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FOREWORD

Climate change is no longer just a problem for the future. It is a problem for now. As the Intergovernmental Panel on Climate Change's latest research tell us, climate change is already causing widespread disruption to nature, society and the global economy – undermining decades of development gains and threatening to push millions back into poverty.

To slow and reverse this crisis, we need to speed up implementation of climate change mitigation and adaptation, and further up ambition – which the UNEP-Copenhagen Climate Centre is well positioned to support.

UNEP Copenhagen Climate Centre and its predecessors – the UNEP DTU Partnership and the UNEP Risoe Centre – have 30 years of experience in providing technical assistance, policy advice and capacity building services in over 100 countries. It was through the UNEP DTU partnership that UNEP's Emissions Gap report provided status updates on efforts to reduce greenhouse gas emissions and solutions to accelerate action.

The new centre will support developing countries to move onto climate-resilient and low carbon development pathways. It will remain a vital part of UNEP's mission to deliver compelling science in support of environmental and climate action. UNEP Copenhagen Climate Centre's support to developing countries



in building national transparency systems to report on climate actions, and implementation support to governments, cities, and the private sector, are both crucial tools for our future.

This annual report shows that UNEP Copenhagen Climate Centre will play a key role in getting on top of the climate crisis – with positive knock-on effects for the nature loss and pollution crises. I commend the centre's work and look forward to seeing it deliver real impact in the global efforts to deal with the climate crisis in years to come.

Inger Andersen, UN Under-Secretary-General and UNEP Executive Director

UNEP DTU Partnership has become the new UNEP Copenhagen Climate Centre.

On 26 April 2022 we formally inaugurate the UNEP Copenhagen Climate Centre, operationally supported by UNOPS. Becoming part of the UN family will allow UNEP Copenhagen Climate Centre to help UNEP achieve its mission to support environmental decision making and climate action across the world, as well as assist its partners achieve their 2030 agenda commitments.

The UNEP Copenhagen Climate Centre will build on the work of the last 30 years and continue our support for emerging economies and developing countries to find climate-resilient and low-carbon pathways. This assistance is more urgently needed now due to the many negative impacts of COVID-19 on vulnerable nations.

Last year, the number of people without access to energy in Africa increased for the first time in a decade, due to COVID-19. Another even more serious factor is the disproportionate opportunities for countries to rebuild their economies via low-carbon initiatives. Less developed and many already climate-vulnerable nations are at risk of being left behind.

We know also know that the decrease in pollution levels and emissions due to lockdowns and economic deceleration all over the world was short-lived. Emissions are once again increasing.

We are in dire need of rapid and sustained emissions reductions getting us closer to net-zero. Markets and market mechanisms can help us get there, and with the finalization of Article 6 and an international rule-book for carbon markets, UNEP Copenhagen Climate Centre is now working to make sure that the rules not only maximize emissions reductions but also promote sustainable development and ensure lasting positive effects for communities and nature.

Leading up to COP26, the UNEP Copenhagen Climate Centre co-produced and co-edited the UNEP Emissions and Adaptation Gap Reports that served as key reference documents for the UNFCCC and during the COP26 negotiations. The UNEP Emissions Gap Report showed us that the climate commitments fell far short of what is needed to meet the goals of the Paris Agreement, while the Adaptation Gap Report was clear about the need to significantly ramp up adaptation implementation and finance.

It is now unequivocally clear: Climate change is a threat to all human beings as well as the health of our planet. Any further delay in concerted global action will miss a brief and rapidly closing window to secure a liveable future.

The UNEP Copenhagen Climate Centre will continue our work towards a climate-resilient world harmonious with nature and transitioning towards low-emission sustainable development pathways.

We will work with our many partners around the world and will increase our engagement and collaboration with the private sector and non-state actors to push for needed mitigation and adaptation actions.

Susanne Pedersen

Director, UNEP Copenhagen Climate Centre



VISION

A climate-resilient and sustainable world for all

MISSION

Provision of knowledge and capacity building for enhanced climate action, supporting developing countries and emerging economies to pursue low-emission, climate-resilient pathways for sustainable development

UNEP COPENHAGEN CLIMATE CENTRE

- FROM KNOWLEDGE TO ACTION

The UNEP Copenhagen Climate Centre provides science-based analyses and assessments on achieving the targets of the Paris Agreement as well as the Sustainable Development Goals.

The Centre supports developing and emerging economies with tools, knowhow and capacity building for ambitious climate, energy, and technology-specific policies, planning and actions. With a strong international expert team, the UNEP Copenhagen Climate Centre provides relevant and comprehensive data and knowledge on climate resilient and low-emission pathways to set the direction for climate policies and to cater to the need for greater transparency and scaling up of actions.

The UNEP Copenhagen Climate Centre was established on 1 March 2022, building on work done under the UNEP DTU Partnership. The Centre builds on more

than 30 years of experience in providing science-based assessments, policy advice, and capacity building in over 100 countries to advance global development and climate goals, with the strong and consistent backing of the Danish Ministry of Foreign Affairs.

Supported operationally by the United Nations Office for Project Services (UNOPS), the UNEP Copenhagen Climate Centre addresses climate change through three complementary strategic areas:

- » **Policy:** Strengthen climate policy and planning
- » **Transparency:** Support tracking and reporting for climate accountability
- » **Implementation:** Facilitate and scale-up climate action



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AT A GLANCE

THE GAP REPORTS:

DELIVERING SCIENCE TO SUPPORT CLIMATE ACTION

The UNEP Emissions Gap and Adaptation Gap reports in 2021 served as key reference documents for the UN Framework Convention on Climate Change (UNFCCC) and during the COP26 negotiations. The UNEP Copenhagen Climate Centre co-produced these reports. The reports were published with the support of the Climate-Works Foundation, the Nordic Council of Ministers, Germany, the Netherlands, Sweden, Norway and Denmark

The 2021 Emissions Gap Report showed that the updated climate commitments ahead of COP26 fell far short of the targets, with the world on track for a

temperature rise this century of at least 2.7°C. On a more optimistic note, the report also showed that fully implemented net-zero pledges could bring the rise down to 2.2°C. The 2021 Adaptation Gap Report, meanwhile, showed an urgent need to step up efforts to finance and implement climate change adaptation.

The two reports and their executive summaries were downloaded almost 100,000 times. Over 4,500 articles in 104 countries featured the report's science and findings – nearly double the reach from 2020.



ARTICLE 6 RULEBOOK PROMOTING SUSTAINABLE DEVELOPMENT

With the Glasgow Climate Pact adopted at COP26, the Article 6 component of the Paris rulebook was finally finished. UNEP Copenhagen Climate Centre recommendations on how a finished Article 6 could promote sustainable development found their way to the final rulebook, paving the way for implementation. Most of this work was done in collaboration with the Gold Standard Foundation, and has been supported by Germany, Norway, Sweden and Finland.

The UNEP Copenhagen Climate Centre will continue to support Parties, the Secretariat and other stakeholders with the development of tools and guides, making sure that the sustainable development provisions are translated into real and measurable impact.





NDC ACTION

Through the NDC Action project, the UNEP Copenhagen Climate Centre directly supports ten countries to translate their Nationally Determined Contributions (NDCs) to the Paris Agreement into concrete strategies and actions. The NDC Action Project is jointly implemented by the UNEP Copenhagen Climate Centre and UNEP with funding from the IKI (Internationale Klimaschutz Initiative).

In Costa Rica, the NDC Action Project assisted the government in analyzing the decarbonization of industrial processes within the scope of the National Plan of Decarbonization.

In Ghana, the NDC Action project secured USD 250,000 from the Adaptation Fund Climate Innovation Accelerator (AFCIA) to implement measure increasing adaptation financing.

At the end of 2021, the project launched the Asia Regional NDC Clinic, a series of virtual events presenting common challenges faced by Asian countries when implementing NDCs at sector level.



BUNDLING SUCCESS IN ARGENTINA

An innovative business model developed with the support of the UNEP Copenhagen Climate Centre has been used to bundle green investments in Argentinian municipalities.

The model includes the establishment of a trust fund, through which small and medium-sized municipalities can jointly procure green technology – making the volumes more attractive to suppliers and thus the unit prices lower. The trust fund and the bundling approach are implemented in a partnership with the Argentinean Network of Municipalities Against Climate Change (RAMCC).

In late 2020, the first LED streetlights procurement in a bundle through the fund arrived in nine municipal-

ities throughout Argentina. Since then, the fund has been multiplying the number of investments in street lighting and other technologies – such as solar panels, water meters and electric vehicles. More Argentinian municipalities are joining the Trust Fund, translating into higher impact, replicability and scalability.

The bundling approach, which is designed to be replicable across regions and countries, was recognized in several prizes – including the GCF Climate Community Champion (2019) and the New York University Grunin Prize for Law and Social Entrepreneurship (2021), for the associated legal work developed by the firm Beccar Varela.

TRANSPARENCY METHODOLOGIES FOR INCREASED ASPIRATIONS

The UNEP Copenhagen Climate Centre is a key implementing partner of the Initiative for Climate Action Transparency (ICAT). The Centre has led the development of methodologies for assessing sustainable development and transformational change impacts of climate actions.

The UNEP Copenhagen Climate Centre has used on-the-ground experience to refine the approach, enabling countries to select the most efficient, cost-effective policies to achieve their sustainable development priorities and fulfil their reporting requirements under the UNFCCC.

In Costa Rica, the methodologies were used to integrate monitoring of sustainable development and transformation change impacts in the National Climate Change Monitoring System (SINAMECC).

Supported by UNEP Copenhagen Climate Centre experts, the country engaged in a thorough process of methodological development, using pilots, and stakeholder engagement, to create tailor-made guidance documents. Through ICAT, the UNEP Copenhagen Climate Centre also supported Costa Rica in creating an e-learning platform for capacity building.

ENSURING **GREEN FINANCE FLOWS**

To curb global emissions and adapt to climate change, we need green finance and investments on a massive scale. As part of efforts to achieve this goal, the UNEP Copenhagen Climate Centre works closely with the Danish Investment Fund for Developing Countries (IFU).

The Centre supported IFU to develop a new climate policy, with the goal of increasing climate investments, decarbonizing the portfolio and aligning with the goals of the Paris Agreement. The UNEP Copenhagen Climate Centre has analyzed investment projects and helped IFU align with new regulatory frameworks for sustainable finance.

Last year the Centre also did the first calculations of the carbon footprint of IFU and Danish export credit agency, EKF. Work is ongoing on a footprint assessment of EKF's portfolio. UNEP Copenhagen

Building on the partnerships with IFU and EKF, UNEP Copenhagen Climate Centre will develop more tools for financial institutions to increase green finance for climate action.

This work is aligned with the UNEP Finance Initiative's efforts on supporting private sector financial institutions to fully align portfolios with the mitigation and adaptation objectives of the Paris Agreement.



LOCALISING **RENEWABLE ENERGY** **TECHNOLOGY PRODUCTION**

For the past three years, the UNEP Copenhagen Climate Centre has been piloting a new approach to investigate technology transfer and diffusion, converting this into actionable recommendations.

Through the Technology, Markets and Investment for Low Carbon and Climate Resilient Development (TE-MARIN) project, the Centre has been working closely with government and private sector actors in Uganda and Kenya to analyze and recommend way to increase the share of locally-manufactured green technologies.

In 2021, the work focused on the solar PV sector in Uganda, drawing on previous positive experiences from Kenya. The UNEP Copenhagen Climate Centre worked directly with Ugandan companies, as well as investors and policymakers.

Through a targeted market analysis and profiling of each company, new insights were gained that benefitted the specific companies and led to an overall capacity increase in the sector. The Centre conducted match-making sessions between companies and investors, resulting in a German crowdfunding platform exploring a model for bundling several investments in Ugandan Solar PV companies.

The work with the selected solar PV companies also revealed several uncertainties regarding market regulations, which were hindering the success of local production. UNEP Copenhagen Climate Centre made specific recommendations to the National Renewable Energy Platform in Uganda for policy changes that can remove some of the barriers for local production and job creation.

OTHER HIGHLIGHTS

SUSTAINABLE BIOFUEL IN PAKISTAN

Based on findings from the country's Technology Needs Assessment, Pakistan started a new project to use sustainable biofuels to reduce emissions, meet Paris Agreement contributions and increase access to energy. The Technology Needs Assessment project, funded by the Global Environment Facility, is implemented by the UNEP Copenhagen Climate Centre and UNEP in close collaboration with the UNFCCC. Close to 100 countries have, since 2009, joined the TNA project.

INDIGENOUS PEOPLES AND CLIMATE TECHNOLOGIES

Working with indigenous organizations and representatives from all over the world, the UNEP Copenhagen Climate Centre published a guide on Indigenous Peoples and Climate Technologies. It highlights how Indigenous Peoples' knowledge on climate solutions can play a critical part in climate action and shows ways to integrate and strengthen Indigenous tech in national Technology Needs Assessments.

KENYA - ENERGY EFFICIENCY IMPLEMENTATION PLAN

Kenya presented its energy efficiency implementation plan during COP26 in Glasgow. The plan builds on the national energy efficiency strategy, which was developed with support from the UNEP Copenhagen Climate Centre.

ENERGY EFFICIENCY IN THE BUILDING SECTOR IN ARGENTINA

UNEP Copenhagen Climate Centre undertook studies to understand the gap between the supply and demand for energy efficiency skills and knowledge. These studies contextualise skills and knowledge gaps for energy efficiency in the building sector in Argentina, the transport sector in Sri Lanka and the commercial and manufacturing sectors in Kenya.

BEHAVE 2020-2021

The 2020-2021 BEHAVE conference on behaviour and energy efficiency was hosted by the UNEP Copenhagen Climate Centre, bringing together over 500 participants to share ideas and experiences in promoting effective solutions for energy efficiency improvements and climate mitigation.

THE GLOBAL ESCO NETWORK

2021 also saw the Global ESCO Network hosted by the UNEP Copenhagen Climate Centre became truly global. The network now comprises of 85% of the world's associations that represent Energy Service Companies. ESCOs are important in mobilizing good climate investments but their potential is far from reached. The Global ESCO Network aims to change that by driving and inspiring government actions for scaling up the contribution of ESCOs to the Paris Agreement goals

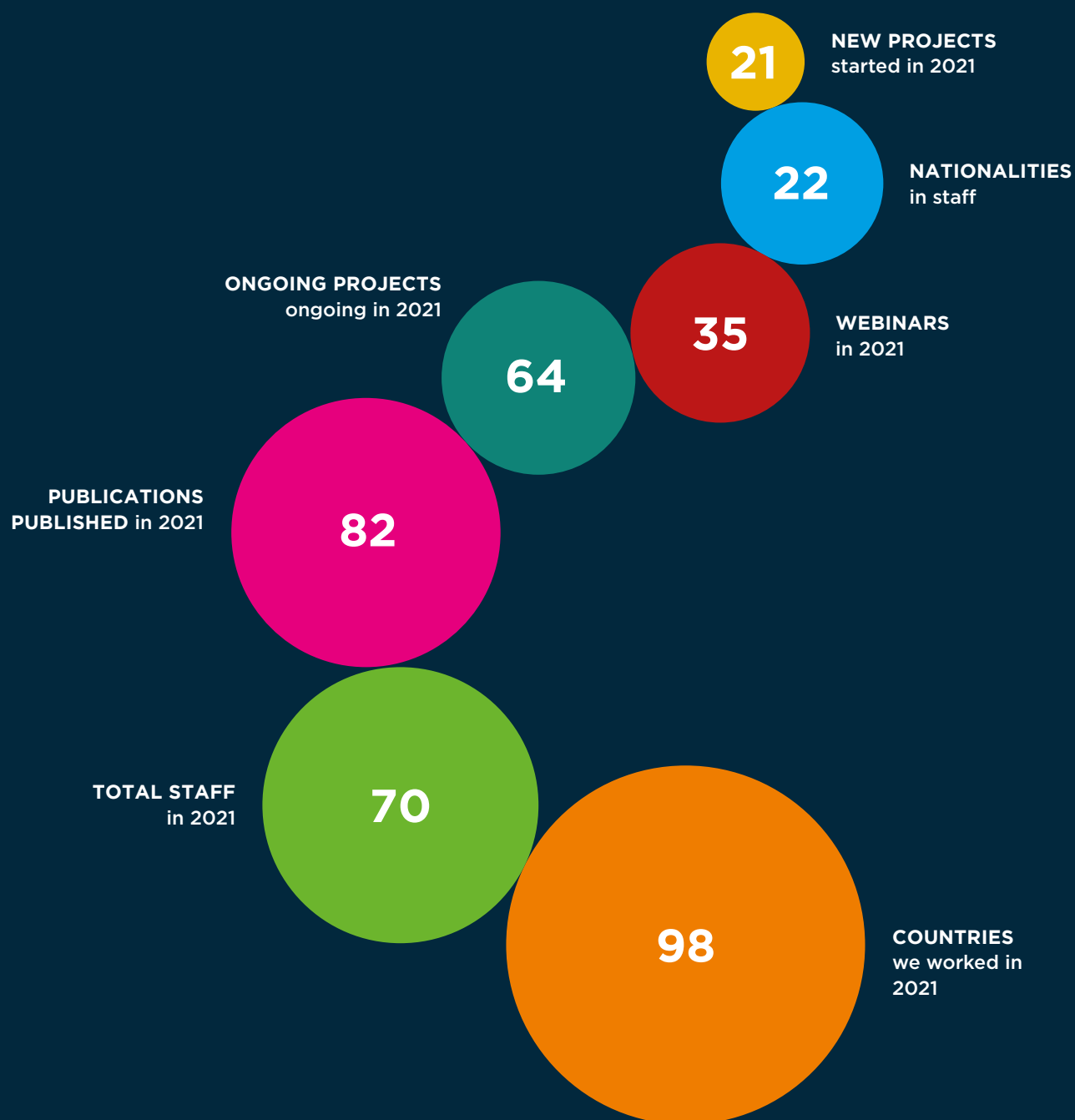
ENERGY EFFICIENT SOLUTIONS FOR STREETLIGHT IN MOZAMBIQUE

In Mozambique, the UNEP Copenhagen Climate Centre carried out an assessment of a complete retrofitting of the country's streetlights to energy efficient solutions, in partnership with the local electricity utility. Building on this assessment, the African Development Bank is now financing further studies towards implementation.

LIBERIA - SHAPING THE PARIS AGREEMENT COMMITMENTS

Liberia used the results of its Technology Needs Assessment to prepare the country's updated Nationally Determined Contributions. Through the assessment, Liberia prioritized the energy sector for climate change mitigation and agriculture and coastal zones for adaptation.

UNEP-CCC IN NUMBERS



IMPACT THROUGH **PARTNERSHIPS**

Partnerships are how UNEP Copenhagen Climate Centre makes an impact. These range from support to central governments and municipalities, to collaboration with research centres and the private sector in emerging economies and developing countries.

NEW PARTNERSHIPS AND HIGHLIGHTS

In July 2021, UNEP Copenhagen Climate Centre signed a new strategic collaboration agreement with the Danish Energy Agency, aimed at enabling the fluid exchange of technical and regulatory knowledge and experiences with selected countries, including China. In particular, the collaboration paves the way for a coordinated effort to promote green district heating solutions.

In Uganda, UNEP Copenhagen Climate Centre initiated a collaboration with the Uganda National Renewable Energy and Energy Efficiency Alliance (UNREEEA) – a non-profit, non-partisan umbrella organization of business associations. UNEP Copenhagen Climate Centre

and UNREEEA agreed to jointly promote investment and partnerships in support of local solar energy SMEs through the National Renewable Energy Platform led by the Ministry of Energy.

In 2021, UNEP Copenhagen Climate Centre joined the Leadership Group of the Household Energy Hub of the Climate & Clean Air Coalition, hosted by UNEP. The aim is to assist low-income countries secure the levels of investment they need to achieve the SDG7 targets on clean cooking. Demand for this work is expressed by around 70 countries, including more than 25 in Africa.

Based on Uganda's Technology Needs Assessment and Technology Action Plan, UNEP Copenhagen Climate Centre worked with stakeholders in the water sector to form a private sector-led alliance promoting rooftop rainwater harvesting. This includes understanding the size of the market and barriers to its expansion, as well as the delivery of customized financial support to identify ways of building upon and/or expanding previous initiatives by government and other players.

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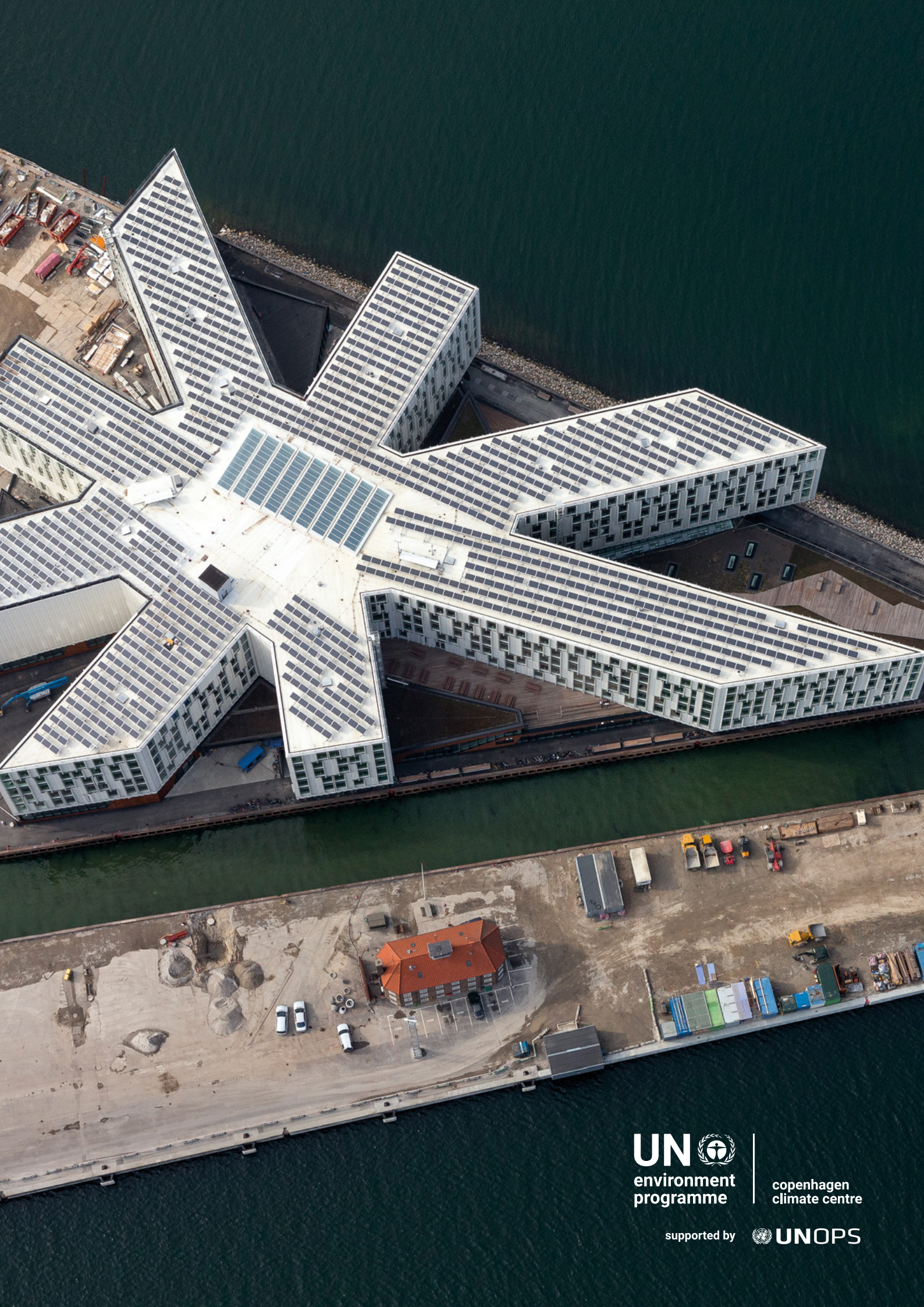
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