

INVEST4CLIMATE
KNOWLEDGE SERIES



United Nations Development Programme

MOBILIZING INSURANCE INVESTMENT IN SUSTAINABLE INFRASTRUCTURE

THE ROLE OF THE UNITED NATIONS

TABLE OF CONTENTS

© 2020 United Nations Development Programme. All rights reserved.

One United Nations Plaza, New York, NY 10017, USA

This publication or parts of it may not be reproduced, stored by means of any system or transmitted, in any form or by any medium, whether electronic, mechanical, photocopied, recorded or of any other type, without the prior permission of the United Nations Development Programme.

The views expressed in this publication are those of the author(s) and do not necessarily represent those of United Nations, including UNDP, or the UN member states.

UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet.

Learn more at undp.org or follow at @UNDP.

Author: Lauren Carter, Engagement Advisor, Invest4Climate (UNDP)

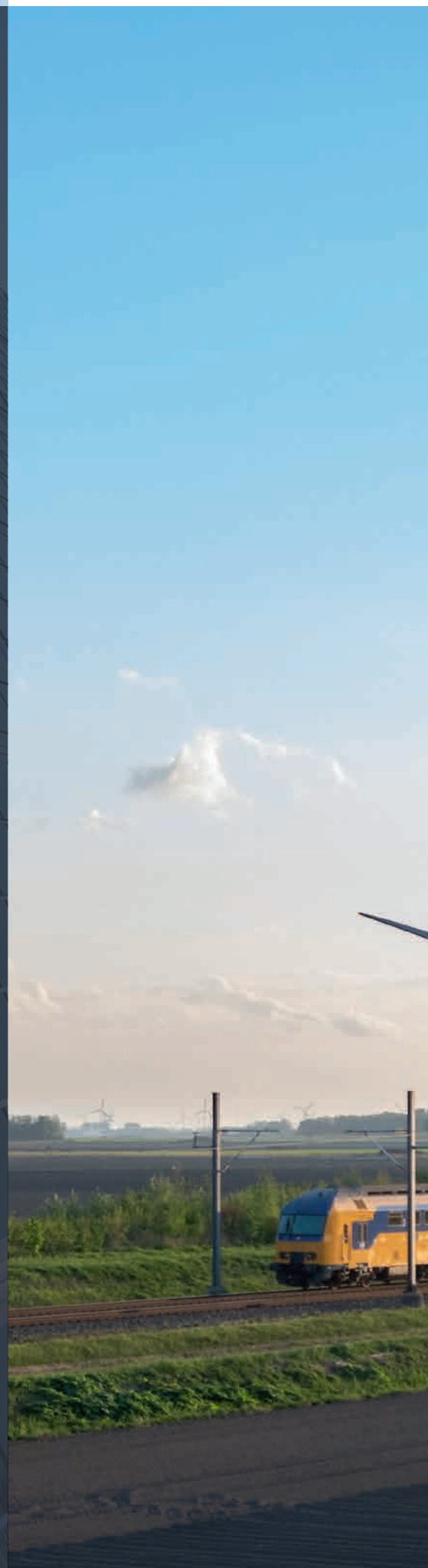
Internal Reviewers: Emily Davis (Programme Specialist, UNDP), Lucas Black (Environmental Policy Advisor, Global Environmental Finance, Bureau for Policy and Program Support, UNDP)

External Reviewers and Interviewees: Claus Stickler (Allianz), Franziska Ehm (Allianz), Carlos Sanchez (Willis Towers Watson), Bill Marcoux (WCM Advisory), Jean-Pascal Asseman (AXA), Thibaud Escalon (AXA), Fabian Ferrer (AXA), Ian Brimecome (Tokio Marine), Catherine Clark (Prudential PLC), Michael McRaith (Blackstone), Julie Chang (Blackstone), Michael Kjeller (Folksam), Rob Wesseling (The Co-operators Group Limited), Martina Englmann (Munich Re), Andreas Jobst (IMF), and Charlene Watson

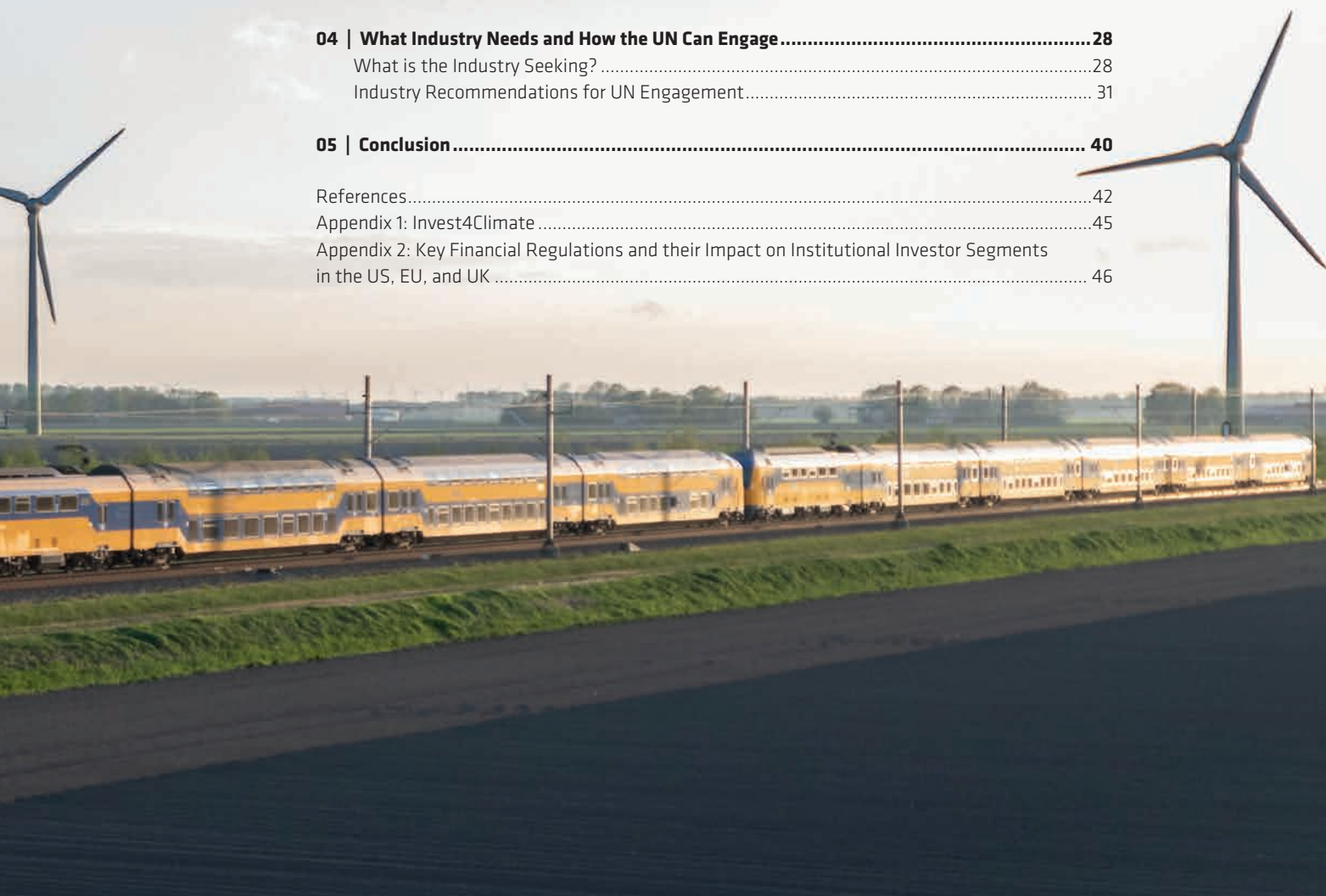
Editor: Jan Kellett, UNDP Team Leader, Insurance and Risk Finance Facility

Acknowledged also is the financial support to Invest4Climate provided by the Government of Germany and the Government of Italy.

This report should be referenced as: Carter, Lauren (2020). *Mobilizing Insurance Investment in Sustainable Infrastructure: The Role of the United Nations*. Invest4Climate Knowledge Series. United Nations Development Programme, New York, NY, USA.



Objective	2
Abbreviations	2
01 Introduction	4
02 Insurance Investment in Emerging Market Infrastructure	8
Understanding the Industry	8
Reinsurance and Insurance-linked Securities	9
Industry Investments	9
Climate Change and the Insurance Industry	12
03 Analysis of Key Investment Challenges	16
Pipeline Origination	19
Political, Legal, and Regulatory Barriers	20
Macroeconomic Barriers	21
Technical Barriers	22
Financial Barriers	24
04 What Industry Needs and How the UN Can Engage	28
What is the Industry Seeking?	28
Industry Recommendations for UN Engagement	31
05 Conclusion	40
References	42
Appendix 1: Invest4Climate	45
Appendix 2: Key Financial Regulations and their Impact on Institutional Investor Segments in the US, EU, and UK	46



Objective

This report is part of the Invest4Climate Knowledge Series. The Invest4Climate platform, a World Bank Group–United Nations Development Programme (UNDP) partnership, was designed to mobilize, coordinate, and deliver the financing needed to close the climate financing gap and help countries transition to a low-carbon, resilient future that supports jobs and growth. The Invest4Climate

Knowledge Series provides targeted reports on expanding private investment in climate action through financial innovation and collaborative partnerships. The objective of this report is to explore the ways in which the UN system can best engage with the global insurance industry to transition more of its portfolio into low-carbon and climate-resilient infrastructure investments.

Abbreviations

AUM	Assets Under Management	LCCR	Low-Carbon and Climate-Resilient
CCRI	Coalition for Climate Resilient Investment	MCPP	Managed Co-Lending Portfolio Platform
CIP	Climate Investment Platform	MDB	Multilateral Development Bank
CIG	Closing the Investment Gap in Sustainable Infrastructure	MIGA	Multilateral Investment Guarantee Agency
CIS	Collective Investment Schemes	NAIC	National Association of Insurance Commissioners
DFI	Development Finance Institutions	NDB	National Development Bank
EEA	European Economic Area	NDC	Nationally Determined Contributions
EIB	European Investment Bank	OECD	Organization for Economic Cooperation and Development
EIOPA	European Insurance and Occupational Pension Authority	PCR	Physical Climate Risk
EM	Emerging Market	PPA	Power Purchase Agreement
EMDE	Emerging Markets and Developing Economies	PPP	Public-Private Partnership
ESG	Environmental, Social and Governance	QBS	Quality-Based Selection
FSB	Financial Stability Board	ReSCO	Resilience Service Company
FX	Foreign Exchange	SDG	Sustainable Development Goals
GCF	Green Climate Fund	SE4All	Sustainable Energy for All
GWP	Gross Written Premiums	Sida	Swedish International Development Cooperation Agency
IAIA	International Association of Insurance Supervisors	SOE	State-Owned Enterprise
ICT	Information and Communications Technology	TCX	The Currency Exchange Fund
IDF	Insurance Development Forum	UNCDF	United Nations Capital Development Fund
IFC	International Finance Corporation	UNDP	United Nations Development Programme
ILS	Insurance-Linked Securities	UNEP	United Nations Environment Programme
INFF	Integrated National Financing Network		
IRENA	International Renewable Energy Agency		

Note: All figures quoted are in US dollars unless otherwise noted.



© Hilda Weges/Getty Images

01

INTRODUCTION

01 | Introduction

Between now and 2040, the world requires investment of \$84.5 trillion in infrastructure, which is more than the total current stock.¹ This means that capital spending over the next two decades will need to fundamentally reshape the infrastructure system to create and maintain sustainable and inclusive growth. Thus, it is critical to the achievement of the major global framework agreements – the United Nations (UN) Sustainable Development Goals (SDGs), the Paris Climate Agreement, the Addis Ababa Action Agenda, and the Sendai Framework on Disaster Risk Reduction – that this new infrastructure is low-carbon and climate resilient (LCCR). This is especially true in emerging markets and developing economies (EMDEs) which are more vulnerable to climate change but also have greater investment needs.

Populations in many EMDEs are rapidly growing, with corresponding demands for the expansion of affordable energy, transportation, information and communications technology (ICT), water resources, health services, and food systems.

These populations are also increasingly vulnerable to climate-related risks and hazards such as severe storms, flooding, and drought. By ensuring that infrastructure is LCCR at the onset, countries can reduce emissions, increase economic growth and strengthen local resilience while avoiding service disruption and costly retrofitting.

Investing in LCCR infrastructure also represents a significant business opportunity with the potential to yield direct economic gains of \$26 trillion through 2030 compared with business-as-usual while simultaneously preventing thousands of deaths and hundreds of billions of dollars in losses from disasters triggered by extreme weather and climate-related hazards (New Climate Economy 2018). In spite of the opportunity, however, there is a projected \$16 trillion sustainable infrastructure

financing gap between now and 2040², and closing this gap will require mobilizing private capital and building a corresponding pipeline of bankable projects at a scale never before seen.

With approximately \$33 trillion in assets under management, insurers rank alongside pension funds as the world's largest long-term investors.³

Sustainable infrastructure offers an attractive investment opportunity for insurers because it can deliver predictable and stable cash flows that match insurers' long-term liabilities while also generating an illiquidity premium (Jobst 2018). As underwriters, insurers are also well-positioned to understand climate risks and the advantages of investing in infrastructure that is low-carbon and resilient to climate change. The complementarity of these two activities make insurers exceptionally well-positioned to lead the way on responsible investments (Ralph 2018).

The insurance industry acknowledges the substantial role it has to contribute to the acceleration of the low-carbon economy. The European Insurance and Occupational Pension Authority (EIOPA) highlights that, "As risk managers and investors, [insurers] play an essential role in driving investments towards particular sectors and long-term projects. Insurers are increasingly incorporating climate-related risks in their underwriting and investment activities" as these factors are acknowledged to have financial implications to the companies' balance sheets (EIOPA 2019).

Investments in LCCR infrastructure offer dual benefits by reducing the emissions of critical development projects while minimizing the underwriting risks for insurers as countries become increasingly resilient to climate change. Targeted investment in resilient infrastructure that reduces the potential underwriting losses for non-life

1 See <https://outlook.github.org> Global Infrastructure Hub figures from 2020 onwards, inclusive of the SDGs.

2 Ibid.

3 Financial Stability Board 2020.



insurers from storm surges, flooding, heat stress, and other climate factors, and could lead to lower premiums for policyholders, creating a virtuous cycle of price incentives for investing in prevention and preparedness.⁴ According to Lloyd's of London, "with careful design, insurance and investments can be mutually reinforcing. Greater resilience reduces risk, which is then reflected in lower insurance premiums, providing a strong financial incentive to make suitable investments" (Lloyd's 2018).

Historically, significant infrastructure investment by insurers has been inhibited by uncertainty about the proper distribution of payoffs and risk-sharing within opaque and complex public-private partnership (PPP) structures, regulatory barriers, and limited in-house experience. But in recent years, the low interest-rate environment has pushed insurers to seek greater returns in alternative assets such as infrastructure. These infrastructure investments often occur in Organization for Economic Cooperation and Development (OECD) countries where insurers are familiar and have operations, though some of the more sophisticated insurers have been open to investing in EMDEs in which both the need for LCCR infrastructure and the financing challenges are substantial.

In EMDEs, traditional project finance risks are typically amplified by weak enabling environments including political uncertainty, the lack of a predictable pipeline of bankable projects, and a limited supply of de-risking instruments for foreign exchange, liquidity, and counterparty risks. In addition to these risks, insurers have their own set of more specific challenges to overcome. These challenges include: aligning investments with their long-term liabilities; complying with risk-based regulatory frameworks that assign high capital charges for infrastructure investments, especially for unrated projects which are the most common; building their internal expertise and capacity to invest in infrastructure; and, most importantly, finding projects of sufficient size and quality to meet their investment requirements that can ideally be bundled into portfolio structures to achieve scale.

This report will explore how, despite the challenges, the insurance industry is uniquely placed to foster greater investment into LCCR infrastructure in EMDEs, by combining its inherent understanding of physical climate risks with its patient capital, and how the United Nations can support these investments.

Report Structure

Section One reviews the current status of industry investment to date and future ambitions, while Section

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index?reportId=5_11626

