

UNEP YEAR BOOK

EMERGING ISSUES
IN OUR GLOBAL ENVIRONMENT

2014



UNEP

United Nations Environment Programme



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ISBN: 978-92-807-3381-5

Job Number: DEW/1793/NA

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Table of Contents

	Foreword	5
	UNEP Year Book 2014 emerging issues update	
	Excess Nitrogen in the Environment	6
	Changes in the global nitrogen cycle	7
	Increased coastal dead zones and climate change impacts	8
	What is being done to reduce excess nitrogen releases?	9
	Towards integrated nitrogen management	10
	UNEP Year Book 2014 emerging issues update	
	The Emergence of Infectious Diseases	12
	Emergence and re-emergence of infectious diseases	13
	Combating infectious disease while addressing environmental challenges	14
	Taking actions to combat infectious diseases	15
	A multi-sectoral approach to ensure healthy life for all	16
	Further information about infectious diseases	17
	UNEP Year Book 2014 emerging issues update	
	Fish and Shellfish Farming in Marine Ecosystems	18
	Implications for the environment of providing food from the ocean	19
	Development of marine aquaculture	20
	Marine aquaculture with less impact	21
	Capitalizing on progress	22
	Further information about fish and shellfish farming	23
	UNEP Year Book 2014 emerging issues update	
	Illegal Trade in Wildlife	24
	The high environmental, social and economic costs	25
	Recognition of illegal wildlife trade as a serious crime	26
	Are we turning a corner? Small steps towards success	27
	Combating illegal wildlife trade through international collaboration	28
	Further information about illegal wildlife trade	29
	UNEP Year Book 2014 emerging issues update	
	Methane from Hydrates	30
	Methane hydrates	31
	Recent observations and knowledge	32
	Searching for answers to some complex questions	33
	Addressing big questions and continuing international cooperation	34
	Further information about methane hydrates	35



UNEP Year Book 2014 emerging issues update

Realizing the Potential of Citizen Science	36
Getting involved: citizen science	37
Trends and recent developments in citizen science	38
Renewing and understanding traditional knowledge	39
Improving coordination to achieve greater impacts	40
Further information about citizen science	41



UNEP Year Book 2014 emerging issues update

Air Pollution: World's Worst Environmental Health Risk	42
Unacceptable environmental, social and economic costs	43
Air pollution: the leading cause of environmentally related deaths	44
The transboundary challenge of air pollution	45
Meeting agreed standards to achieve economic and health benefits	46
Further information about air pollution	47



UNEP Year Book 2014 emerging issues update

Plastic Debris in the Ocean	48
Continuous flows of plastic to the marine environment	49
Growing concern about microplastics	50
Cooperation at international, regional and national levels	51
The key to reducing inputs of plastic debris is at the source	52
Further information about plastic debris in the ocean	53



UNEP Year Book 2014 emerging issues update

Securing Soil Carbon Benefits	54
Managing soils for multiple economic, societal and environmental benefits	55
Improved soil management: crucial for climate change and food production	56
Maintaining and enhancing soil carbon benefits	57
Seeking synergies with other policy objectives	58
Further information about soil carbon benefits	59



UNEP Year Book 2014 emerging issues update

Rapid Change in the Arctic	60
A view from the top	61
Arctic update: science and shipping	62
Adapting to rapid change	63
Combatting climate change and building resilience	64
Further information about the Arctic	65

Acknowledgements	66
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Foreword

Ten years ago UNEP alerted the world to the development of dead zones in coastal waters resulting from excess nitrogen seeping into the water. That was in the first edition of the Year Book series. In the intervening period many more emerging issues have been identified, with some rising to crisis level and others showing encouraging improvement.

The 2014 Year Book shows how scientific endeavour and policy actions have led to innovative solutions and vital advancements. Yet these are frequently outpaced by overall economic growth. For example, as the fuel efficiency of cars has increased, the size of the vehicle fleet continues to grow. Similarly, as the aquaculture sector expands in response to the demand for food, scientists expect that its environmental impacts may double by 2030. For the illegal wildlife trade, a state of crisis has been reached, with the world standing to lose two iconic species as a result of the demand for ivory and rhino horn if no urgent action is taken.

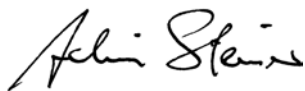
The 2014 Year Book reconfirms the critical role that the environment plays in maintaining and improving the health of people and ecosystems: from the well-managed soils and nutrients that underpin food production to the critical role of biodiversity in protecting human health against the spread of infectious diseases. Clean air in our cities prevents the premature death and illness of millions of people and can save society trillions of dollars.

Our economies are still largely fossil-fuel based, with the environmental, economic and health costs largely hidden. For example, in the pristine polar regions, scientists have recently found tiny pieces of plastic trapped in sea ice. Transported by ocean currents across great distances, these contaminated particles eventually can become a source of chemicals in our food. The key of course is to prevent plastic debris from entering the environment in the first place.

The issues in the 2014 Year Book have clear connections. A warmer and wetter climate will cause shifts in the spread of infectious diseases, whilst rapid melting of Arctic glaciers will have far-reaching global implications for sea-level rise and the potential release of methane – a potent greenhouse gas. Strong action on air pollutants, especially particulate matter – of which black carbon is a component – would result in multiple benefits by not only slowing the melting of polar ice and snow, but also significantly improving human health.

A key message of the 2014 Year Book is that we will increasingly need access to timely, reliable environmental information from locations around the world so that we can identify issues as they emerge and develop effective actions and policies to respond to them. Without this, the global community's efforts will be hampered. It is for this reason that UNEP is committed to helping countries improve their environmental data flow and to making knowledge much more widely accessible. From new space technologies to social media and citizen science, UNEP is supporting local and indigenous communities to start measuring and providing data themselves. The Year Book itself reflects this change by being launched as a mobile app, richly illustrating the topics with live graphics and video stories about positive initiatives that address existing and emerging issues.

I encourage you to explore the Year Book in its new format and use the 2014 Year Book update to support your own activities in the advancement of sustainable development.



Achim Steiner

United Nations Under-Secretary-General and Executive Director,
United Nations Environment Programme



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