

# DEG – more than finance: We shape transformation

Infrastructure & Energy  
2024

KFW DEG

»» DEG:  
Für unternehmerischen  
Erfolg und Entwicklung  
[www.deginvest.de](http://www.deginvest.de)

# Introduction to DEG

One of the world's leading development finance institutions (DFI)

## Who is DEG?

- **Our job is financing development:** DEG is Germany's development finance institution
- **Focused strategy:** DEG's mandate is to support the private sector in developing markets
- **AAA rated shareholder:** DEG is indirectly owned by the Federal Republic of Germany through its parent company KfW

## Where is DEG?

- **European base:** Headquartered in Cologne, Germany
- **Local presence:** 21 global offices in all major developing regions, local network in > 80 local offices of KfW
- **Global reach:** Investment portfolio of around EUR 9.2bn across 90+ developing economies

## Which funding solutions does DEG offer?

- **Long term partnership:** DEG specialises in long-term funding (up to 21 years; depending on structure)
- **Financial instruments:** Fund investments, direct equity, mezzanine and senior loan funding solutions
- **Multiple currencies:** DEG offers EUR, USD, and selected local currencies
- **Other products:** DEG offers technical assistance programs ("BSS") and provides further promotional funding solutions (e.g. AfricaConnect, Upscaling, develoPPP)

## Who are DEG's clients?

- **Business clusters:** Infrastructure & energy, industries & services, financial sector
- **Diverse businesses:** Project developers, entities of local and international groups, family-owned businesses, PE funds, financial institutions, medium-seized businesses, multinational stock-listed firms
- **Strong sponsors with a proven track record:** technical & financial experience, qualified management, transparent shareholding structure and accounting system

# Worldwide presence of KfW Group and DEG

Approx. 80 offices and representations with regional experience and networks



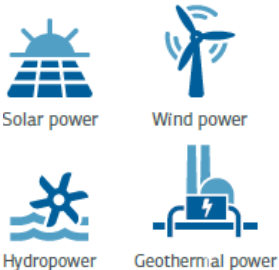
**DEG has established contacts in key regions and main foreign markets and can ensure physical proximity for optimal advisory support across borders**

# Focus Sectors

## Infrastructure & Energy

### Energy

Wind  
Hydropower  
Solar  
Geothermal  
Hydrogen



### Telecom

Mobile Network Operators MNO  
Tower Companies  
Telecom Energy Service Company  
Fiber Companies  
Data Center



### Water

Bulk Water Supply  
(incl. Desalination)  
Integrated Water Utilities  
Waste Water Treatment



### Transportation

Ports - Sea & river ports,  
port related infrastructure  
Airports  
Roads  
E-Mobility



# Financing solutions – Infrastructure & Energy

DEG can provide tailor-made financing products for your infrastructure projects

## Long-term loan

- **Ticket size**  
USD 15-60m (up to USD 150m can be mobilized)
- **Currencies**  
USD, EUR, CNH, MXN, ZAR
- **Interest rate:**  
Fixed/ variable based on risk
- **Collateral:**  
Standard non- or limited-recourse project financing security packages

## Mezzanine finance

- **Ticket size:**  
USD 10 – 30m
- **Equity mezzanine:**  
Significant equity kickers (e.g. conversion rights, warrants, performance-linked returns etc.)
- **Debt mezzanine:**  
i.e. long tenor, no-, partial-, subordinated collateral, subordinated debt service, partially performance linked returns
- **IRR** depending on project and country risk

## Equity capital

- **Ticket size:**  
Usually USD 10-30m
- **Fund investments:**  
Investments in infrastructure & energy funds
- **Direct equity:**  
Minority stakes, up to 25% of share capital; strong minority rights required; exit-driven or long term investments
- **Flexible structures:**  
Sub. Loans, convertible loans, preferred shares etc.
- **IRR** depending on project and country risk

**DEG's involvement as a long-term financier or an anchor investor can have a catalytic effect**

# DEG's Business Support Services in a Nutshell

We cover up to **50% of the costs** with a DEG contribution of **maximum EUR 200k**; project duration ~ **two years**;

## Develop New Markets

### Feasibility Study Support:

- Studying concrete investment opportunities for innovative sustainable technologies or services in new markets

## Improve Business Performance

### Standardized Projects

- Existing framework contracts with best in class advisors (quickly deployable)
- Standardized approach for topics like E&S management, energy efficiency,

### Tailor Made Projects

- Projects addressing your individual topics in all areas of business performance
- Joint tender for advisors or reimbursement of costs for your advisor of choice

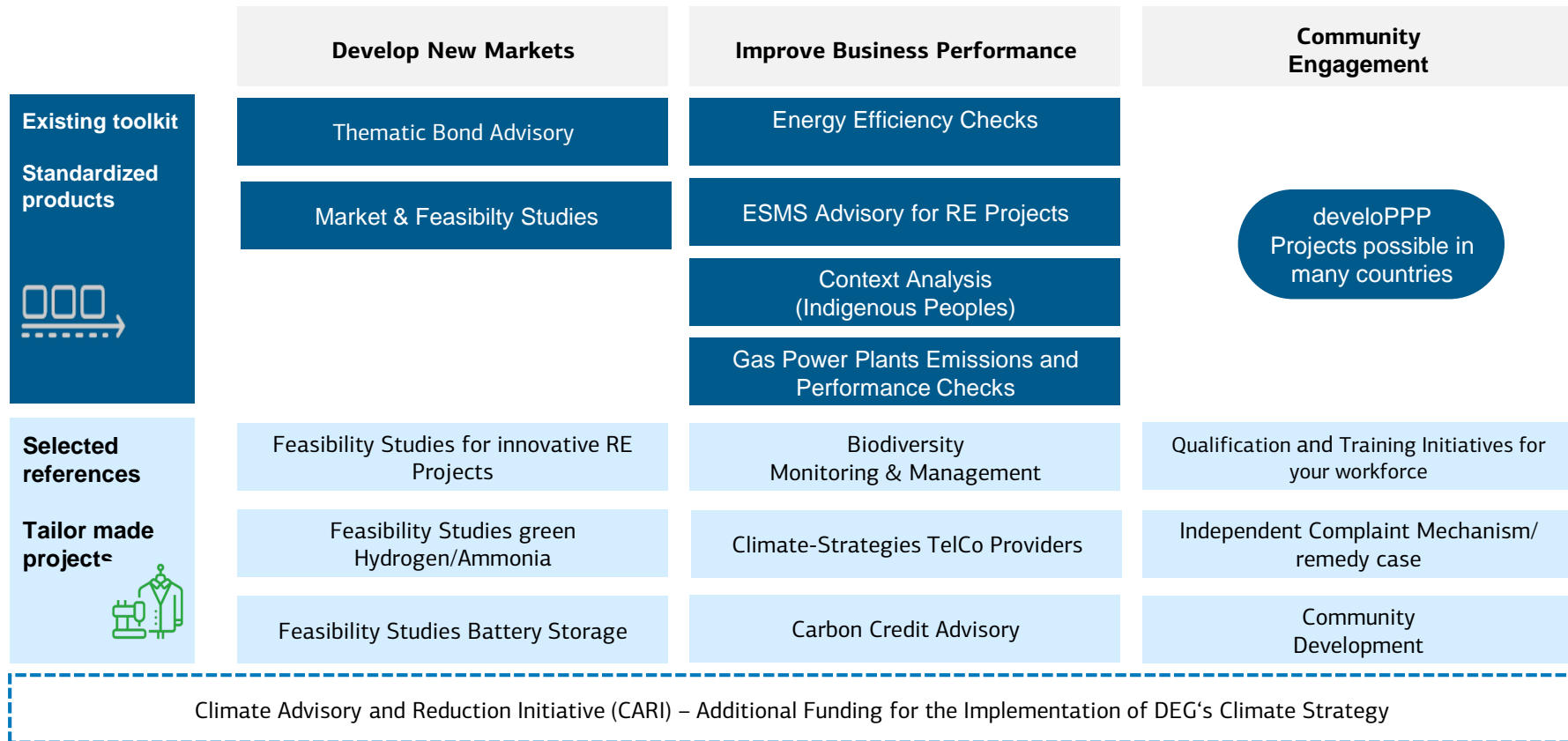
## Work with your Community

### Qualification and Training Initiatives:

- Qualification and training Initiatives for your workforce
- If project has **effects on the wider** community -> potentially eligible for **develoPPP** program; DEG contribution of up to 2 Mio.; 50% of the costs; e.g. large scale training initiative (national or regional) quarterly idea competitions; available in ~70 countries

# Infrastructure & Energy Business Support Services (BSS)

We cover up to **50% of the costs** with a DEG contribution of **maximum EUR 200k**; project duration ~ **two years**;



# DERa – DEG’s Development Effectiveness Rating

We measure the impact of our financings with the DERa



Customers are rated using the DERa, structured along five categories

The DERa is guided by the SDGs

Main development effects of private sector activities

Decent jobs



Local income



Market & sector development



Environmental stewardship



Community benefits



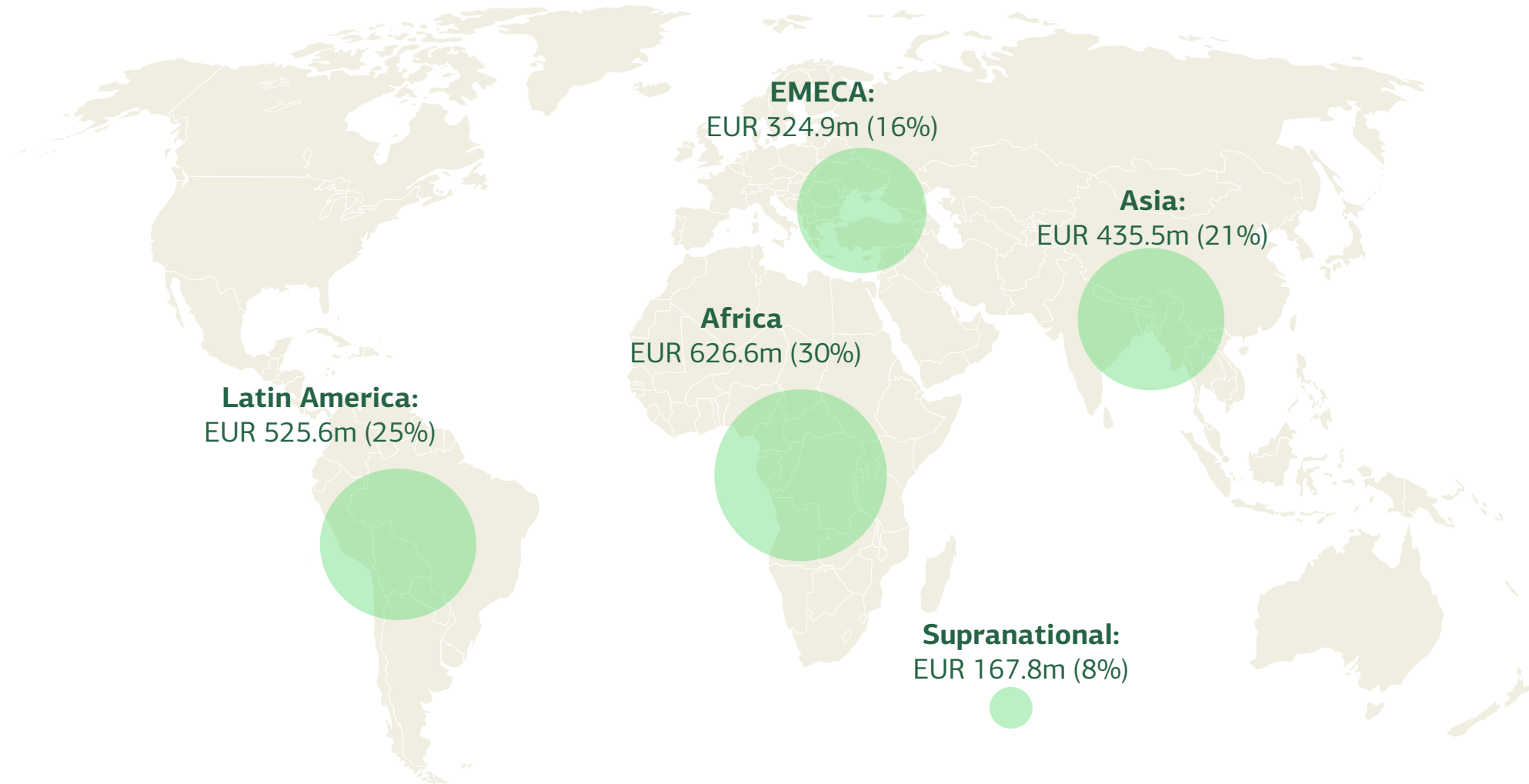
Way of sustainably doing business





# DEG's Infrastructure & Energy Portfolio 2023 by Region

EUR 2.08b Invested in Energy and Infrastructure (includes IEa, IEb and IEc)



Portfolio size is based on commitment volume (Zusageobligo). Includes IEa, IEb and IEc. EMECA includes Europe, Central Asia and the Middle East.

# Success Stories

# Debt Portfolio: Energy

Financing energy transformation and sustainability efforts is a key pillar of DEG's strategy




















## Sustainable Energy – Solar, Hydro and Wind

 <p>ACWA Power Riverside Solar</p> <p>USD 50 mn Senior Loan</p> <p>BESS and solar Power Plant Uzbekistan 2024</p>	 <p>IPT PowerTech</p> <p>USD 32 mn Senior Loan</p> <p>Telecom Cyprus 2024</p>	 <p>ACWA Power UKS GREEN HYDROGEN</p> <p>USD 25 mn Senior Loan</p> <p>Green Hydrogen Uzbekistan 2024</p>	 <p>ORMAT</p> <p>USD 30 mn Subordinated Loan</p> <p>Geothermal Power Plant Kenya 2024</p>	 <p>OSIMA SOCIAL INVESTMENT MANAGERS &amp; ADVISORS</p> <p>USD 20 mn Green Bond</p> <p>Solar Africa 2023</p>	 <p>ENERGY</p> <p>USD 36 mn</p> <p>Solar Park Portfolio Chile 2023</p>
 <p>SUN ENERGY</p> <p>USD 21 mn Senior Loan</p> <p>Solar Indonesia 2023</p>	<p>EECL</p> <p>USD 50 mn Senior Loan</p> <p>Solar &amp; BSS Chile 2023</p>	 <p>ACWA POWER WIND KARATAU</p> <p>USD 25 mn Senior Loan</p> <p>Wind Uzbekistan 2023</p>	 <p>ACWA POWER WIND DZHANKELDY</p> <p>USD 30 mn Senior Loan</p> <p>Wind Uzbekistan 2022</p>	 <p>ACWA POWER WIND BASHI</p> <p>USD 30 mn Senior Loan</p> <p>Wind Uzbekistan 2022</p>	<p>MAAN</p> <p>USD 18,6 mn Senior Loan</p> <p>Solar Power Plant Jordan 2022</p>
 <p>Scatec</p> <p>USD 27,5 mn Green Bond</p> <p>Solar Park Egypt 2022</p>	 <p>B.GRIMM SINCE 1878</p> <p>USD 40 mn Green Bond</p> <p>RE suprasectoral Thailand 2022</p>	 <p>ACWA POWER SIRDARYA</p> <p>USD 37 mn Senior Loan</p> <p>Combined Cycle Power Plant Uzbekistan 2021</p>	 <p>ARMPower</p> <p>USD 15.7 mn Senior Loan</p> <p>Combined Cycle Power Plant Armenia 2021</p>	<p>YDE</p> <p>USD 15 Mio Senior Loan</p> <p>Solar Power Plant Jordan 2021</p>	 <p>POLARIS</p> <p>USD 28,2 Mio Senior Loan</p> <p>Geothermal Power Plant Nicaragua 2021</p>

DEG provides financing for all major sustainable energy asset classes

# Debt Portfolio: Infrastructure












DEG has a successful track-record in all major infrastructure asset classes

Water & Sanitation		Transport		Telecoms	
 <p>GGU Georgia Global Utilities</p> <p>USD 35 mn Eurobond</p> <p>Water Supply</p> <p>Georgia 2024</p>	 <p>China Water</p> <p>USD 25 mn Senior Loan</p> <p>Water Supply</p> <p>China 2023</p>	 <p>TAV Airports a member of Groupe ADP</p>  <p>Fraport</p> <p>EUR 50 mn Bridge Loan</p> <p>Airport</p> <p>Turkey 2024</p>	 <p>damietta alliance</p> <p>USD 60 mn Senior Loan</p> <p>Port</p> <p>Egypt 2023</p>	 <p>TORREC M</p> <p>USD 20 mn Senior Loan</p> <p>Tower Company</p> <p>UER America 2023</p>	 <p>CBET CREI</p> <p>USD 19,4 mn Senior Loan</p> <p>Tower Company</p> <p>Philippines 2022</p>
 <p>MWASE Municipal Water &amp; Sewerage Authority</p> <p>USD 25 mn Senior Loan</p> <p>Water Supply</p> <p>Vietnam 2022</p>	 <p>GGU Georgia Global Utilities</p> <p>EUR 45 mn Eurobond</p> <p>Waste Services</p> <p>Georgia 2020</p>	 <p>VINCI AIRPORTS</p> <p>EUR 20 mn Senior Loan</p> <p>7 Airports</p> <p>Cape Verde 2023</p>	 <p>TAV Kazakhstan</p> <p>EUR 34.5 mn Senior Loan</p> <p>Airport</p> <p>Kazakhstan 2021</p>	 <p>AXIAN TELECOM</p> <p>USD 23 mn Bond</p> <p>Telecommunication</p> <p>China 2022</p>	 <p>LIQUID INTELLIGENT TECHNOLOGIES</p> <p>USD 25 mn Euro Bond</p> <p>Existing Bond Refinancing</p> <p>Mauritius 2021</p>
 <p>gwp Georgian Water &amp; Power</p> <p>USD 30 mn Senior Loan</p> <p>Waste Supply</p> <p>Georgia 2019</p>	 <p>NHPC National Hydro Power Corporation</p> <p>EUR 35 mn Senior Loan</p> <p>Hydro Plant</p> <p>Cameroon 2018</p>	 <p>Liquid Storage Terminal</p> <p>USD 25 mn Senior Loan</p> <p>Liquid Storage Terminal</p> <p>Mexico 2021</p>	 <p>OJE Oriental InfraTrust</p> <p>EUR 34.5 mn Equity</p> <p>Road Infrastructure</p> <p>India 2019</p>	 <p>国动集团 GUODONG GROUP</p> <p>USD 20 mn Senior Loan</p> <p>Tower Company</p> <p>China 2021</p>	 <p>helios towers</p> <p>USD 25 mn Term Loan</p> <p>Tower Company</p> <p>Africa 2021</p>

DEG finances the entire water value chain; transport infrastructure from (air)-ports via roads to e-mobility and offers financing for telecoms & digitalization

# Equity Portfolio Infrastructure & Energy

Equity investments are an integral part of DEG's infrastructure & energy strategy

Energy	Telecoms & Transport	Funds				
 <p>Equity-Mezz Hydro, Solar &amp; Wind Power Vietnam 2022</p>	 <p>Equity Energy &amp; Water Ivory Coast 2021</p>	<p><b>Eastcastle</b> Equity Telecom Towers Pan-African 2021</p>	 <p>Equity Telecom Towers Pan-African 2021</p>	<p><b>A.P. Moller Capital</b> Fund Transportation / Logistics Africa &amp; Asia 2023</p>	 <p><b>AII F4 Fund</b> Infrastructure Pan- African 2023</p>	<p><b>CONVERGENCE PARTNERS</b> Fund Digital Infrastructure Africa 2022</p>
 <p>Equity Wind Power Chile 2019/2020</p>	 <p>Equity Solar/Wind-Platform India 2019</p>	 <p>Equity Toll roads India 2019</p>	<p><b>IHS</b> Equity Telecom Towers Pan-African 2014</p>	<p><b>North Haven India Infrastructure Fund</b> Fund Infrastructure India 2019</p>	<p><b>Ashmore Andean Fund II</b> Fund Infrastructure &amp; Energy Latam 2022</p>	 <p>Fund Energy Global 2017</p>
 <p>Equity Wind Power Serbia 2018</p>	<p><b>Azure Power</b> Equity-Mezz Solar Power India 2015</p>	<p><b>TIA</b> Equity Airport Albania 2005</p>			 <p>Fund Infrastructure Pan-African 2017</p>	 <p>Fund Infrastructure Pan-African 2015</p>

**DEG provides equity financing via dedicated infrastructure funds and direct investments**

# Green Hydrogen in Uzbekistan

Customer: ACWA Power UKS Green H2 LLC JV



Picture credits: AdobeStock/513533742/AA+W

## The customer

- The DEG client ACWA Power has set up a SPV for the development, design, construction, ownership, and operation of first integrated Green Hydrogen and Wind project in Uzbekistan.

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## Services provided by DEG

- DEG provides a Guarantee Backed loan of USD 25m to support ACWA's equity portion of the project.

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## The investment and its impact

- The transaction contributes to the energy transition in Uzbekistan by providing 100% renewable energy and supports the technological diversification, thus boosting the market development in Uzbekistan.
- It entails a learning curve for DEG on the first Green Hydrogen financing in Uzbekistan and fits to DEGs climate/impact strategy as well as to KfW Plus.

# Supporting Green Energy Generation in Kenya

Customer: OrPower4 („Olkaria“)



Picture credits: KfW-Bildarchiv / Anne Schönharting

## The customer

- OrPower4 is the largest independent power producer in the Naivasha region, Kenya. It is a fully owned subsidiary of ORMAT, the world's leading geothermal technology provider.
- The company operates a geothermal power plant in the Olkaria steam field since 2000.

## Services provided by DEG

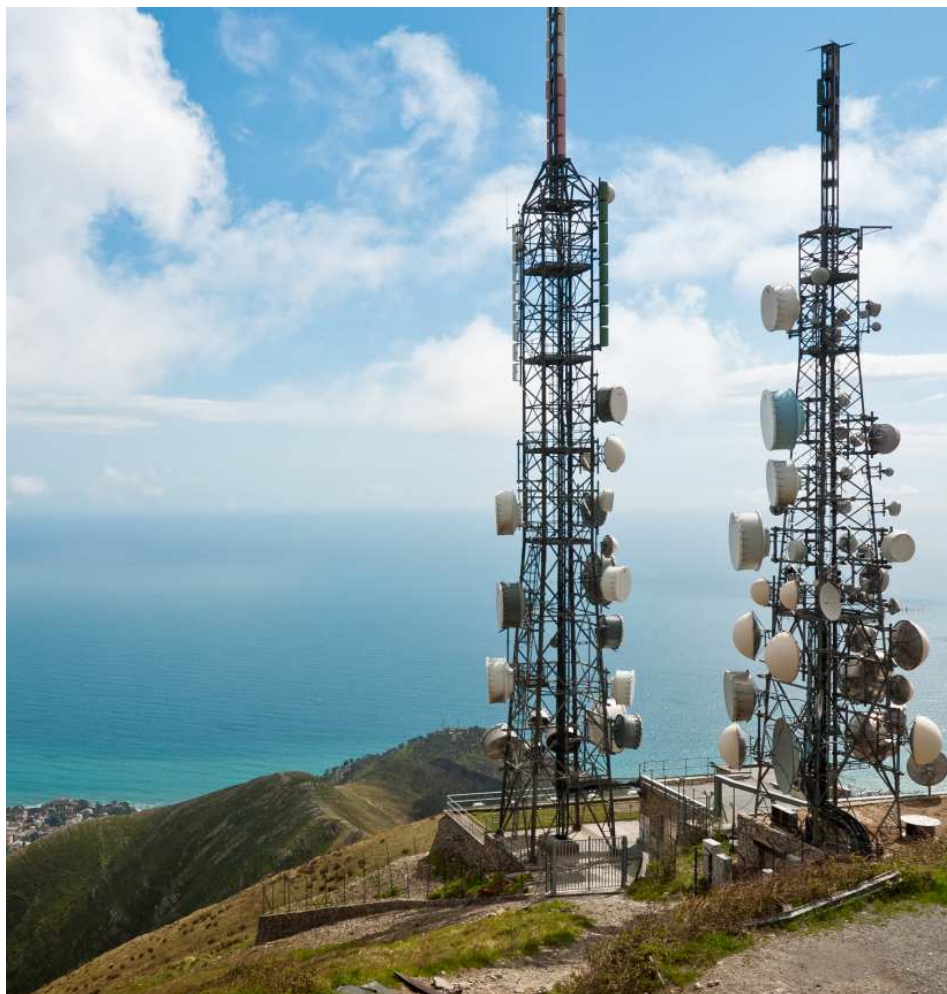
- DEG provides a top-up financing in form of a subordinate loan of up to USD 30m, increasing the overall "Barobligo" to USD 58.6m.
- DEG finances the project since 2008 and mobilized funds from European Finance Partners and Evangelische Bank.

## The investment and its impact

- In 2021, OrPower4 had started a geothermal drilling program to regain the Project's full operational capacity of 139 MW, from around 110 MW before. DEG's financing is essential to ORMAT to enable the company to further invest.
- The project company has been a positive contribution to local economic growth and thus supports the SDG 8 ("Decent Work and Economic Growth") and 9 ("Industry, Innovation and Infrastructure").
- Olkaria supports the provision of affordable and renewable energy, contributing to SDG 7 "Affordable and clean energy".
- Also, the Project provides reliable base-load electricity in Kenya, a country which continues to grow quickly and often experiences excess electricity demand.

# Facilitating Digital Growth in Africa

Customer: Helios Towers plc („HTA“)



Picture credits: AdobeStock/41544289/itestro

## The customer

- Helios Towers Africa (“HTA”) is a independent tower company which is active in 9 countries throughout Africa and the Middle East. In 7 of its active locations HTA is the market leader.
- Helios specialises on building, acquiring and operating telecommunications towers and rent them to mobile network operators. The firm has more than 14,000 sites.

## Services provided by DEG

- Since 2013, DEG has financed HTA with several facilities and helped Helios to successfully gain access the capital market in 2017. DEG's latest engagement helps HTA to refinance an outstanding bond.
- DEG acts as an anchor investor and financed USD 55m of the USD 850m bond issued. The offering was three times oversubscribed.

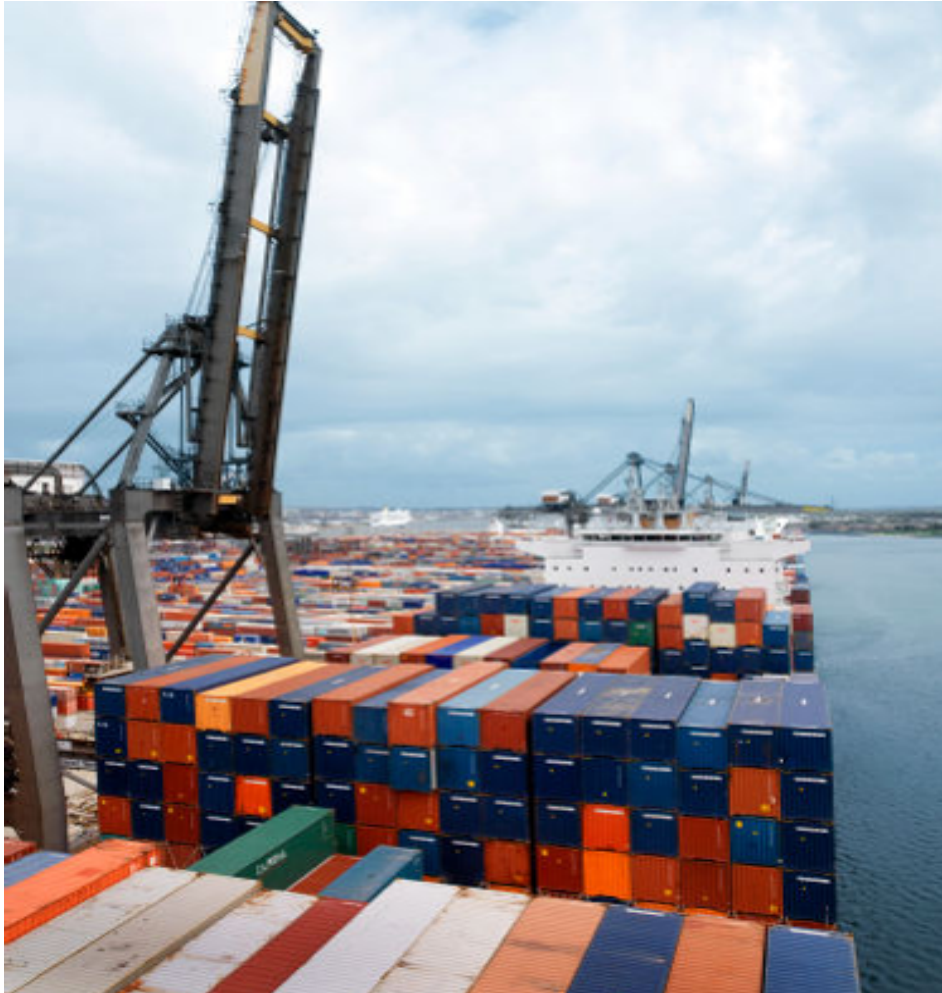
## The investment and its impact

- DEG's new engagement will help HTA to continue its successful growth path in a challenging environment. Further, our financing provides a strong signal to institutional investors to mobilize private capital.
- HTA has an “AAA” ESG rating from MSCI, the highest possible. The deal's development quality is also reflected in the exceptionally high DERA of 116. Mostly, HTA's impact stems from providing critical infrastructure in a structurally underdeveloped region. Also, HTA employs mostly local population and has a local procurement structure.
- HTA is committed to reduce the GMG emission per tenant by 46% until 2030 and will invest USD 100m in programmes to reduce its carbon footprint.



# Enhancing Access to Global Trade in Egypt

Customer: Damietta Alliance Container Terminals, S.A.E.



Picture credits: KfW-Bildarchiv / Rüdiger Nehmzow

## The customer

- Damietta Alliance Container Terminals, S.A.E. is a project company established to operate a second container terminal in Damietta, Egypt.

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## Services provided by DEG

- DEG, together with the EBRD, the IFC, the AIIB and Proparco, is financing the construction and operation of a container terminal in the port of Damietta.
- DEG contributes a tranche of USD 110 million, of which USD 60 million will be taken on DEG's own book.

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## The investment and its impact

- DEG is investing in this challenging region of North Africa to support the German clients Eurogate and Hapag-Lloyd, as well as Italian port operator ContShip.
- The project will lead to a reduction in average CO2 emissions per container, as shipping routes can be made more efficient and climate-friendly technologies can be used in the port.
- The project is also of strategic importance for the economic development of Egypt, which will benefit from improved connections to the global market and the modernization of its transport infrastructure.

# Supporting C&I Solar in a fast Growing Market

Customer: PT Surya Utama Nuansa (“SUN“)



Picture credits: Sight visit by Abhas Sharma

## The customer

- SUN is a young company in the area of Commercial and Industrial (C&I) rooftop solar power in Indonesia
- Until today SUN operates over 60 projects with a capacity of over 50MW and is a leading solar project developer in Indonesia.

## Services provided by DEG

- DEG provides a 2<sup>nd</sup> senior long term loan facility of USD 21m to finance the debt portion of additional 62MW capacity.
- 2<sup>nd</sup> facility can be used in a more flexible way as long as certain criteria are met.

## The investment and its impact

- SUN is a fast growing but still small company by absolute numbers. However, it is among the first to invest in the area of C&I and provides affordable, reliable and sustainable energy.
- SUN plans to increase its operational capacity to up to 126 MW by 2025. DEG's financing helps SUN to achieve its goal.
- DEG's investment will help to more than double the number of permanent jobs to ca. 80.
- DEG's financing supports Indonesia's ambitious climate goals to increase PV rooftop capacity to 3,600 MW and achieve its Net Zero Emissions target by 2060.

# Financing for Airports in Cape Verde

Customer: Vinci Airports Cape Verde Ltd.



Picture credits: Vinci Airports Cape Verde Ltd.

## The customer

- Vinci Airports – one of the largest private airport operator worldwide
- Underlying assets in Cape Verde: 7 airports; 4 international and 3 domestic

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## Services provided by DEG

- DEG provides a long term senior loan alongside IFC and Proparco, each party financing EUR 20m
- Another tranche is foreseen in 2025

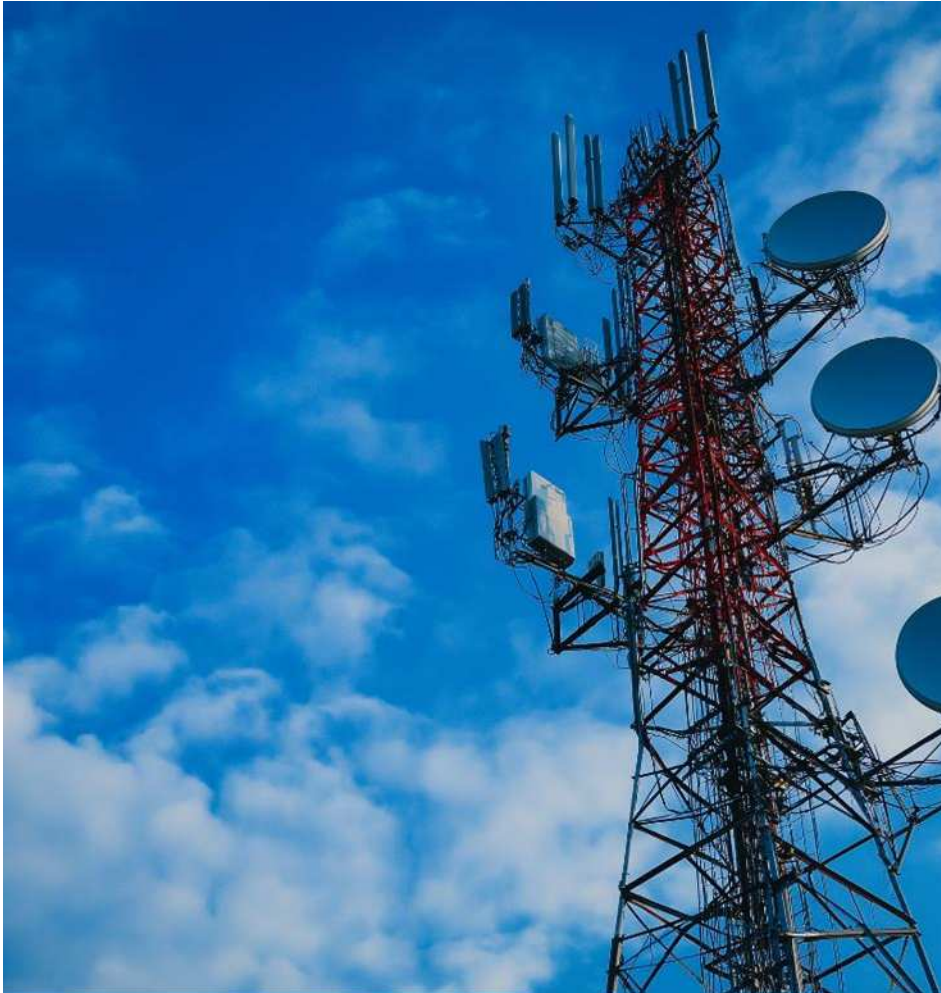
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## The investment and its impact

- DEG supports the privatization process incl. payment of a concession fee in favour of the government
- Company takes action to reduce CO2 emissions of the airport, including the Airport Carbon Accreditation programme
- Promotion of a life-long learning program for the over 300 employees and fostering of women's careers

# Driving Mobile Telecom Coverage in LATAM

Customer: Torrecom Partners



Picture credits: Adobe Stock/1068379859/JubkaJoy

## The customer

- Torrecom Partners LP and its subsidiaries (“TowerCos”) in presently in 10 Central- and South American countries.
- Torrecom specializes on built-to-suit (“BTS”) telecom towers, i.e. building, operating and leasing space on BTS telecom towers to mobile network operators.

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## Services provided by DEG

- DEG is lender under a syndicated USD 70 million term loan facility led by French Proparco and together with the IDB
- DEG contributes USD 20 million long term funding

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## The investment and its impact

- Torrecom’s investment program envisages additional 450 towers in several Central- and South American countries
- The wider tower network will improve mobile telecom coverage and enable access to broadband services to underserved regions.
- Broadband access drives economic development and improves well being of the population.

# Airport acquisition, expansion and sustainable transformation

Customer: TAV Kazakhstan LLP



Picture credits:AdobeStock/178863677/Chalabala

## The customer

- The domestic SPV's main Sponsor (85%) is TAV Airports, who has together with its shareholder Groupe ADP, a strong track-record in global airport management.

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## Services provided by DEG

- USD 38.8 mn within a 15Y project financing (jointly arranged by IFC/EBRD) of up to USD 450 mn.
- DEG plays a counter-cyclical role to finance a critical infrastructure project within a sector deeply affected by the COVID-19 crisis.

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## The investment and its impact

- Upgrade, expansion and partial refinancing of the acquisition of capacity-constrained Almaty Airport, Kazakhstan's largest international airport.
- Construction of a new, energy-efficient terminal with green-building certification in line with DEG's new impact and climate strategy.

# Supporting solar power in Chile

Customer: Condor Solar SpA (Oenergy)



Picture credits: AdobeStock/357023493/Inveru

## The customer

- Condor Solar SpA is a privately owned renewable energy holding in Chile owned by Blue Elephant Energy AG (Germany) and oEnergy Capital SpA (Chile)

## Services provided by DEG

- DEG contributes to the financing of the project by providing a senior loan of 60m USD together with co-lender Cofides who adds another senior loan USD 15m

## The investment and its impact

- Portfolio of 12 greenfield solar PV plants with a total capacity of 99MW in the region of Santiago de Chile achieving COD in H1 2023
- The project is part of the small-scale distributed generation program ("PMGD") and generates energy to be sold at stable and regulated price.
- By exploiting the irradiation potential of the country, the project provides an additional energy source and enables Chile to reduce the import of fossil fuels as well as greenhouse gas emissions

# Expansion of Efficient Water Supply

Customer: Binh Duong Water–Environment Joint Stock Company –Vietnam



Picture credits: Paul Heinemann

## The customer

- BIWASE, listed at the HCMC stock exchange, is Vietnam’s largest privately owned water supplier, serving > 2 million inhabitants and 14,000 companies
- Dominant position in the fast developing and industrialized Binh Duong province, also active in waste treatment/recycling
- Continuous investment requirements due to water demand growth, driven by economic/population growth & urbanization

## Services provided by DEG

- USD 25 million corporate loan to finance the expansion of water supply capacities (water treatment and pipeline system)
- Provision of long-term, maturity-matching funds for its capital-intensive business
- Support of the company in the transition phase from a formerly state-owned enterprise to become financially self-sufficient and to apply international ESG standards

## The investment and its impact

- Transaction helps to ensure the availability/security of clean water supply and to increase the water coverage ratio
- High operational efficiencies/low water losses of BIWASE makes a strong case for further privatized water companies, thereby stabilizing the tariff affordability for end consumers
- Formalization of a Water Safety Plan to mitigate risks stemming from increasing pollution of raw water sources

# First Utility Scale Solar Power Plant in Cambodia

Customer: Risen Energy (Cambodia) Battambang Co., Ltd.



Picture credits: AdobeStock/67544874/kessudap

## The customer

- The SPV has been established by Risen Energy Co., Ltd. to implement a greenfield 60 MW solar PV project in Battambang province, Cambodia.

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## Services provided by DEG

- Tailor made, well-balanced financing structure attractive to both client and financing partners.
- DEG arranged and lead the consortium of USD 44.8 million debt project financing for the development, construction and operation of the power plant.

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## The investment and its impact

- The Project is the first major utility scale power plant in Cambodia.
- It will mitigate the existing power crises in the country; it will produce enough electricity to power approximately 100,000 Cambodian households.
- It will offset the equivalent of 59,400 tons of carbon dioxide during each year of operation.



# Contact Details

# Your contact

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