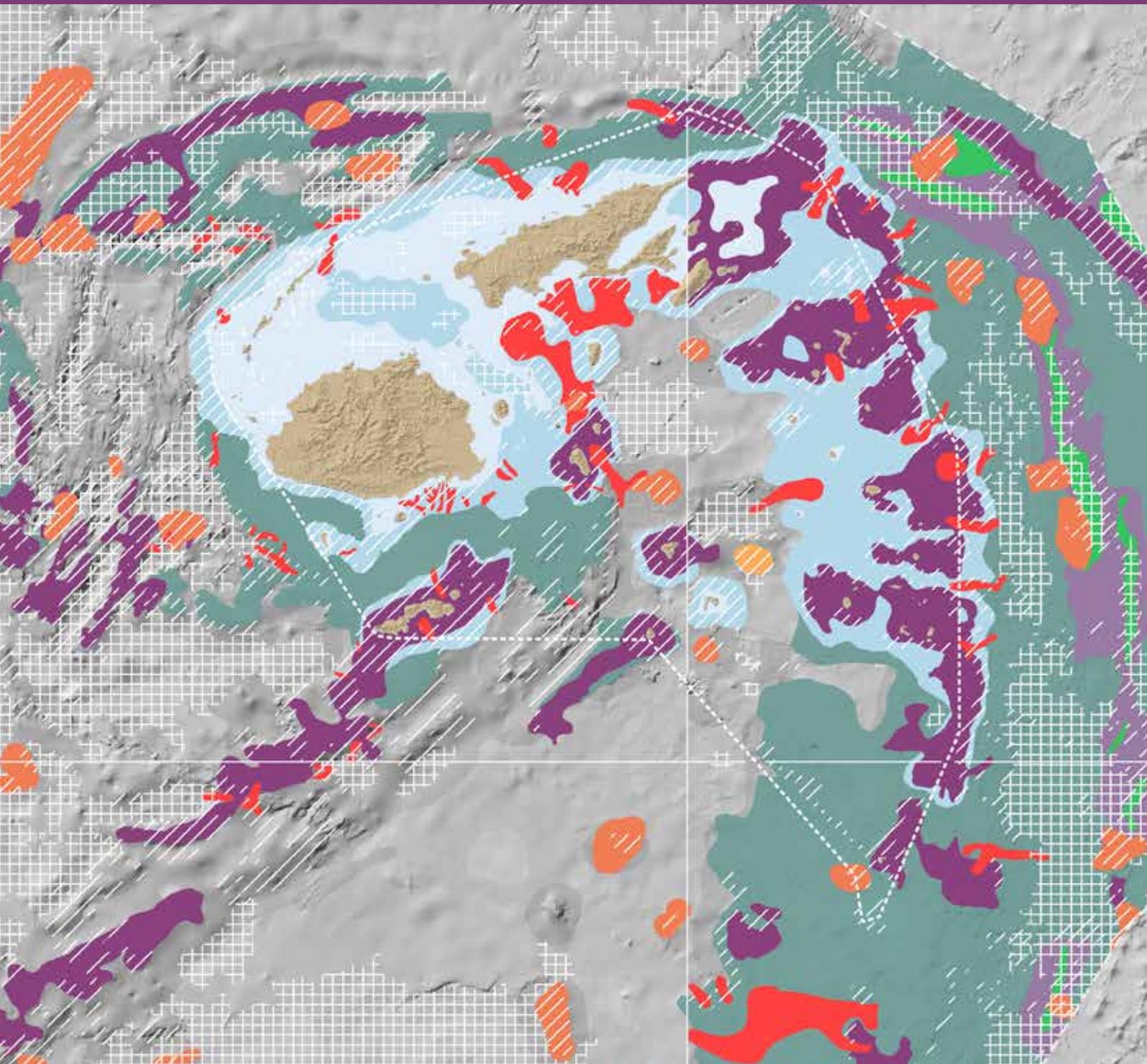


Ahead of the Curve

GRID-Arendal Annual Report 2016

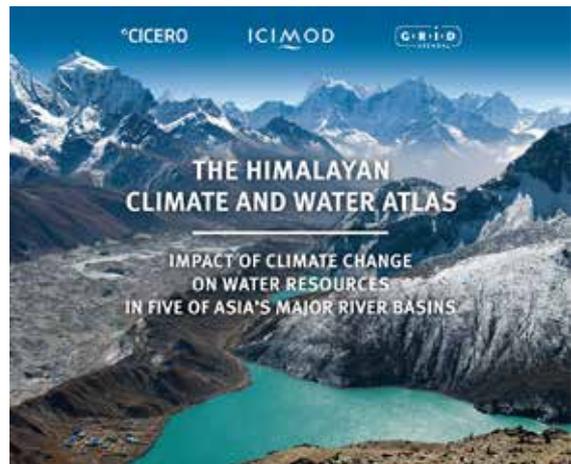


Established in 1989, our mission is to create environmental knowledge that encourages positive change. We do this by organizing and transforming available environmental data into credible, science-based information products, delivered through innovative communication tools and capacity building services targeting relevant stakeholders.

GRID-Arendal works closely with the United Nations Environment, other UN agencies and partners around the world to connect science to policy. Our joint purpose is to shorten the distance between the emergence of new science and policy actions. We seek to influence thinking and action at the level of the global community on issues that require collective action because we cannot solve many problems through action at the national level alone.

Acknowledgements

GRID-Arendal would like to acknowledge the support of the Government of Norway and its other funders and partners.



“This Atlas would not be out of place on the bookcase of any Himalayan researcher or on the coffee table of the interested layperson. Great credit should be given to the editors and the contributors for summarizing complex data in such an accessible format ... It is a fine output from the HiCAP project and promises to make a real impact given the credible status of the main contributing organizations.”

From a review of The Himalayan Climate and Water Atlas in *Mountain Research and Development*

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GRID-Arendal promotes environmentally sound practices globally and in its own activities. This report is printed on paper from sustainable forest including recycled fibre. The paper is chlorine-free. Our distribution policy aims to reduce GRID-Arendal’s carbon footprint.

Foreword

GRID-Arendal's motto is "Environmental Knowledge for Change." It emphasizes the importance of turning science and ideas into the information we need to navigate an increasingly complex world. Nothing could be more appropriate for this turbulent time of rapid change.

Last year, we saw global temperatures continue to set new records, coral reefs continue to die and pollution continue infiltrate our daily lives. Such bad news commands headlines, so people can be forgiven for thinking the picture is entirely bleak.

It isn't! Because last year we also saw nations continue in their commitment to reducing global greenhouse gas emissions. We saw the level of investment and job creation in renewable energy continue to increase rapidly. And we saw global determination to deliver sustainable development continue to expand, pushing our oceans up the agenda to start getting the attention they deserve.

There are any number of complex connections between these issues, but each represents an incredible opportunity to improve the lives of ordinary people and their environment. That's possible only if robust scientific information is communicated clearly with researchers, policy makers, the private sector and the general public. The team at GRID-Arendal has a real talent for making that happen. It is a vital role, for which UN Environment is deeply grateful.

Over the last year we worked together closely, determined to put the right information into the right hands when it was needed most. For example, last year's UN Environment Assembly gathered representatives from 174 countries. Thanks to GRID-Arendal's session on the

impact of microplastics on oceans, the Assembly adopted a resolution committing to action on this growing threat. GRID-Arendal was also instrumental in ensuring delegates received crucial information that supported the adoption of resolutions on wildlife crime and pastoralism.

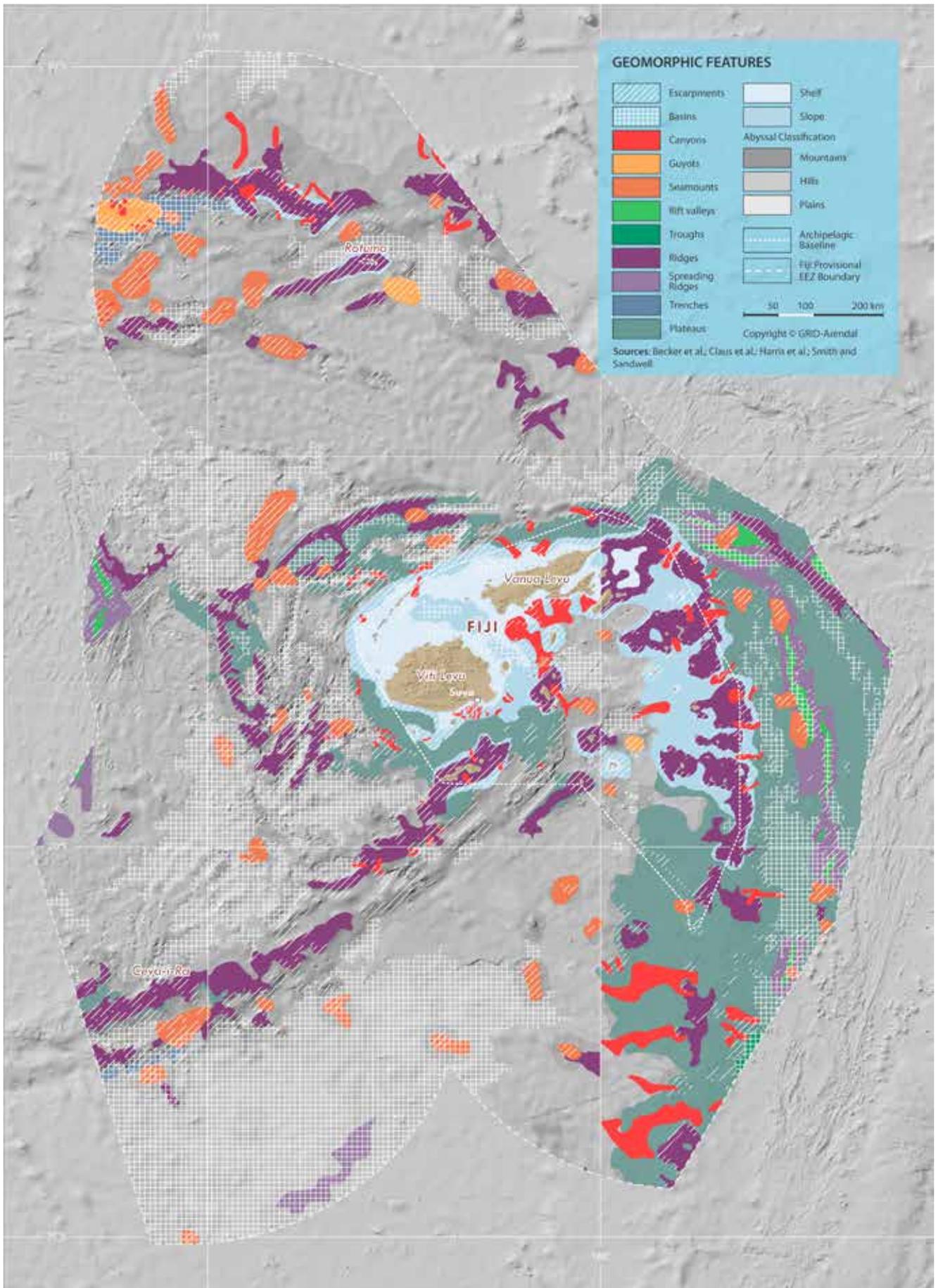
Likewise, their coordination of our Global Environment Outlook for Africa helped draw attention to some major challenges and potential solutions. This includes highlighting that the population, which is expected to double to 2.5 billion by 2050, will face land degradation, air pollution, poor sanitation and unsafe drinking water. But it also reveals that the large youth population can help drive growth and that Africa has 60 per cent of the world's under-utilized arable land. So again, it's about making it easy for decision makers to understand the relationships between threats and opportunities for health, food security and economic development.

Governments and companies act when they can access information that makes these complex issues easy to understand. The team at GRID-Arendal makes that possible. This Annual Report is testimony to that work and to a future that is not all gloom, where new ways of doing things are emerging for a whole new generation. Using science to draw out such messages is what GRID-Arendal does best and is why UN Environment looks forward to building our relationship for many years to come.



A handwritten signature in black ink that reads "Erik Solheim".

Erik Solheim
Head of UN Environment



On the cover: Map of Geomorphic Features in Fiji's Economic Exclusive Zone, based on data from Seafloor Geomorphic Features Map by Harris, P.T., Macmillan-Lawler, M., Rupp, J. and Baker, E.K. 2014. *Geomorphology of the oceans*. *Marine Geology*, 352: 4-24

From the desk of the Managing Director

A lot has changed in the world since GRID-Arendal was established in 1989 to support UN Environment. This is especially true in the role we have played ever since in assisting it with its communications and capacity building initiatives.

At GRID-Arendal, we have always adopted innovative technologies to stay ahead of the curve when it comes to communications. For example, we were among the first organisations to publish reports in digital format (on CD-ROMs) back in the 1990s. Nowadays we are using the latest technology to get environmental information and news out to our stakeholders.

A good example of this is the “story map”. Based on ESRI’s ArcGIS software, this is a new way of conveying spatial information that used to be shown on a static map. A story map comes to life as a user scrolls through a narrative along a side bar. GRID-Arendal produced three of these story maps in 2016 on the UN World Ocean Assessment, the precarious state of human dependence on coral reefs and how marine ecosystem services support the Sustainable Development Goals.

Telling a story is a more engaging way of getting the message out. Through GRID-Arendal’s new online news series, we have shared information about events, meetings and products in a different way from the conventional newsletter.

Of course we still produce scholarly reports written by our staff together with partners and expert consultants. Our reports are normally commissioned by UN Environment and we produced seven of them last year (see Publications, page 24).

There has also been a subtle change in the kind of message that we are trying to convey. In the past, raising awareness of issues was a core objective. These days, that’s not enough and we try to emphasize solutions to

problems. Solutions that have been found to work in one place could work again in a different place. This gives new meaning to the term “environmental awareness”. It’s no longer enough to just be aware of a problem; we need to know if somebody has already come up with an answer somewhere in the world.

In May, GRID-Arendal played an important role at the United Nations Environment Assembly (UNEA-2) meeting, participating in side events on sustainable pastoralism, the Gender Global Environmental Outlook, mountain environments, environmental crime, sargassum sea weed, the Global Environmental Outlook for Africa and marine plastics. The latter side event was sponsored by the Norwegian Ministry of Climate and Environment and included the participation of Minister Vidar Helgesen. Resolutions passed by the UNEA General Assembly included measures aimed at halting the illegal trade in wildlife, stemming the flow of plastic waste into the oceans and steps to protect and conserve coral reefs.

At GRID-Arendal we take pride in our work for UN Environment. If you haven’t done so, I recommend that you browse through one of our reports, story maps or news articles that are described briefly in this 2016 annual report. They are all different ways to tell a story. Reliable, accurate and timely, GRID-Arendal has once again proven that we are a valuable asset that directly channels Norwegian government support to where it is most needed within UN Environment’s programme of work.

I am extremely proud of what we at GRID-Arendal achieved in 2016 and I look forward to another successful year in 2017.



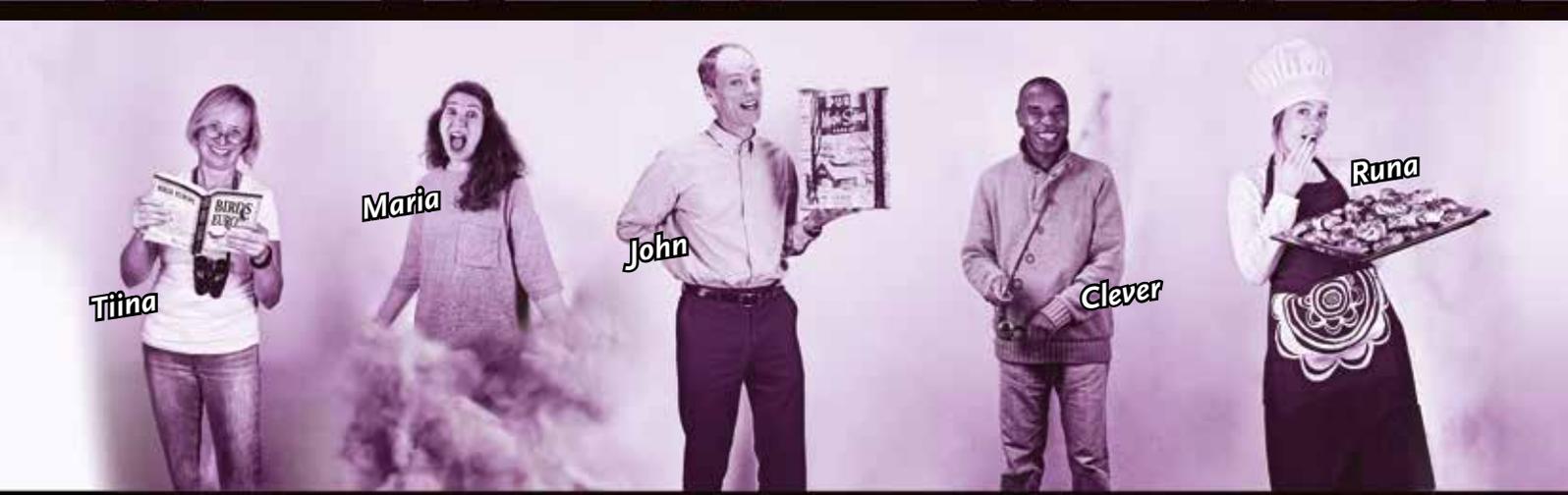
Peter T. Harris
Peter Harris
Managing Director

Introduction

GRID-Arendal's work focusses on the goal of changing the way we do business on this planet. To get there we work closely with UN Environment and partners around the world for a future that recognizes the essential links between the planet, ecosystems and the people that depend upon them.

We take complex scientific information and turn it into material that is used in decision-making by political leaders, policy makers and the general population. This information

comes in many forms: graphic reports, photographs, video, social media and other innovative forms of communication. We focus on results.



Our 31 staff and two consultants work on climate change, wildlife poaching, illegal waste disposal, joint management of rivers and seas, and the need for developing countries to be able to monitor and report on the state of their environment, to name just a few areas. Given that GRID-Arendal worked on 100 projects organised in seven programmes last year, flexibility was the key. This flexibility was enhanced by the XX interns who worked with us and it's important to acknowledge their contribution.

GRID-Arendal's seven programmes include:

- Blue Carbon
- Ecosystems, Economies and Sustainable Development
- Environmental Crime
- Ocean Governance and Geological Resources
- State of Environment and Spatial Planning
- Polar and Mountain Environments, and
- Transboundary Waters.

This report outlines the main achievements in each programme.



Blue Carbon

From concept to reality

Last year, GRID-Arendal helped put coastal blue carbon ecosystems – seagrasses, saltwater marshes and mangrove forests – on the global climate change agenda. Countries that signed onto the 2015 Paris agreement are looking for ways to address the climate challenge. The natural climate adaptation and mitigation values blue carbon ecosystems support are little known and often overlooked. However, GRID-Arendal and its partners are turning them from an idea into a reality in national and international climate change policy.

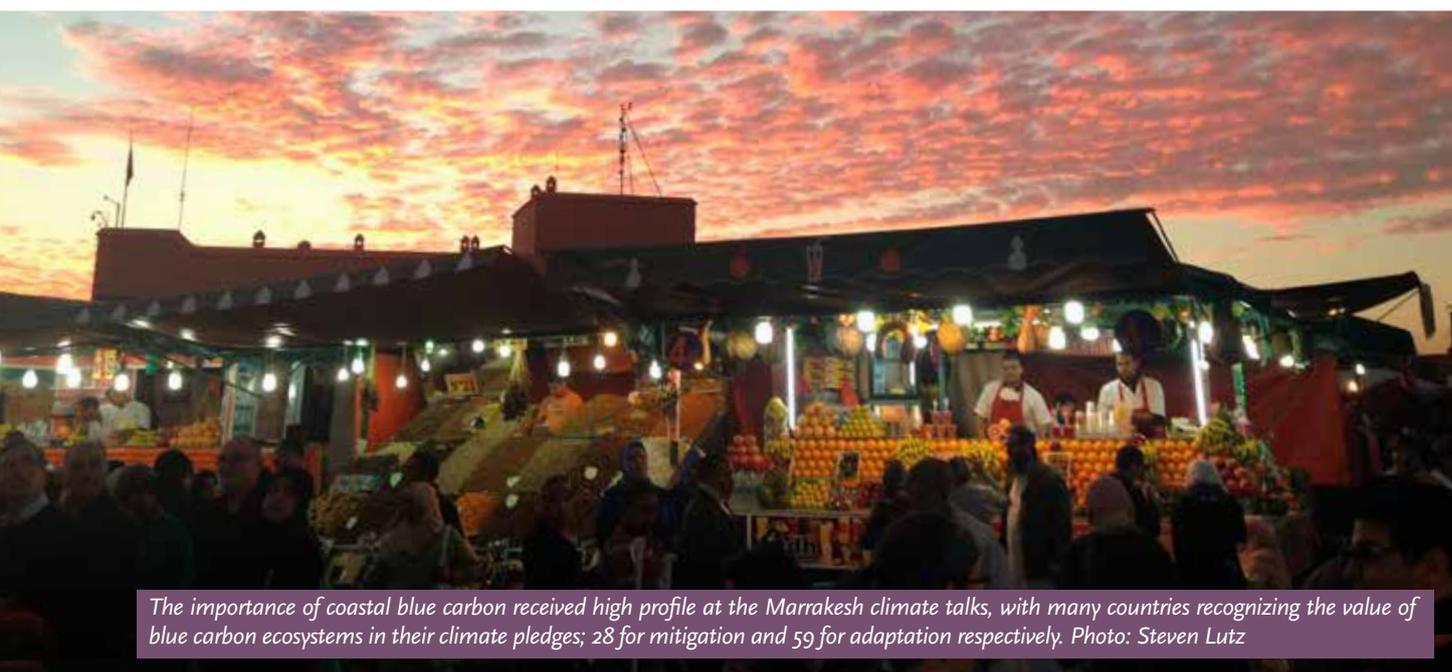
The conservation of blue carbon ecosystems is an important nature-based option for addressing climate change because it helps countries reduce emissions while supporting climate resilient communities.

Coastal blue carbon habitats can absorb more carbon pollutants than terrestrial forests. These ecosystems support coastal and island life and well-being across the globe through the valuable services they provide such as fish habitat, coastal protection, water filtration, natural beauty, recreation and cultural heritage.

International recognition of the importance of blue carbon is growing. At the November 2016 climate talks in Marrakesh, GRID-Arendal and partners released the first inventory and analysis of blue carbon-related climate actions. This work examines how blue carbon ecosystems are included in Nationally Determined Contributions (the pledges countries are making to reduce greenhouse

gas emissions). These are national actions to reduce greenhouse gas emissions under the Paris Agreement and 59 countries have identified measures that include blue carbon ecosystems in adaptation and/or mitigation language in their contributions.

GRID-Arendal also supports blue carbon actions on the ground through the implementation of the Blue Forests Project, a global initiative of UN Environment and the Global Environment Facility (GEF) focused on harnessing the value of coastal carbon and ecosystem services to achieve improved capacity and ecosystem management. As part of this project, work is underway on carbon science, policy and ecosystem services at sites in Ecuador, Kenya, Mozambique, Madagascar, Indonesia, Dominican Republic, United States of America, United Arab Emirates and Thailand. With GEF support provided in 2016, project sites in four countries are completing national policy assessments that bring together key policy, legal and regulatory frameworks and incentives that affect the management of blue carbon ecosystems. These and the other activities will be a basis for providing targeted advice



The importance of coastal blue carbon received high profile at the Marrakesh climate talks, with many countries recognizing the value of blue carbon ecosystems in their climate pledges; 28 for mitigation and 59 for adaptation respectively. Photo: Steven Lutz



In 2016, the Norwegian Blue Forests Network helped profile the importance of blue forests ecosystems with Norwegian stakeholders, in the context of national and international climate science and policy. Photo: Janne K. Gitmark/NIVA

on blue carbon science, the value of ecosystem services and policy approaches both within the project and how they can be applied globally. Additionally, as part of the Blue Forests Project, GRID-Arendal is producing a report for release in early 2017 on how the value of blue carbon can help nations achieve multiple Sustainable Development Goals.

Other activities of the Blue Carbon Programme included continued education activities of the Norwegian Blue Forests Network, a partnership with the Norwegian Institute for Water Research and the Institute of Marine Research, focused on increasing the scientific understanding of the value of Norway's "Blue Forests" (kelp forests in particular) and of blue carbon within Norwegian climate policy in the developing world.

GRID-Arendal is also working with UN Environment to bring the blue carbon concept to West Africa where a regional assessment of blue carbon is to be produced in early 2017.

Finally, it's not just coastlines where blue carbon is important. Last year, GRID-Arendal also explored oceanic blue carbon, a concept that examines the role that marine life beyond the coasts may play in addressing the global climate challenge. This project builds on the release of an earlier report entitled *Fish Carbon: Exploring Marine Vertebrate Carbon Services*. Activities in 2016 included presentation at a scientific forum and the production of a newsletter, the BlueCLog.

GRID-Arendal's efforts in sharing information and developing proposals for oceanic blue carbon included a focus on "whale carbon," one of the benefits identified in the Fish Carbon report, which received multinational endorsement at last year's meeting of the International Whaling Commission when 36 countries endorsed a resolution on whale ecosystem services. Next year GRID-Arendal will produce a short video on all of the marine vertebrate carbon services.



The importance of oceanic blue carbon received significant international support at last year's meeting of the International Whaling Commission, when 36 countries endorsed a resolution on whale ecosystem services that includes a focus on "whale carbon". Photo: Isaac Kohane

Ecosystems, Economies and Sustainable Development

The search for solutions

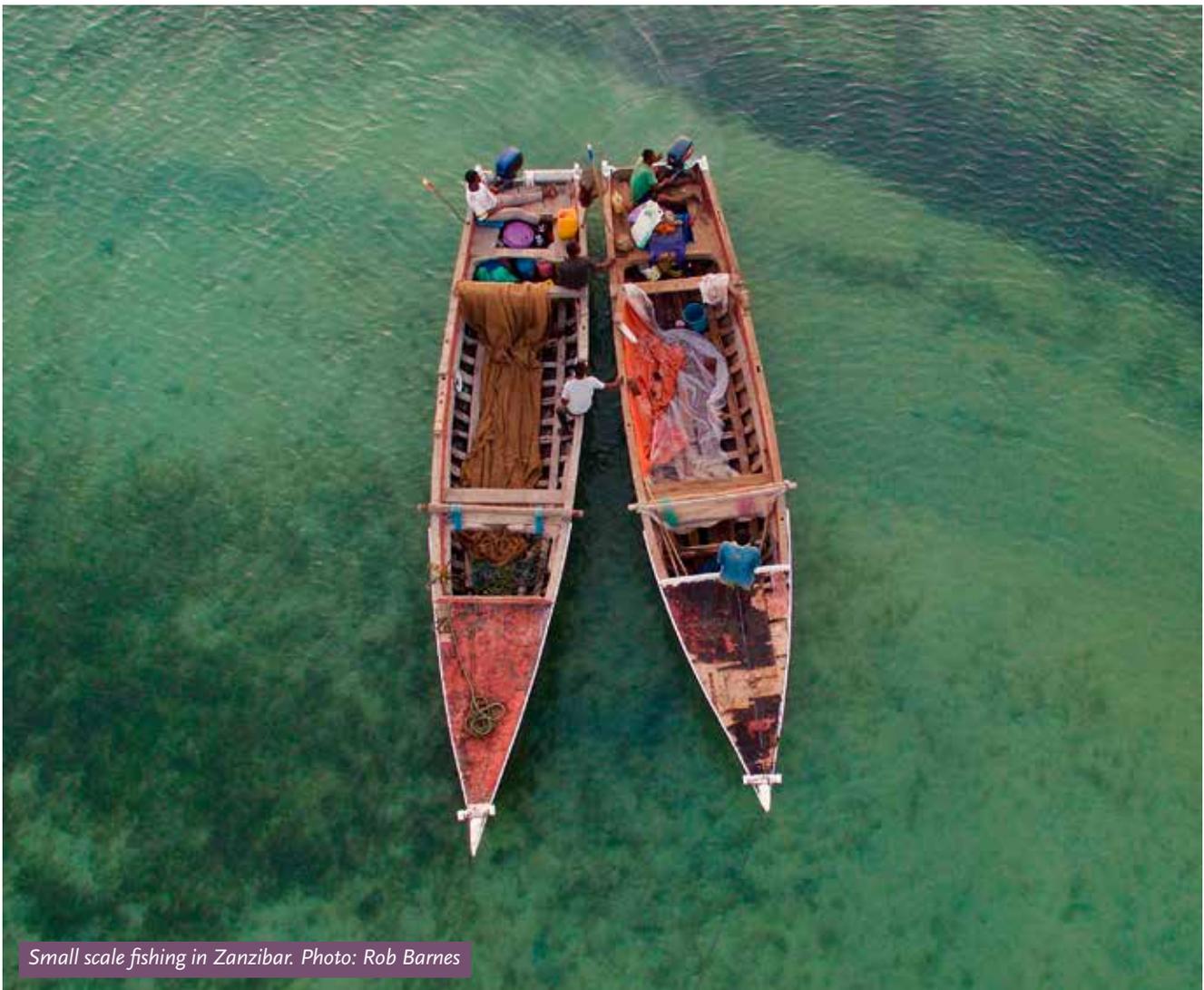
Human beings think of themselves as living on the land but our well-being, livelihoods, nutrition and safety also depend on healthy marine ecosystems. Without them, human food supplies and economies in many countries would be in trouble.

About a billion people – mostly in developing countries – rely on fish as their primary source of animal protein. Fisheries alone employ over 200 million people around the world. As well, achieving the goals set out by the UN 2030 Agenda for Sustainable Development will be very hard, if not impossible, without healthy marine ecosystems.

GRID-Arendal's Ecosystems, Economies and Sustainable Development programme focuses on the oceans and works where conservation and development intersect.

Blue Solutions is a partnership between the GIZ, GRID-Arendal, the International Union for the Conservation of Nature (IUCN) and UN Environment.

The Blue Solutions Partnership Initiative has been a core activity of this programme since 2013. The initiative looks for good ideas that have worked in marine management around the planet and then shares them. This helps different countries learn about solutions they can apply in their own work.



Small scale fishing in Zanzibar. Photo: Rob Barnes



The Panorama platform was launched by UN Environment's Erik Solheim at IUCN World Conservation Congress in September 2016. Photo: IUCN/Marie Fischborn

In May, we held a regional forum to share solutions in Africa on the beautiful island of Zanzibar. We brought together over 100 practitioners from all over the continent to learn from one another in a unique way. In September, the initiative's Panorama platform for solution sharing was launched by UN Environment's Executive Director, Erik Solheim, at the IUCN World Conservation Congress. It features over 250 practical approaches with over 1000 "Building Blocks" ready to be re-used all over the world.

The Mami Wata project advances Integrated Ocean Management in the countries on the African Atlantic coast. It was launched in Dakar, Senegal in April and will use three pilot projects on the Atlantic Coast of Africa to design and implement integrated ocean management strategies. Its goal is to minimise conflicts among fishing, maritime transport, energy development, tourism and many other sectors and to ensure they contribute jointly to

sustainable development. What is learned in these three pilots will be shared with practitioners in all countries of the Abidjan Convention, the regional political body for the protection of the marine environment. "Mami Wata" is an ocean spirit in some West African cultures, but it also means "Enhancing Marine Management in Western, Central and Southern Africa through Training and Application". The project runs until the end of 2019.

Blue Solutions and Mami Wata are funded by the German International Climate Initiative.

GRID-Arendal's work in the marine environment has led to it being invited to take over the Secretariat of the Marine Ecosystem Services Partnership, the foremost global source of information on marine and coastal ecosystem values. This partnership shares the most recent scientific findings and thinking with its community of over 600 practitioners.



Fishermen cleaning the boat outside of Libreville, Gabon. Photo: Kari Synnøve Johansen

Environmental Crime

A global security threat

Profits from the illegal exploitation of natural resources – timber, wildlife, and minerals to name just a few – are often funnelled into organized criminal and terrorist organizations. As GRID-Arendal has reported before, environmental crime robs states of billions of dollars every year in much needed revenue and threatens the overall pace of development.

GRID-Arendal works to shine a light on this dark business by focusing on illegal mining, logging, waste traffic, wildlife poaching and fisheries. Our reports and contributions to other studies raise awareness about the extent of the problem and our environmental crime programme connects with others working in the field. One example is GRID-Arendal's contribution to the most comprehensive scientific analysis of illegal logging published to date: *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impacts and Responses*. This report, which includes contributions from over 40 renowned scientists from around the world, found evidence of increased involvement of organized criminal logging networks.

“Forestry crime, including corporate crimes, and illegal logging account for up to \$152 billion every year, more than all official development aid combined”, said Erik Solheim, Head of UN Environment in a statement. (UN Environment, along with GRID-Arendal and several other organizations, were partners in the analysis.)

The first step in tackling environmental crime is to make people aware that it exists. Over the years GRID-Arendal publications have reached a wide audience and created a considerable media attention. Efforts to put the case before the public continued last year through a partnership with the Global Investigative Journalism Network and SKUP (the Norwegian Foundation for a Free and Investigative Press). GRID-Arendal supported two investigative journalists to write stories on the illegal charcoal trade in Kenya and illegal gold mining in Colombia. Both generated a number of articles in the

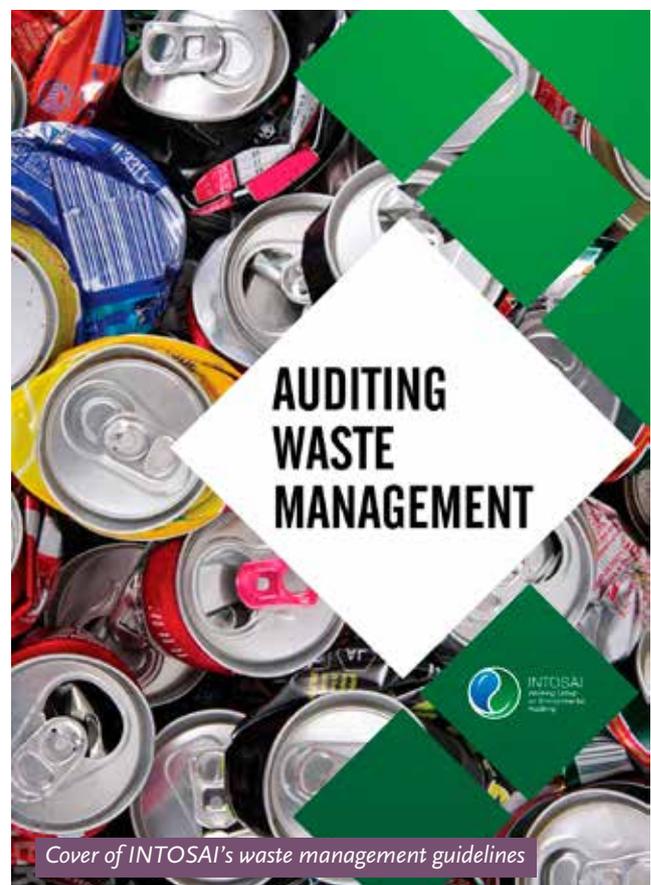
“We urgently have to come up with new strategies to eliminate illegal timber production and related trade. This could also significantly improve the lives of poor and disadvantaged people and protect them from criminal cartels. When the scientific evidence is clear, as it is in this report, it enables policy makers to act.”

Erik Solheim, Executive Director, UN Environment

local and international media, including a story in the U.S. publication Newsweek which acknowledged the sponsorship of GRID-Arendal and SKUP.

Our work and that of our partners and other organizations led to the passage of a resolution at last year's UN Environment Assembly on illegal trade in wildlife and wildlife products. This resolution builds on previous commitments and urged Member States to take further steps at the national and international levels to combat this threat.

Although the long-term goal – a world where there is no environmental crime – is a still long way off, we are seeing signs of progress. Following the release of our 2015 report, *Waste Crime – Waste Risks: Gaps in Meeting the Global Waste Challenge*, the International Organization of Supreme Audit Institutions prepared guidelines on waste management and presented them at a meeting in





Participants undertake a practical exercise on transboundary waste shipments during a workshop in Malaysia in September 2016. Photo: Ieva Rucevska

Indonesia. These guidelines will soon be available online. Riksrevisjonen (the Office of Auditor General of Norway) is the main coordinator of the waste guidelines and expressed its appreciation for GRID-Arendal’s contribution and help in improving the quality of the guidance paper.

The waste report also led to GRID-Arendal facilitating national training workshops in Indonesia and Malaysia on combating illegal trade in chemicals and waste for customs and experts from environmental authorities. The workshops, developed with the European Union, UN Environment and national authorities, yielded concrete results. During the workshop, intelligence was received about illegal shipments of contaminated plastic on its way from Europe to Port Klang, Malaysia. The information was passed on to the customs division at the port and the shipment was returned to its country of origin. Following the workshop, the Malaysian Ministry of Natural Resources and Environment committed to

improve cooperation between environmental authorities and customs in the country.

GRID-Arendal continues to develop innovative partnerships to tackle environmental crime. For example, last year saw the launch of a new project funded by the European Space Agency in partnership with the INTERPOL. Called “MARine and coastal satellite Services to TRack Environmental Crime activities (MASTREC)”, the project uses satellites to detect the illegal transportation of rosewood and charcoal in Somalia, the Middle East and Madagascar from space.

“The day the government really wants to end illegal mining, they have to go after the ones who invest in illegal mining.”

Erik Solheim, Executive Director, UN Environment

Ocean Governance and Geological Resources

The extended continental shelf story continues

For many developing countries, finalizing their outer limit of their maritime boundaries is a complex process. Lodging a submission for what is termed the “extended continental shelf” with the United Nations completes the first phase of the process, but then countries have to defend their claim.



Members of the new Pacific Fisheries Data Exchange Working Group.

GRID-Arendal is working with partners, including the United States Geological Survey and Geoscience Australia, to develop tools to help states with their defense. Our initiative provides a way to examine the decisions of the Commission on the Limits of the Continental Shelf. This is the group that assesses the claims made by coastal states and it is important that it gets the right information in a timely fashion.

GRID-Arendal is compiling this information in a searchable website that includes commentary and analysis that allows states to keep up to date and use previous decisions to strengthen their own case prior to examination.



Miners heading up to the La Rinconada tunnels in the high mountains tramp on polluted slush flowing from the mines and pass mounds of rubbish. Photo © Gina Nemirofsky

GRID-Arendal is also working with states to get their geophysical data and information into the scientific literature. This means that when states' submissions come before the commission important aspects of the interpretation of data and information have already been peer reviewed and are thus less likely to be disputed.

GRID-Arendal continues to support Pacific Island states with finalisation of shared maritime boundaries and marine spatial planning. In June 2016, technical and legal personnel from 12 Pacific Island states met in Sydney for the 15th Maritime Boundaries working session. A highlight of the meeting was the establishment of the Pacific Data Exchange Working Group which aims to develop fisheries data exchange standards that will revolutionise the management of fisheries in the region.

Responsible resource use

To support best practice in mining, GRID-Arendal joined UN Environment's Extractive Industry Hub and spoke at its Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development. The hub focusses on supporting livelihoods and improving environmental governance over mining in developing countries.

This includes examining the potential for technological innovation in the safe storage, reuse, reduction and

perhaps complete elimination of mine waste. Members of the hub are looking at how to use spatial data and multi-stakeholder consultation – on existing agriculture, human settlements, water reservoirs, rivers, biodiversity, and other things – to find the best way to improve government planning and risk management in the mining sector. Another important initiative is to develop a global database of tailings dams and determine ways to detect dam defects before they cause failure.

To this end, GRID-Arendal is coordinating the UN Environment's Rapid Response Assessment on Mine Waste and Tailings Dam Failures, to be completed in June 2017. The material discarded in the mining process has been a problem for people and the environment for centuries. With the growth in large scale industrial mining, the waste piles (stored in tailings dams) have expanded – the largest of these are now the biggest man-made structures on the planet. With increased size comes the potential for large tailings dam failures that can have catastrophic effects on people and the environment. The rapid assessment will be used to highlight good practices and promote innovative thinking in an industry that has been slow to change. It will also encourage governments to develop governance mechanisms to eliminate the risk of dam failures.



Retention ponds set up by the US EPA following the accidental release of acid mine water from the Gold King mine in Colorado in 2015. The water in the ponds is treated with lime which raises the pH and sodium hydroxide solution which facilitates sedimentation of the metals prior to release of the water. The process is time consuming and expensive. As of August 2016, the US EPA had dedicated \$29 million to the clean-up and remediation effort. Photo © Wikimedia/EPA

Polar and Mountains

Rapid change and vulnerable regions

Our work in mountains communicates accurate and timely information on environmental and climate issues to the attention of national governments, local communities and the international research community.



In the Arctic, we work closely with Indigenous Peoples to help them tell their stories about how they are coping with environmental change, and how their knowledge contributes to adaptation. We work with Indigenous herders on conservation of pasture ecosystems as a way to enhance the resilience of pastoral livelihoods. And we assist UN Environment on polar and mountain issues.

Putting mountains on the map

Mountains play a crucial role in providing water for up to half the world's population and they are changing fast as a result of climate change. They are also often the scene of natural disasters like earthquakes and floods. Like the Arctic, they straddle national borders and thus create opportunities for international cooperation and peace-building.

Our longest running project in mountain regions, the Himalayan Climate Change Adaptation Programme (HICAP), has had an impact and is generating change. For example, a training programme for journalists we

introduced a few years ago has led to significant regional and international media coverage. It has also triggered a change within our partner organisation, the International Centre for Integrated Mountain Development (ICIMOD), which is now using our training model on other projects.



“I want also to congratulate you with well prepared Caucasus Mountain Outlook report which is a useful document for further adaptation planning of mountain areas of our region.”

Isa Allyev, Azerbaijan UNFCCC focal point

The *Himalayan Climate and Water Atlas*, released in 2015, is now being used by governments as they develop their commitments to reduce greenhouse gases under the Paris climate change agreement. A special report on the atlas ran on Nepal television last February. The report also received a very positive review in a leading mountain research journal, *Mountain Research and Development*.

Change is also happening on the ground. Two examples are HICAP's pilot action on implementing flood early warning systems in Assam, India, and on the Mountain Resilient Villages approach in Nepal. There are plans for the early warning system to be implemented in other India states and Nepal's government has committed to rolling out Mountain Resilient Villages in 15 districts (over 100 villages).

In our Mountain Policy project with UN Environment we analyse risks to various sectors in mountain regions and look at what existing adaptation policies target them. Adaptation Outlooks have examined the Southern Caucasus, Western Balkans, Tropical Andes, Central Asia and East Africa, and have increased government attention on mountain issues. For example, in the Caucasus our work has led to requests by the governments of Georgia and Azerbaijan for technical assistance on ecosystem-based adaptation in mountains.

Our work with UN Environment has also been recognised at the international level in the Report of the Secretary General on Sustainable Mountain Development.

Finally, GRID-Arendal worked with UN Environment and the International Solid Waste Association on the Waste Management Outlook for Mountain Regions – the first report of its kind to analyse waste management issues specific to mountain regions. An article about it has been published on the Mountain Research Institute blog.

“One big achievement HICAP has brought to China is the idea of tracking impacts, looking at policy impacts. Working with HICAP has broadened the ways that researchers do their work and are now looking into ways to work with government and other stakeholders.”

Haiya Zhang, Kunming Institute of Botany

Working with Indigenous Peoples

The oral history of Indigenous cultures is a rich source of data. GRID-Arendal continues its work with Indigenous Peoples to bring attention to this knowledge, to increase the awareness of the vulnerability of their communities and at the same time support their important role as local stewards of the environment.

In 2016, GRID-Arendal worked with the Arctic Council Indigenous Peoples Secretariat on a story map that tells about the influence Indigenous Peoples have had on the development of the Arctic Council and the Arctic environmental agenda in general. The project coincides with the council's 20th anniversary.

Storytelling is also an important element in our Nomadic Herders partnership with the International Centre for Reindeer Husbandry. Together with reindeer herders, we developed text, maps and GLOBIO3 scenarios outlining herders' concerns and aspirations for the Arctic Council report *Adaptation Actions for a Changing Arctic*. As well, we have been working with herders on a new method to ensure that local concerns are addressed in planning and decision-making.

The Nomadic Herders project develops capacity in herding communities to enhance pastoral livelihoods and protect biodiversity. This partnership led to a GRID-Arendal contribution to Sámi University College course on “Biological diversity in a circumpolar indigenous perspective.” It attracted more than 30 students from reindeer herding communities in Russia, Mongolia and Norway.

Our activities on Indigenous Peoples and pastoralism go beyond the Arctic and sub-Arctic Asia. GRID-Arendal was part of a broad, international consortium which organized a side event on sustainable pastoralism at the second UN Environment Assembly in Nairobi. The event produced recommendations that were included in a resolution on promoting sustainable pastoralism and rangelands adopted by the states at the assembly. At the December meeting of the Convention on Biodiversity, GRID-Arendal was one of the 76 institutions and governments that signed the “Cancun Statement” which recognizes the value of rangelands, grasslands and pastoralism. We have also been invited to be part of a Steering Committee of UN agencies and international NGOs that will work towards getting the United Nations General Assembly to designate an International Year of Rangelands and Pastoralists.

State of Environment and Spatial Planning

The right information for sound decisions

Without the right information, sound decisions about the environment cannot be made. GRID-Arendal contributes to improved environmental stewardship in coastal states by supporting capacity building in state of the environment assessments and marine spatial planning. Tools, methodologies and web platforms have been developed to collect and present environmental data and information to support better environmental decision making. These activities include a mix of global, regional and country based activities with focus on developing countries in Africa and the Small Island Developing States of the Pacific.



Tumbu fishing village in Sierra Leone. Photo:GRID-Arendal

The ability of several West African states to conduct state of the marine environment assessments has been greatly enhanced through GRID-Arendal's engagement with the Abidjan Convention and its member states. The development of a coastal zone management plan last year for Sierra Leone was a direct result of the 2015 State of the Marine Environment Report GRID-Arendal developed for that country.

The Abidjan Convention Secretariat is using the report to guide other State of the Marine Environment Reports

within the region. This has led to several countries in the Guinea Current region producing draft reports using a method called "expert elicitation" where the opinions of experts and stakeholders are synthesised into "data" to support the assessment of environmental conditions. GRID-Arendal has also started using this approach in the Caribbean where we will support the UN Environment regional seas organization, the Cartagena Convention Secretariat, with its State of the Convention Area Report programme in 2017.

Combating Marine Litter

GRID-Arendal is working hard to draw attention to the critical global problem of litter in the marine environment. As part of this effort, UN Environment and GRID-Arendal developed the report *Marine Litter Vital Graphics* last year. Many of the graphics from this publication were also used in a UN Environment report called *Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy change*. This report provided background information for discussions on marine litter at the second UN Environment Assembly held in May.

The Norwegian Ministry of Climate and Environment asked GRID-Arendal to organize a high-level side event during the ministerial section of that meeting. GRID-Arendal's awareness raising and facilitation efforts in the run up to this major global assembly contributed to the broad support and consensus for a Norwegian Government sponsored resolution on Marine Plastic Litter and Microplastics. In August, the minister also attended a public debate on marine litter organized by GRID-Arendal during Arendalsuka, an annual week-long political gathering in the city where the organization is based.

“The most successful event at UNEA-2.”

Vidar Helgesen, Norwegian Minister of Climate and Environment

Referring to GRID-Arendal organized event on marine litter at UNEA-2

GRID-Arendal supported marine spatial planning in the Pacific through the continuing development and training of the Pacific Regional Data Portal found at PacGeo.org. The PacGeo portal was key to the delivery of information to support disaster recovery in Fiji after Cyclone Winston in February 2016. The high quality of the portal was recognised when the Secretariat of the Pacific Community's Geoscience Division, which hosts it, received the Asia Geospatial Excellence Award for Disaster Management at the Geosmart Asia conference.

PacGeo was also selected by the International Union for Conservation of Nature to host digital atlases on environmental information for marine spatial planning in Fiji, Kiribati, Solomon Islands, Tonga and Vanuatu. These atlases feature data from GRID-Arendal's global seafloor features map, which was developed through a partnership between GRID-Arendal, Geoscience Australia and Conservation International in 2014. This map is being used in marine planning and research projects spanning the globe, including the derivation of a new classification of the world's continental shelves and seamounts (under-sea volcanos) that have been included in scientific publications. To date the printable version of the map has been downloaded thousands

of times from the bluehabitats.org website. The map has been used by over 350 institutions and projects to support education, research and marine spatial planning. It has helped to set spatial priorities for the marine environment in South East Asia, modelling migratory species in the Pacific and planning in the Seychelles, among other things.

Gender and Environment

GRID-Arendal worked on the Global Gender and Environment Outlook (GGEO), a massive UN Environment-led effort. The first comprehensive and global assessment of the connection between gender and environment, it engaged more than 50 experts. It points out that gendered environmental analysis is not just a matter of “add women and stir”. In fact, it is not primarily about “adding women” at all. The goal is to bring a gender lens to environmental assessments which makes both men and women visible as actors and demonstrates how femininity, masculinity and environmental change affect each other.

GRID-Arendal provided a lead author for the GGEO and was invited to UNEA-2 to launch an abridged version of the report and to participate in a number of other gender and environment events. GRID-Arendal also worked with a number of partners to organize the event “Dialogue on Marine Litter, Plastics and Gender” on the last day of UNEA-2. The full version of the GGEO was released mid-July at the High-level Political Forum on Sustainable Development in New York. GRID-Arendal is now exploring ways of making this important report more accessible.

Keep it in the ground – global threats from peat fires, loss and degradation

Peat is partially decayed plant material that accumulates over long periods in natural areas called peatlands, also known as bogs or mires. Peatlands are highly efficient carbon sinks. Although they only cover less than 3 per cent of global land surface, estimates suggest that peatlands contain twice as much carbon as the world's entire forests and four times as much carbon as the atmosphere. Recently, peatlands have come under increased threat in many countries, mainly from climate change and conversion to agricultural land.

GRID-Arendal has signed an agreement with UN Environment to produce a Rapid Response Assessment (RRA) that lays the groundwork for the Global Peatlands Initiative (GPI). The RRA will raise awareness among policy makers, build the case for support for the global assessment, respond to increased concerns about the global implications of peatland degradation and point to ways that peatlands can be conserved, sustainably managed and restored at the national and local levels. It will be finished in May 2017. GRID-Arendal developed a web page for the GPI as part of this work.

Transboundary Waters

Sustainable development through cross-border cooperation

GRID-Arendal promotes peace and collaboration between countries by highlighting the interconnectedness of basin states and the benefits of working together. In Africa, transboundary lake and river basins are not only central to the development of regional economic communities, but are also the sites where ideas about ecosystem based adaptation can be tried.

GRID-Arendal's publication *Lake Victoria Basin: Atlas of Our Changing Environment* places Lake Victoria at the centre of economic development of the East African Community. The lake connects East African countries through maritime transport and is a major source of hydropower for the region. GRID-Arendal provides technical support to the Lake Victoria Basin Commission through communication products for use in policy and decision making, as well as through offering capacity building to the region.

Similarly, the *Limpopo River Basin: Changes, challenges and opportunities* atlas acknowledges the importance of the Limpopo River in the regional integration efforts of

the Southern African Development Community. The atlas highlights the value of upstream and downstream cooperation as a way of reducing the risk and impact of floods and droughts, which are common to the basin.

In developing the Limpopo atlas, GRID-Arendal supported the efforts of the Limpopo Watercourse Commission to champion the sustainable use and management of the water resources of the basin. It also demonstrated the positive benefits of working in partnership and how to more effectively use funding and expertise. GRID-Arendal worked with the Resilience in the Limpopo Basin Programme and the Global Water Partnership Southern Africa, both of which provided financial and technical support to the process. Such collaboration ensured local ownership of the atlas and allowed it to attract a wider pool of experts.

Both atlases were completed last year. Their impact on awareness raising, policy and decision-making will be reviewed over time. One early indication of their value and potential impact is the fact that they were requested by their respective river/lake basin commissions.

“The active participation of partner states and other stakeholders signifies the importance attached to this atlas, and their commitment to implement its recommendations.”

Ally Said Matano, Executive Secretary, Lake Victoria Basin Commission



Heavy torrential rains in January 2013 in Chokwé, Mozambique caused the Limpopo River to flood its banks, inundating homes and irrigation schemes, affecting 150,000 people and resulting in 70 deaths. The flooding occurs 3 to 4 times every 10 years. The images above compare the situation in 2013 (right) to a non-flood year in 2005 (left). Source: Adopted from NASA-EOB 2013



Chokwé city, Mozambique affected by floods in 2013. Photo: Vitorino Mondlane



Floods often maroon people due to the inadequate dissemination of early warning messages. Photo: Vitorino Mondlane

The atlases note the scarcity of water resources in Africa in general. This scarcity is compounded by the poor management of wastewater, some of which ends up polluting lakes and rivers. Africa scored low on sanitation targets in the Millennium Development Goals. For this reason, GRID-Arendal is supporting UN Environment and the Africa Development Bank on a new project to assess the management of wastewater in Africa, as well as to track trends in the provision of sanitation services. This project acknowledges that there are vast human health benefits and opportunities for investment by the public and private sectors in wastewater management and proper sanitation. It will run until 2020.

Supporting the Tehran Convention and regional cooperation in the Caspian Sea

Years of hard work in the Caspian Sea region have paid off in the form of a functioning Convention and Protocols. In 2016 much effort was spent on negotiating an agreement that will see a permanent Tehran Convention Secretariat formally established in Baku, Azerbaijan.

The Framework Convention for the Protection of the Marine Environment of the Caspian Sea (the “Tehran Convention”) was adopted in 2003. It is the only legally binding regional agreement signed by all five Caspian states (Republic of Azerbaijan, Islamic Republic of Iran, Republic of Kazakhstan, Russian Federation and Turkmenistan) and is important because it lays out the mechanism for environmental protection in the region.

GRID-Arendal has hosted the Convention’s Interim Secretariat on behalf of UN Environment since 2014. This has included managing parts of the secretariat work related to assessment and information exchange, in particular raising funds for, and establishing, the Caspian Environmental Information Center (CEIC).

Having produced the first State of the Environment report for the Caspian region in 2011, GRID-Arendal is preparing a second report. Its outline has been agreed upon and the work will begin when funding is received from British Petroleum which supported the creation of CEIC.

In June the (Aktau) Convention Protocol Concerning Regional Preparedness, Response and Cooperation in Combating Oil Pollution Incidents entered into force, which concluded months of negotiations and work by the Interim Secretariat. It was followed by a decision by the countries and representatives of the oil industry to join forces to address future oil spill incidents.

The widespread support for this regional collaboration was seen in August when public events were organized in all the Caspian countries with activities ranging from beach cleaning operations to awareness raising and educational work highlighting the values and importance of the Caspian Sea as a unique marine ecosystem.

“I would like to express my gratitude to GRID-Arendal for our partnership throughout the years of running the interim Secretariat of the Tehran Convention out of UN Environment’s European office in Geneva and for the technical support and expertise extended by GRID-Arendal to the Caspian states for the creation of the Caspian Environmental Information Center, to only name the latest of your success stories.”

Jan Dusik, Director and Regional Representative, Regional Office for Europe, UN Environment

Communications and Special Projects

New website, new look, new social media

GRID-Arendal's new website has been developed which integrates a more visual way to present news and created 60 new stories in 2016. This also allows us to capture the conversation from social media and include multimedia content directly in the story. It also gives us a way to promote our most valuable resource – our staff. The new format led to a rapid increase in the number of views on the news site.

The new website allows for the creation of new connections between publications, projects, media, etc. All of our work is related to staff who are involved in various projects. This means it's easier and faster for users to find what they need and at the same time promotes our staff through the Internet.

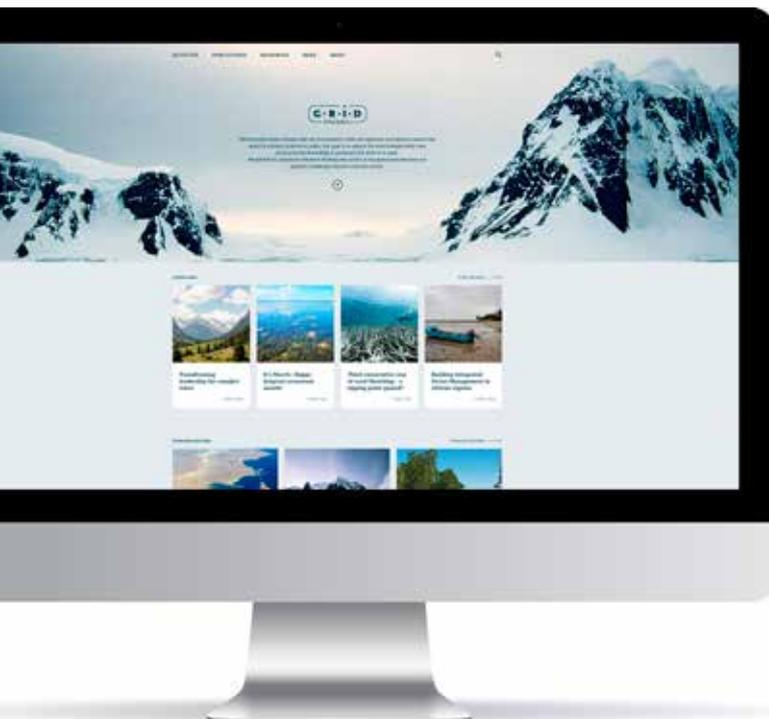
As part of our new social media strategy, we upgraded and branded the existing Facebook, Twitter, LinkedIn and Google+ social media platforms. In addition to this, we set up an Instagram account, and we are seeing rapid growth across all platforms. Social media performance is monitored and evaluated to improve global and local outreach efforts. A logbook tracks digital impact and analytics. These changes have led to a rapid increase in traffic to the GRID-Arendal website.

GRID-Arendal has also increased its use of videos and other visual products to deliver information about our changing environment. Our videos can be found on Vimeo.

GEF International Waters: Learning Exchange and Resource Network (GEF IW:LEARN)

GRID-Arendal is the Implementing Partner on behalf of UNEP in the new phase of the GEF IW: LEARN project. UNEP and UNDP are the two Executing Agencies. The goal of the project is to strengthen knowledge management capacity and promote scaled-up learning of disseminated experiences, tools and methodologies for transboundary waters management together with a global network of partners – across and beyond the GEF IW portfolio – in order to improve the effectiveness of GEF IW and partner projects to deliver tangible results and scaled-up investments. GRID-Arendal leads Component 1 of the project which provides access to an integrated suite of dynamic tools and reliable knowledge networks, project and partner platforms and portals, governments and the broader environment community, to support the wide analysis, dissemination and integration of IW portfolio results and experiences into decision making processes at the national, regional and global levels.

Since inception, GRID-Arendal has focused its efforts on creating a new website with better functionality, relaunching the IW: LEARN e-bulletin, developing publication templates, and creating a social media strategy. The beta version of the new IW:LEARN website was launched in December. The site is still a work-in-progress and so is being constantly updated. An updated release is scheduled for 2017.



GRID-Arendal's new website



The new IW:LEARN website



During Arendalsuka, GRID-Arendal's Managing Director Peter Harris led a children's parade through the town. Photo: Rob Barnes

“We thank Jarle Mjaasund, Tiina Kurvits, Janet Fernandez Skaalvik, and John Crump of GRID-Arendal for encouraging and supporting this endeavour within the cross-cutting initiative of biodiversity and human nutrition.”

From the Acknowledgements, Traditional Animal Foods of Indigenous Peoples of Northern North America website

Traditional Animal Foods of Indigenous Peoples of Northern North America

GRID-Arendal helped McGill University in Canada to produce a website and ebook about the traditional animal foods of Indigenous Peoples in northern North America. The publication, produced by the Centre for Indigenous Peoples' Nutrition and Environment, had been a decade in the making. The ebook has three volumes, each nearly 600 pages, and is a major source of ethnographic information, some of which goes back 100 years. The website will be a tool for teachers and researchers and can be searched by animal, culture or region.

Arendal International Week

GRID-Arendal takes part in the annual celebration of International Week in Arendal, Norway. The week long event, which features seminars and workshops, exhibitions, film screenings and other activities targeting different audiences, was jointly organized by GRID-Arendal and other local and regional organizations to create awareness on the chosen theme of the celebration, to promote action at all levels and to facilitate dialogue across all stakeholders. The focus of the 2016 celebration was on sustainable food production and healthy diets and their contribution to food security and nutrition in support of the 2016 UN International Year of Pulses.

Arendalsuka

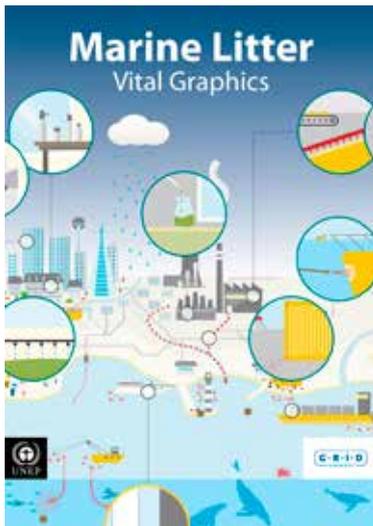
Since 2012 this small city where GRID-Arendal is based has hosted a week of political debates and policy discussions called Arendalsuka. Inspired by Almedal week in Sweden, Norwegian politicians, policymakers, NGOs, businesses and others come to discuss current and future issues. GRID-Arendal has participated in a number of ways over the years and last year we focused on telling stories on everything from meetings between Alaskans and Norwegians exploring Arctic connections to the effects of microplastics in the marine environment. GRID-Arendal, Hold Norge Rent and the Norwegian Ministry of Climate and Environment organized a session on the effects of marine plastic on this country's marine areas, and what needs to be done to clean them up.

Arendalsuka is not all work. GRID-Arendal led a children's parade through the town. Led by two bagpipe players (one of whom was Managing Director Peter Harris), the march attracted a lot of attention. It's not every day one hears bag pipes in Norway.

Network of UN-related organizations in Norway

GRID-Arendal is actively involved in the activities of the network of UN-related organizations in Norway. The network consists of UNICEF Norway, UNDP Norway, FN-Sambandet (UN Association of Norway), the Norwegian Forum for Development and Environment (ForUM), Forum for Kvinner og Utviklingsspørsmål (FOKUS), the International Organization for Migration (IOM) and GRID-Arendal. In 2016 GRID-Arendal contributed to two public events: a seminar on conflict and the Sustainable Development Goals during Arendalsuka and a second seminar focusing on the links between Sustainable Development Goals and human rights on UN Day in Oslo.

Selected publications



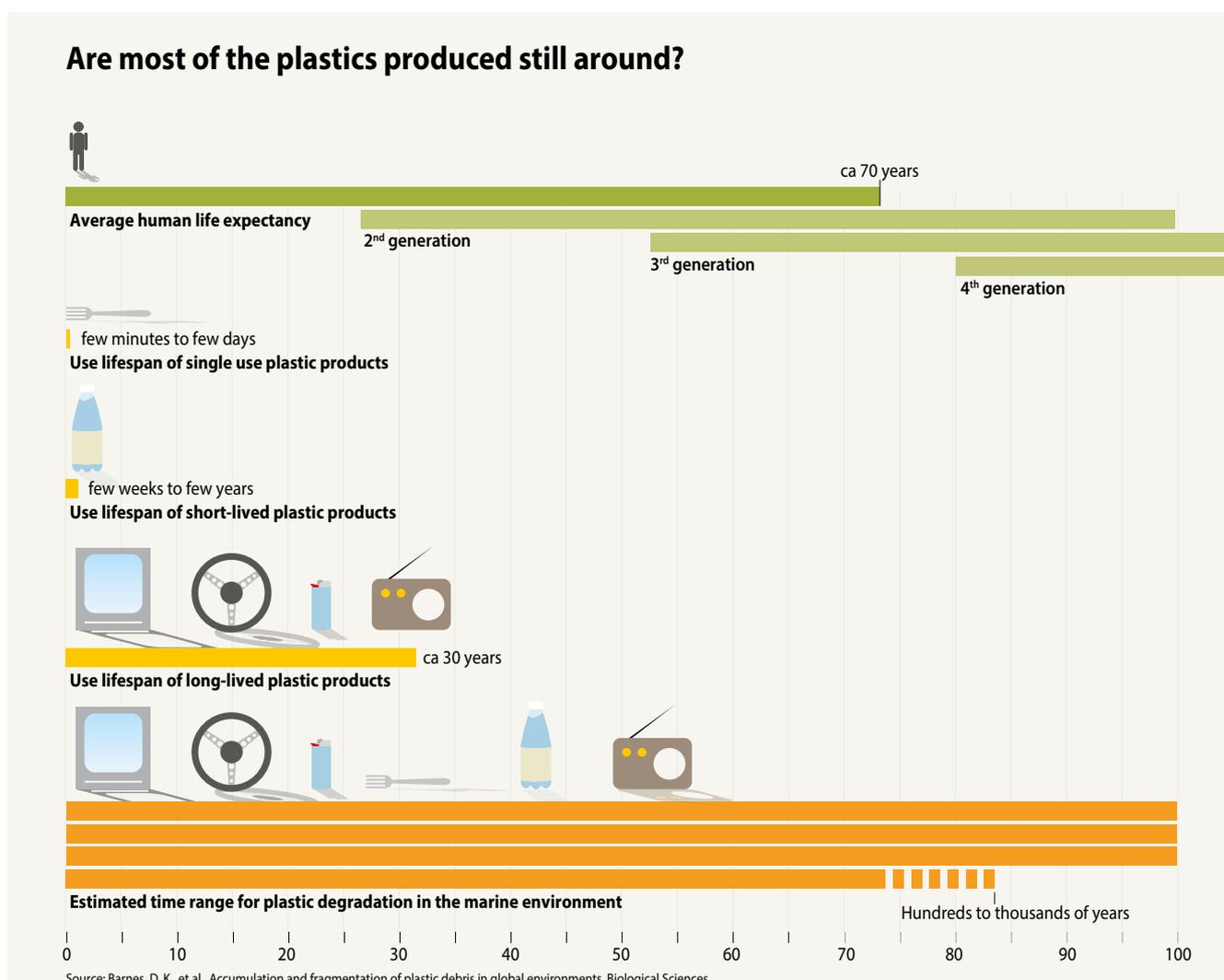
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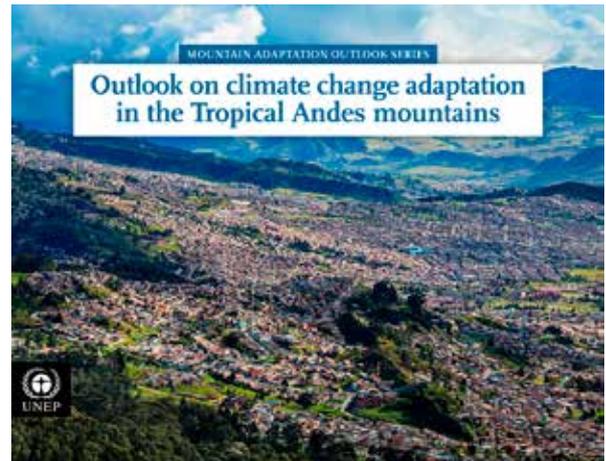


Graphic from the *Marine Litter Vital Graphics*



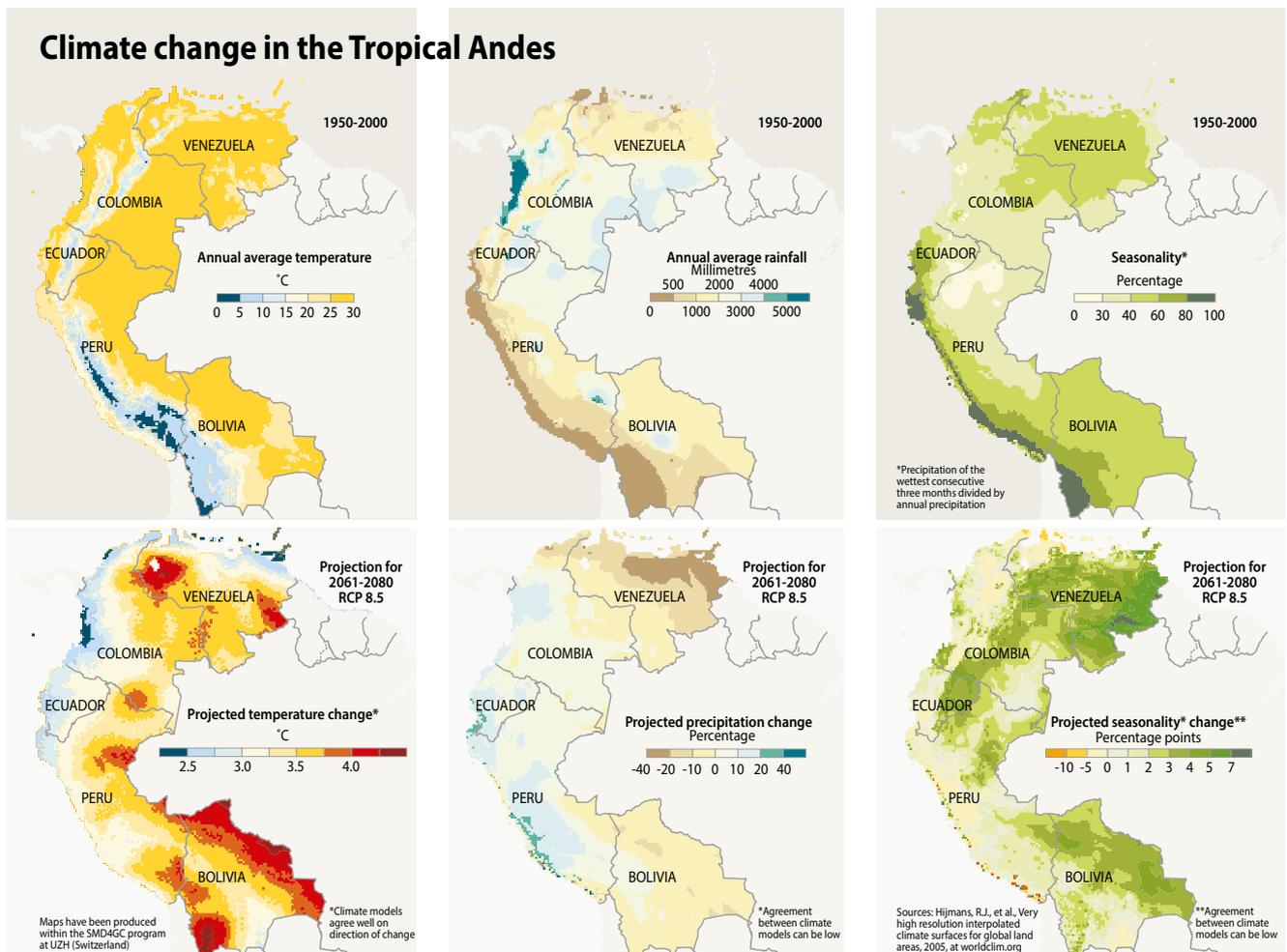
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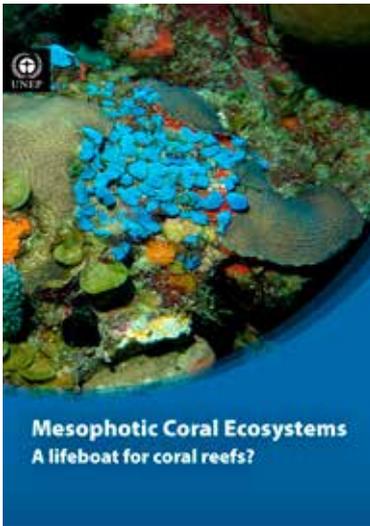


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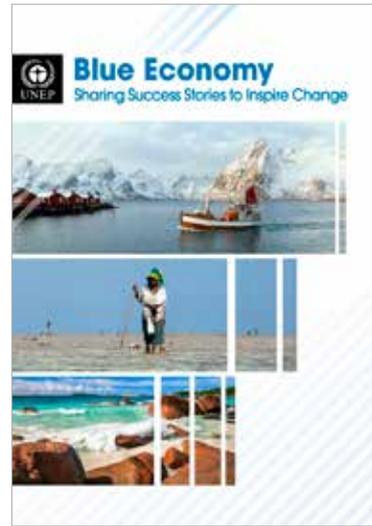


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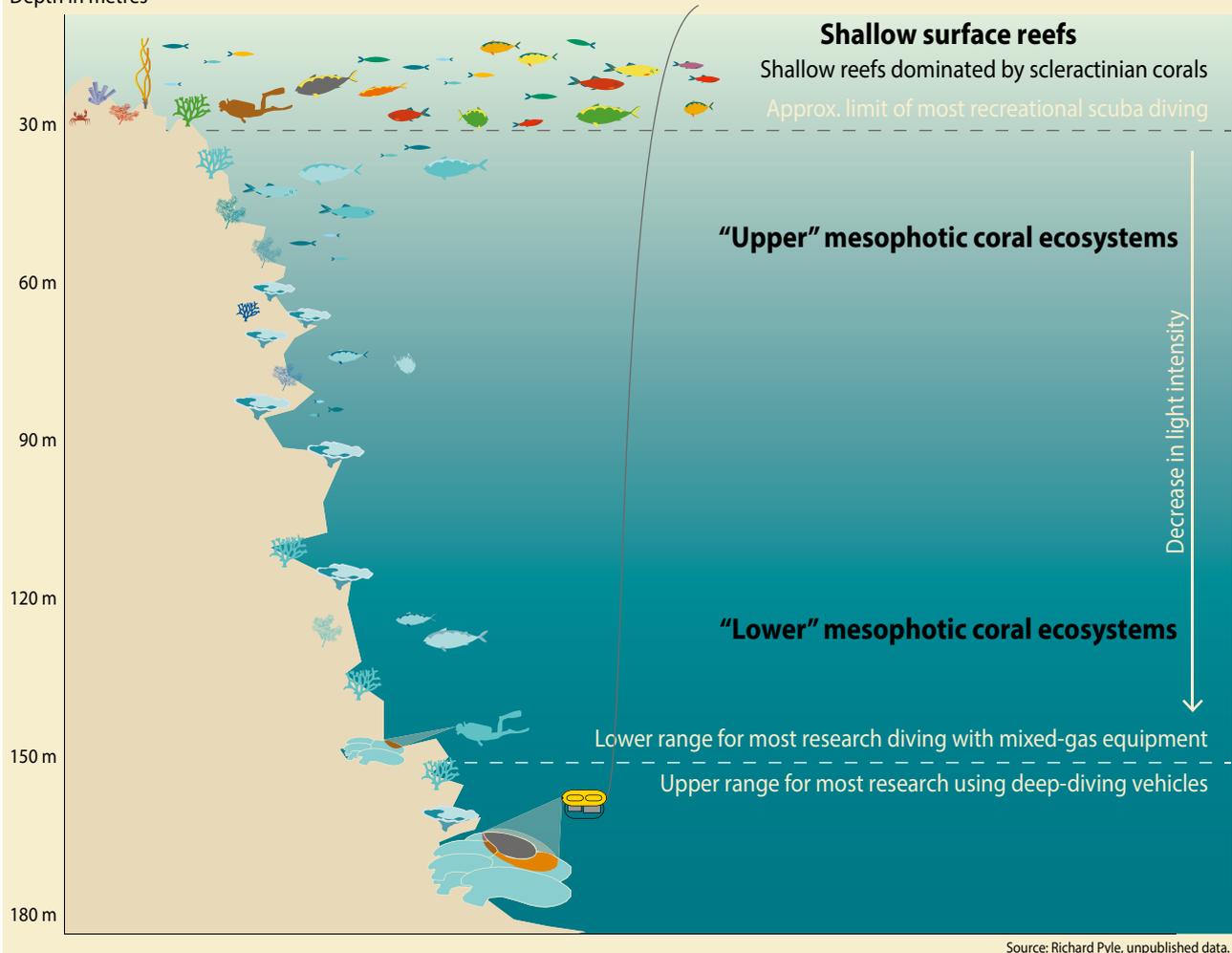


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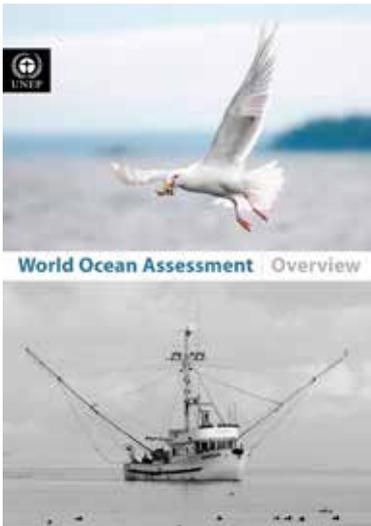
The mesophotic coral ecosystem

Depth in metres



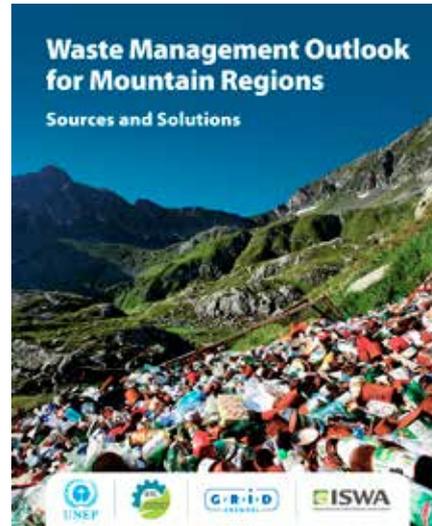
Source: Richard Pyle, unpublished data.

Graphic from *Mesophotic Coral Ecosystems*



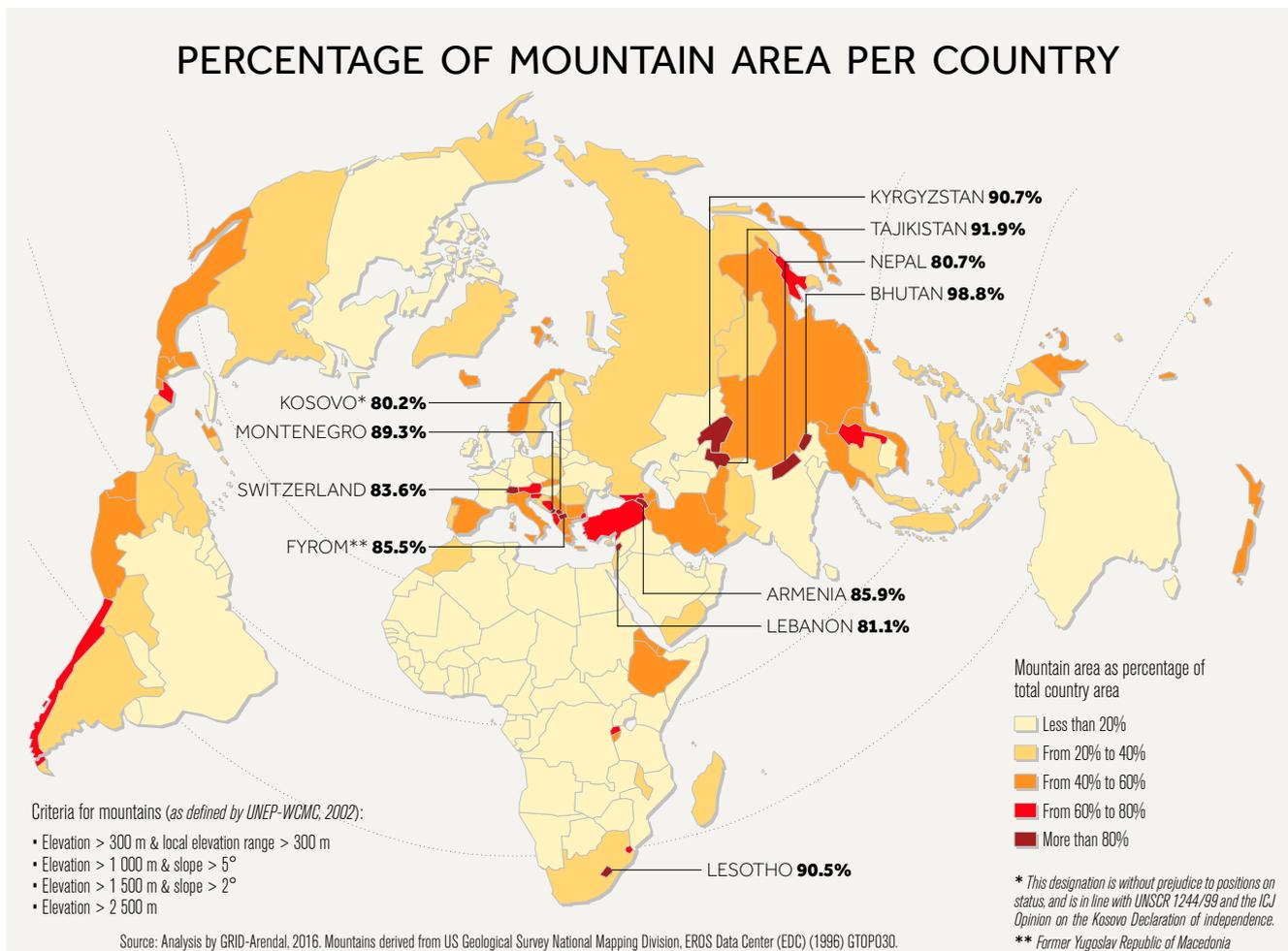
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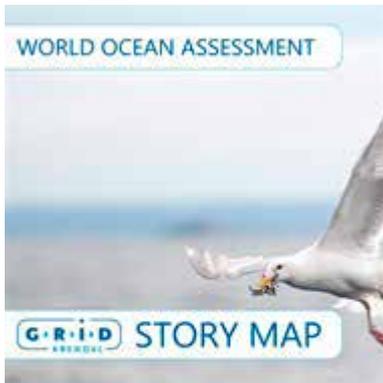
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Map from the *Waste Management Outlook for Mountain Regions*

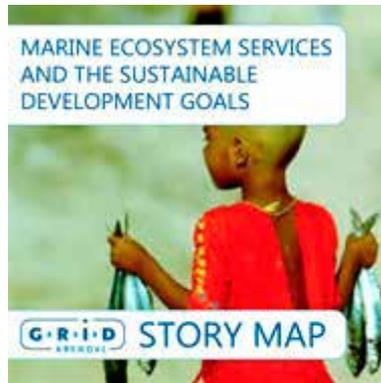
Story maps

The Story Map Gallery is a new initiative designed to communicate the work of GRID-Arendal and raise awareness of environmental issues around the globe. Story Maps are an innovative tool that combine visual media such as maps, graphics and video to communicate complex ideas in a simple story format. The stories are designed to take the user on a journey which will increase their understanding of a topic and raise awareness of the work GRID-Arendal is doing in that field. Story maps can be seen here.



World Ocean Assessment

www.grida.no/publications/story-maps/map/6705



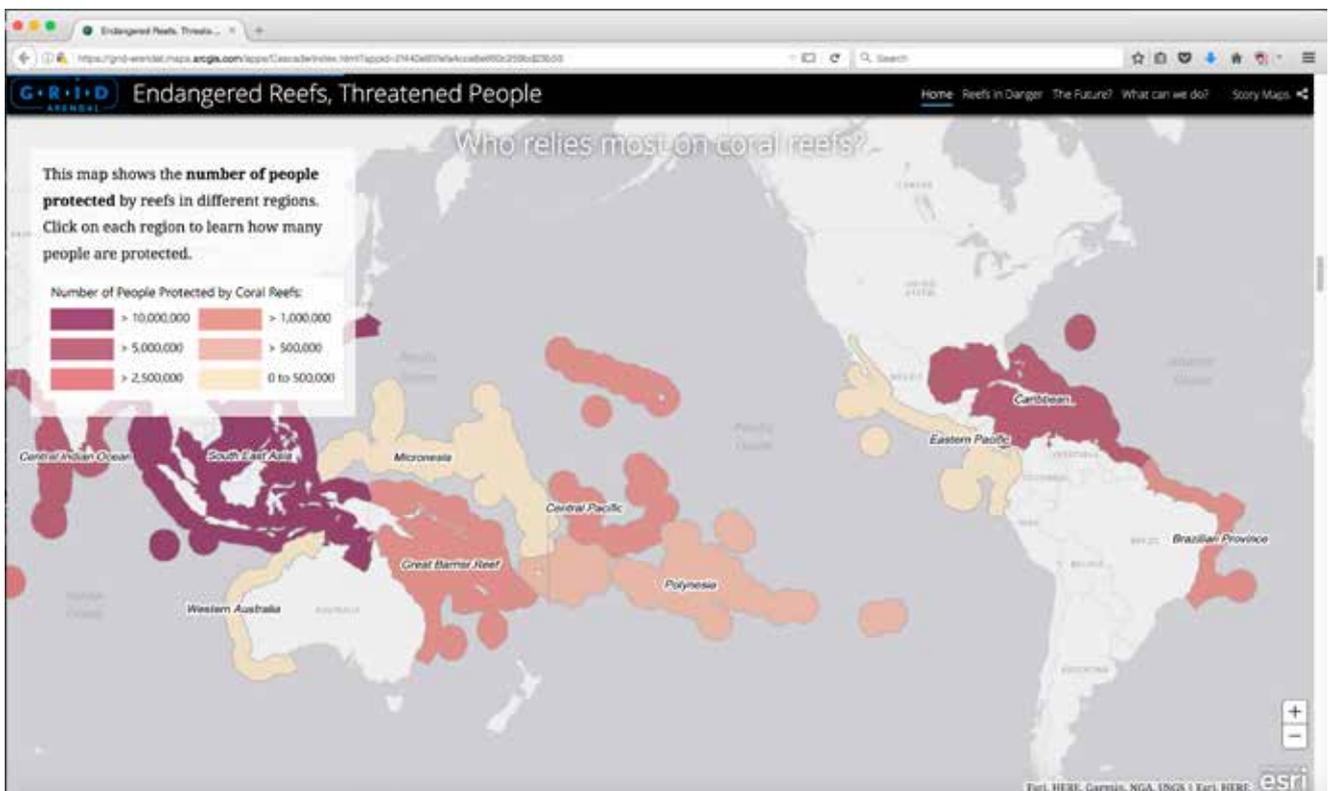
Marine Ecosystem Services and the Sustainable Development Goals

www.grida.no/publications/story-maps/map/6795



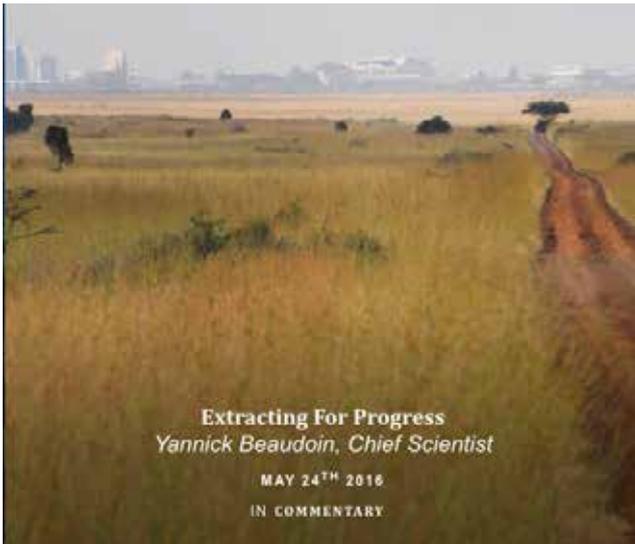
Endangered Reefs, Threatened People

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Endangered Reefs, Threatened People story map

Selected news stories



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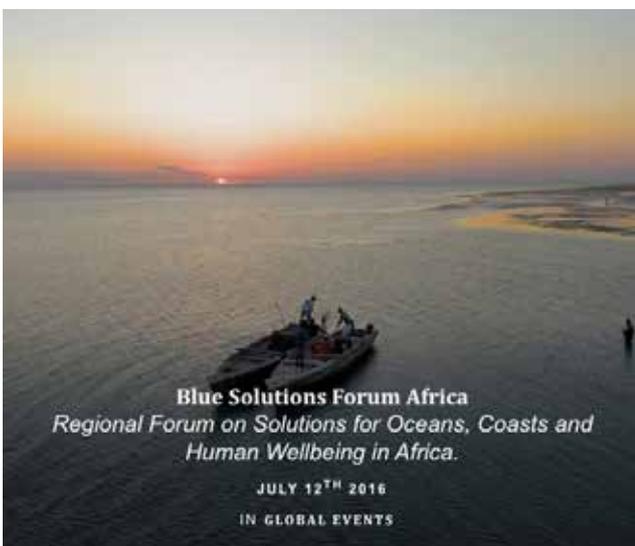
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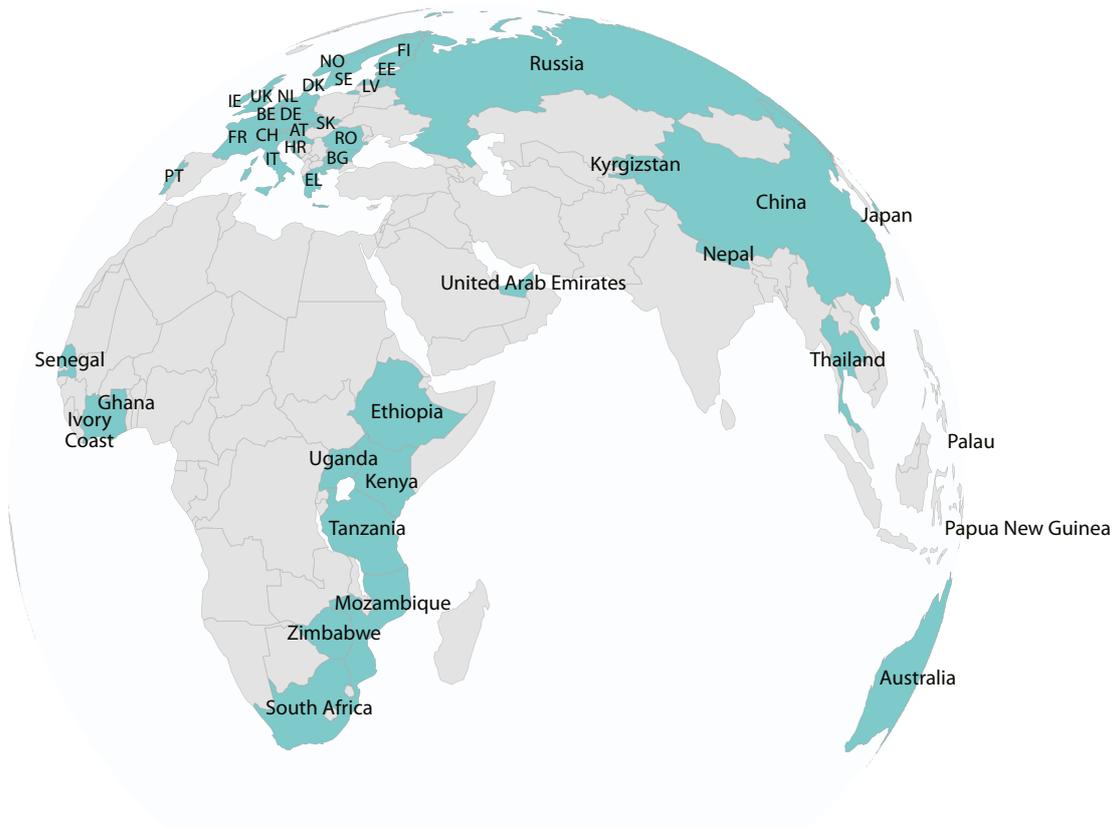


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Leibnitz Institute for Research on Society and Space • **Greece** • Dimos Athinaion • Kion Architects S.A. • Seven Engineering Consultants • **Hungary** • Regional Environmental Center for Central and Eastern Europe (REC) • **Italy** • Consiglio Nazionale Delle Ricerche (CNR) • Consortium for Sustainable Development of the Andean Ecoregion (CONDESAN) • Food and Agriculture Organization of the UN (FAO) • **Ireland** • National University of Ireland Galway • **Latvia** • Homo Ecos • The Green Liberty • University of Latvia • **Netherlands** • Gemeente Amsterdam • Gemeente Ede • Marine Information Service (MARIS) • OKRA Landschap Sarchitecten BV • Stichting Dienst Landbouwkundig Onderzoek • Stichting Hogeschool van Amsterdam • Stichting Waternet • ProSea Foundation • Univeristy of Amsterdam (UVA) • **Norway** • Arendal Kommune • Aust-Agder Fylkeskommune • Environmental Protection Agency • Forum for Kvinner og Utviklingsspørsmål (FOKUS) • FN-Sambandet • Arctic Council Indigenous Peoples Secretariat • Grindaker AS • Hold Norge Rent • Institute of Marine Research (IMR) • International Centre for Reindeer Husbandry (ICR) • International Organization for Migration (IOM) Oslo • Norsk Institutt for Vannforskning (NIVA) • Norwegian Agency for Development Cooperation (NORAD) • Norwegian Center for Global Analyses (RHIPTO) • Norwegian Mapping Authority • Norwegian Ministry of Climate and Environment • Norwegian Ministry of Foreign Affairs • Norwegian Petroleum Directorate (NPD) • Norwegian Forum for Development and Environment (ForUM) • Oslo Kommune • Office of the Auditor General of Norway • Research Council of Norway (RCN) • Saami Council • Saami University College • Socentral AS • Statistics Norway • Stiftelsen for en Kritisk og Undersøkende Presse (SKUP) • United Nations Children's Fund (UNICEF) Norway • UNDP Norway • University of Agder • University of Tromsø • **Portugal** • PROAP • Universidade Lusófona • **Romania** • Danube Delta National Institute for Research and Development (DDNI) • **Russia** • Aleut International Association • Inuit Circumpolar Council • Russian Association of Indigenous Peoples of the North (RAIPON) • Saami Council • **Slovakia** • Mestská Cast Bratislava Karlova Ves • **Slovenia** • IZVO-R, Projektiranje in Inzeniring D.O.O. • Univerza V Ljubljani • **Sweden** • Saami Council • The Global Water Partnership • **Switzerland** • Environmental Network for Optimizing Regulatory Compliance on Illegal Traffic (ENFORCE) • Geodas • International Union for Conservation of Nature (IUCN) • Secretariat of the Basel Convention (SBC) • Sustainable Caucasus • Tehran Convention Secretariat • UNEP/ROE • World Wildlife Fund for Nature (WWF) • Zoi Environment • **Turkey** • United Nations Development Programme (UNDP) • **United Kingdom** • Blue Ventures • Centre for Marine and Coastal Policy Research • Department for Environment Food & Rural Affairs (DEFRA) • HRH Prince of Wales International Sustainability Unit • London Borough of Lewisham • TVE • UNEP World Conservation Monitoring Centre (UNEP WCMC) Simpleshow • University of Sheffield (USFD) • **NORTH AMERICA** • **Antigua and Barbuda** • **Bahamas** • **Barbados** • **Canada** • Arctic Athabaskan Council • Carleton University • Environment and Climate Change Canada • Fisheries and Oceans Canada • Global Affairs Canada • Inuit Circumpolar Council • National Resources Canada • Polar Knowledge Canada • University of Prince Edward Island • **Cuba** • **Dominica** • **Dominican Republic** • **Grenada** • **Haiti** • **Jamaica** • International Seabed Authority (ISA) • **Panama** • UNEP Caribbean Regional Seas Convention • **Saint Kitts and Nevis** • **Saint Lucia** • **Saint Vincent and the Grenadines** • **Trinidad and Tobago** • **United States of America** • Aleut International Association • Arctic Athabaskan Council • Clinton Foundation • Conservation International • Counterpart International • Duke University • Inuit Circumpolar Council • National Oceanic and Atmospheric Administration (NOAA) • United Nations Development Programme (UNDP) • UNEP/RONA • IPEN Secretariat • US Forest Service • US Geological Survey (USGS) • **OCEANIA** • **Australia** • Charles Darwin University • GeoScience Australia • University of Sydney • **Cook Islands** • **Federated States of Micronesia** • **Fiji** • International Union for Conservation of Nature (IUCN) • Pacific Forum Fisheries • Pacific Maritime Boundaries Consortium • SPC Geoscience Division • **Kiribati** • **Marshall Islands** • **New Zealand** • National Institute of Water and Atmospheric Research (NIWA) • **Niue** • **Palau** • **Papua New Guinea** • **Samoa** • **Solomon Islands** • **Tonga** • **Tuvalu** • **Vanuatu** • **SOUTH AMERICA** • **Ecuador** • Conservation International Ecuador • CPPS Regional Sea Secretariat

Board report

Financial report

Board report

GRID-Arendal is a foundation established by the Norwegian Ministry of Environment in 1989 to support the work of United Nations Environment Programme. The foundation produces environmental information, communications and services to build capacity in environmental management and motivate decision-makers to take sustainable actions.

The foundation conducted its activities in 2016 in line with its bylaws, approved budgets and work plans. Its reports and websites describe the activities of its different programmes and the results achieved – see www.grida.no.

2016 saw a positive financial result with a surplus of NOK 375,298 which will be added to the previous year's equity, creating a new equity balance of NOK 10,381,651. The operation is healthy and there were no significant overruns on project or administration costs. The cash situation was generally good with the exception of late autumn, which provided some challenges due to the late receipt of substantial public funding.

GRID-Arendal's environmental policy is based on the foundation's "green" values and commitment to operate in an environmentally responsible and resource efficient manner. Employee flights constitute the greatest environmental impact. As a compensation, GRID-Arendal is investing in emission credits to finance concrete climate action in developing countries. GRID-Arendal is a certified Miljøfyrtårn (environmental) organization and member of Climate Partners (Klimapartnere). GRID-Arendal has its offices in an environmentally friendly building with good energy solutions.

Working conditions at GRID-Arendal are considered good. Long-term sick leave in 2016 amounted to 1.4% of total working days, while short-term sick leave was 2.1%. There were no injuries to staff in 2016 and there was no significant damage to the equipment of the organization. GRID-Arendal strives to reduce stress and improve teamwork and collaboration through efficient communication by the organization's Work Environment Committee.

At the end of 2016, the Board consisted of 3 women and 5 men. The staff consisted of 16 women and 17 men. GRID-Arendal aims to be a workplace where there is full equality between women and men. It has incorporated provisions aimed at preventing gender discrimination in matters such as salary, promotion and recruitment, and conducts annual employee surveys.

Project funding is satisfactory, activity levels are high and the Board is therefore optimistic about the outlook for 2017. The Board concludes that GRID-Arendal's activities are consistent with its mandate and that it has a competent staff for continuing operations and for planning future strategy-relevant operational activities.

The financial statements are based on the assumption of continued operations, as the Board is aware of no factors that indicate otherwise. The Board considers the financial statements to give a true and fair view of assets and liabilities, financial position and results. There were no events in the past year that had special impact on GRID-Arendal's development or position.

Arendal, 01.03.2017



Olav Orheim
Chair



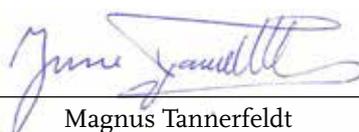
Peter Townsend Harris
Managing Director



Randi Eidsmo Reinertsen
Deputy Chair



Nils Audun Karbø



Magnus Tannerfeldt



Colin Daniel Martin



Yngvild Lorentzen



Beate Nossum



John Patrick Crump
Staff Representative

Financial report

Balance sheet (NoK)

Assets	Note	2016	2015
<i>Tangible fixed assets</i>			
Machinery and equipment	2	0	20 207
Total tangible fixed assets		0	20 207
<i>Financial fixed assets</i>			
Investments in subsidiaries	5,8	11 012 000	9 012 000
Total financial fixed assets		11 012 000	9 012 000
Total fixed assets		11 012 000	9 032 207
<i>Current assets</i>			
<i>Debtors</i>			
Accounts receivables		4 287 883	3 298 796
Other receivables		698 888	844 720
Total debtors		4 986 771	4 143 516
Cash and bank deposits	6	17 605 230	17 091 126
Total current assets		22 592 001	21 234 642
Total assets		33 604 001	30 266 849
Equity and liabilities			
Restricted equity	9	500 000	500 000
Total restricted equity		500 000	500 000
Retained earnings			
Other equity	9	9 881 651	9 506 353
Total retained earnings		9 881 651	9 506 353
Total equity	9	10 381 651	10 006 353
<i>Current liabilities</i>			
Trade creditors		2 723 115	2 839 165
Public duties payable		1 147 012	1 199 759
Other short term liabilities	8	19 352 224	16 221 573
Total short term liabilities		23 222 351	20 260 496
Total liabilities		23 222 351	20 260 496
Total equity and liabilities		33 604 001	30 266 849

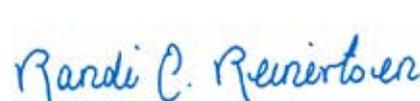
Arendal, 23.03.2017



Olav Orheim
Chair



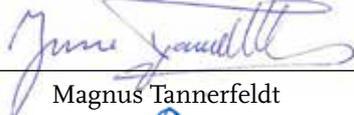
Peter Townsend Harris
Managing Director



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Deputy Chair



Nils Audun Karbø



Magnus Tannerfeldt



Colin Daniel Martin



Yngvild Lorentzen



Beate Nossum



John Patrick Crump
Staff Representative

Income statement (NoK)

Operating income and operating expenses	Note	2016	2015
Operating income		52 945 455	55 841 011
Project costs		16 334 695	18 893 822
Personnel costs	3,4	23 331 284	22 615 199
Depreciation	2	20 207	26 940
Other operating expenses	7	12 248	12 231 339
Operating expenses		51 934 875	53 767 299
Operating result		1 010 580	2 073 712
<i>Financial income and expenses</i>			
Other financial income		334 451	1 562 662
Other financial expenses		969 733	962 839
Net financial income and expenses		-635 283	599 823
Annual net profit	9	375 298	2 673 535
<i>Brought forward</i>			
Net brought forward		375 298	2 673 535

Note 1

Accounting principles

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 2016 for small companies, consist of the profit and loss account, balance sheet and notes to the accounts. The financial statements give a true and fair view of assets, debt, financial status and result. 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.

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 of delivery of goods 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, which are probable and quantifiable, are taken to cost.

Accounting principles for material items

Revenue recognition

Revenue is normally recognised at the time of delivery of goods 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 3 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, 3 years.

Accounts Receivables

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

Note 2**Machinery and equipment (NoK)**

Book value 01.01.2016	20 207
Addition 2016	0
Depreciation 2016	-20 207
Book value 31.12.2016	0

Note 3**Salary (NoK)**

	2016	2015
Salary and holiday pay	16 796 510	16 405 240
Employers contribution	2 824 822	2 558 942
Pension costs	1 819 936	1 459 988
Other personnel costs	1 890 016	2 191 029
Total	23 331 284	22 615 199

Average number of employees	32	30
Salary of Managing Director	888 480	
Fee to Chairman of the Board	47 500	
Fee to other Board members	105 800	

Stiftelsen GRID-Arendal has entered into a pension agreement with the former CEO that can lead to future payments. There are accruals set aside for the most likely outcome of this obligation.

The company has subscribed to a pension scheme which meets the requirements of the obligatory pension scheme.

Note 4**Pension obligations**

The pension premium to the contribution plan for the employees is NoK 1 819 936 and the premium is charged to the personnel costs.

Note 5**Long term investments (NoK)**

Shares subsidiaries: Teaterklassen AS
 Owners share: 82.9%
 Purchase cost: 11 012 000
 Share of equity 31.12.2016: 17 390 587

Note 6**Petty cash and bank accounts**

NoK 736 065 of the total cash is restricted to meet the liability arising from the payroll taxes withheld.

Note 7**Auditor's fees**

The audit fee for 2016 is split into two parts:
 The audit as required by law NoK 90 500
 Other services provided by the auditor NoK 26 000.

Note 8**Balances with subsidiaries**

As of 31.12.2016 GRID-Arendal has a debt of NoK -7 500 000 to Teaterklassen ASO.

Note 9**Equity capital (NoK)**

	Other equity	Total
Share capital		
Equity capital 01.01.2016	0	10 006 353
Result for the year	375 298	375 298
Additional dividend	0	0
As at 31.12.2016	375 298	10 381 651



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To the The Board of Directors in Stiftelsen Grid-Arendal

Independent Auditor's Report

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Stiftelsen Grid-Arendal showing a profit of NOK 375 298. The financial statements comprise the balance sheet as at 31 December 2016, the income statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements are prepared in accordance with law and regulations and give a true and fair view of the financial position of the Foundation as at 31 December 2016, and its financial performance for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.

Basis for Opinion

We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, included International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the foundation as required by laws and regulations, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information

Management is responsible for the other information. The other information comprises the Board of Directors' report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

KPMG AS, a Norwegian limited liability company and member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Statsautorisererte revisorer - medlemmer av Den norske Revisorforening

Offices in:

Oslo	Elverum	Mo i Rana	Stord
Alta	Finnsnes	Molde	Straume
Arendal	Hamar	Skien	Tromsø
Bergen	Haugesund	Sandefjord	Trondheim
Bodø	Knarvik	Sandnessjøen	Tynset
Drammen	Kristiansand	Stavanger	Alesund

Responsibilities of The Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director (management) are responsible for the preparation and fair presentation of the financial statements in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Foundation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern. The financial statements use the going concern basis of accounting insofar as it is not likely that the enterprise will cease operations.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, included International Standards on Auditing (ISAs), we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error. We design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Foundation's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Foundation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Foundation to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit

Report on Other Legal and Regulatory Requirements

Opinion on the Board of Directors' report

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Board of Directors' report concerning the financial statements, the going concern assumption, and the proposal for the allocation of the profit is consistent with the financial statements and complies with the law and regulations.

Opinion on Registration and Documentation

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, it is our opinion that management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the foundation's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Opinion on distributions and administration

Based on our audit of the financial statements as described above, and control procedures, we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, «Assurance Engagements Other than Audits or Reviews of Historical Financial Information», it is our opinion that the foundations administration and distributions are in accordance with laws and regulations, the foundations objectives and articles of association.

Arendal, 23 March 2017
KPMG AS

Terje H. Holst
State Authorised Public Accountant



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