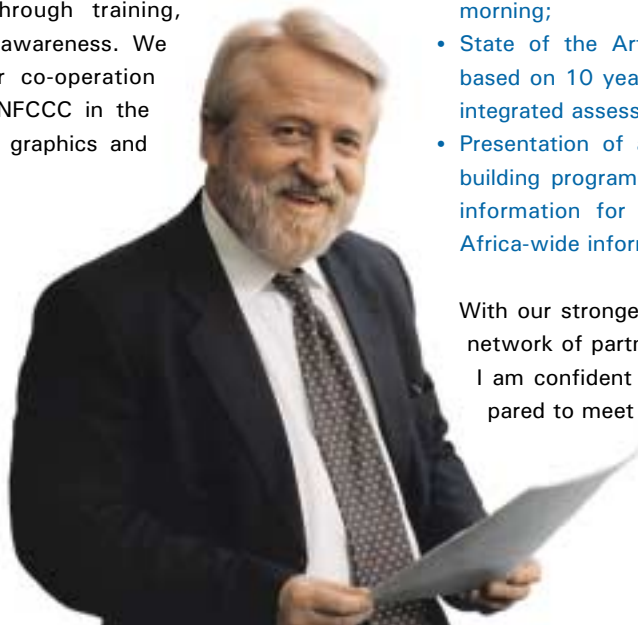
2002 marks GRID-Arendal's first year as an official UNEP Centre.

Focus will be given to establish stronger integration with UNEP Headquarters. This includes increased support to UNEP's new Internet flagship UNEP.Net, as well as web support and polar input to UNEP's newest Global Environment Outlook – GEO 3.

We will also expand our co-operation with UNEP, through the establishment of a new co-operative programme in support to the Aarhus Convention with UNEP's Regional Office in Geneva, and we will work closely with UNEP's Division of Technology, Industry and Economics in Paris, through our support to the SANet programme.

Part of this strengthened UNEP role will be to develop a global programme to support the implementation of Article 6 of the United Nations Framework Convention on Climate Change (UNFCCC) through training, education and public awareness. We will also develop our co-operation with the IPCC and UNFCCC in the preparation of climate graphics and web sites.

Photo: Dagnevig Foto



2002 is also the year of the Johannesburg Summit:

Ten years after we came to Rio with the first digital national State of the Environment report on diskettes, we hope to go to Johannesburg with an excellent suite of information products and initiatives. Our portfolio for Johannesburg includes amongst others:

- Comprehensive presentation of the Status of the Arctic environment in co-operation with key Arctic stakeholders;
- A new series of Vital Graphics focusing on the relation between Poverty and Environment;
- A new series of Vital Climate Graphics focusing on Africa;
- A new environmental news on the web service for the SADC region with updated environmental news every morning;
- State of the Art Environmental reporting on Internet based on 10 years of experience since Rio – now with integrated assessments from the city to the global level;
- Presentation of a new comprehensive UNEP capacity building programme to improve access to environment information for decision-making in a comprehensive Africa-wide information network.

With our stronger cooperation with UNEP, our growing network of partners and users and our dedicated staff, I am confident that GRID-Arendal is capable and prepared to meet these challenges in 2002.

Svein Tveitdal
Managing Director

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