

»» Renewable Energy Finance

DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH

OCT 2017

KFW DEG

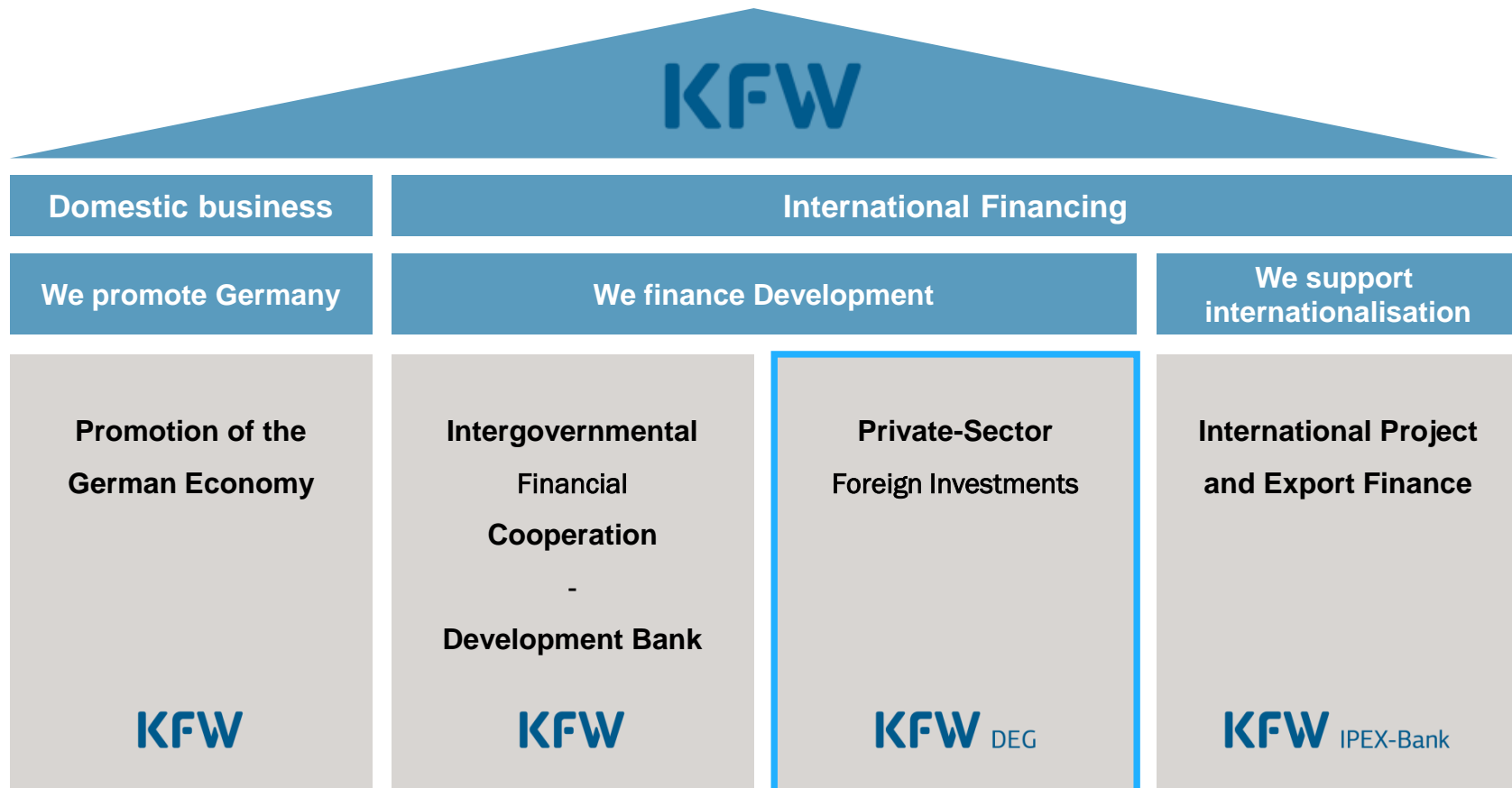
»» DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH

For more than 50 years, we have been promoting entrepreneurial initiative in developing and emerging-market countries, offering long-term finance, advice and promotional programmes. In order to create added value for enterprises and people.

Founded	1962
Employees	539
Headquarters	Cologne
Shareholder	KfW, Frankfurt
New business	EUR 1.6 billion
Portfolio	EUR 8.6 billion
Equity	EUR 2.4 billion
Balance sheet total	EUR 5.8 billion

»» Part of a strong group

DEG, a subsidiary of KfW – promotional bank of the Federal Republic of Germany



»» DEG locations and portfolio

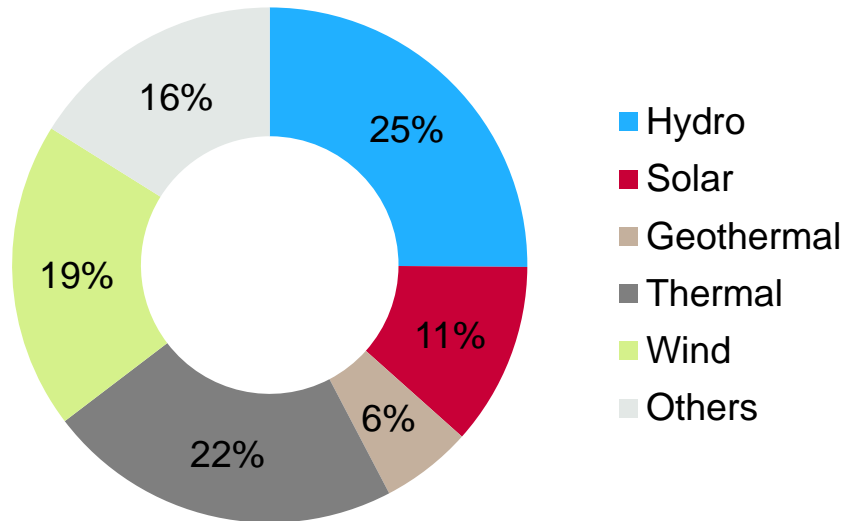
14 representative offices, 8.6 bn euros invested worldwide.



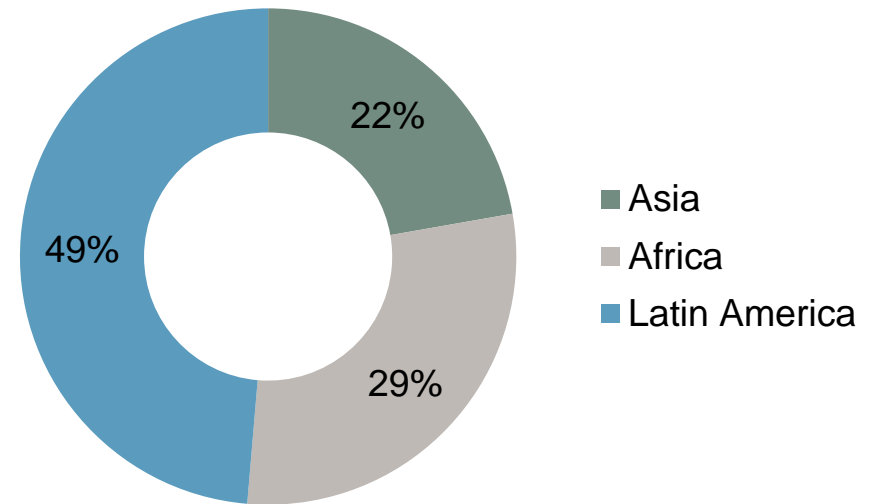
»» Portfolio overview

DEG energy portfolio and distribution of technologies (debt exposure as of 31/12/2016)

DEG energy portfolio (EUR 670mn)



Regional investment



»» Role of DEG

› **Active in challenging markets**

- › Limited commercial financing- for example Myanmar, Laos, Cambodia, Vietnam, Bangladesh, & Mongolia

› **Promote renewable energy**

- › Wind, Solar, Hydro, Geothermal, Biomass, etc.
- › (no coal, no atomic energy, no HFO, no Diesel)

› **Ensure international standard**

- › e.g. PPA, Environmental and Social development

› **Provide added value**

- › e.g. experience, network, syndication capability, technical assistance

»» DEG's Financial Instruments

Long-term loans

- Currency: EUR, USD and some local currencies (PHP, ZAR, IDR, HKD, JPY, CNH)
- Term: usually 4-18 years, depending on cash-flow
- Grace period: depending on cash flow
- Amount: USD10-40mn (up to USD100mn under the Friendship Facility Agreement); max. amount not to exceed one third of total assets post investment
- Interest rate: fixed or variable, market-oriented depending on project and country risk

Mezzanine finance

- Equity mezzanine: significant equity kickers (e.g. conversion rights, warrants, other performance-linked returns etc.)
- Debt mezzanine: i.e. long tenor, no-, partial-, subordinated collateral, subordinated debt service, partially performance linked returns

Equity capital

- Long-term equity participation i.e. 5-7 year exit horizon
- Clear exit strategy
- Significant minority stake up to 25% with protection rights
- Active role e.g. board representation

»» Success story: Affordable and clean energy supply

Customer: Theun-Hinboun Power Co. Ltd. (“THPC”) in Laos

About the company

- › Since 1998 THPC successfully operates a 220 MW run-of-river hydropower plant in Laos
- › The Project has since been selling 95% of its net available electricity output under a 25-year PPA

DEG's contribution

- › Provision of a EUR 22mn loan
- › The project contributes to a reliable and cost efficient power supply in Laos and Thailand
- › Significant CO2 savings of 775.000 tons p.a.

The investment

The program includes:

- › The building of another dam
- › Upstream of the existing dam, resulting in a storage reservoir of approx. 107 km
- › A 60 MW power plant, that is integrated into the dam
- › An increase of the existing power plant from 220 MW to 440 MW

»» Success story: Affordable and clean energy supply

Customer: Lake Turkana

About the company

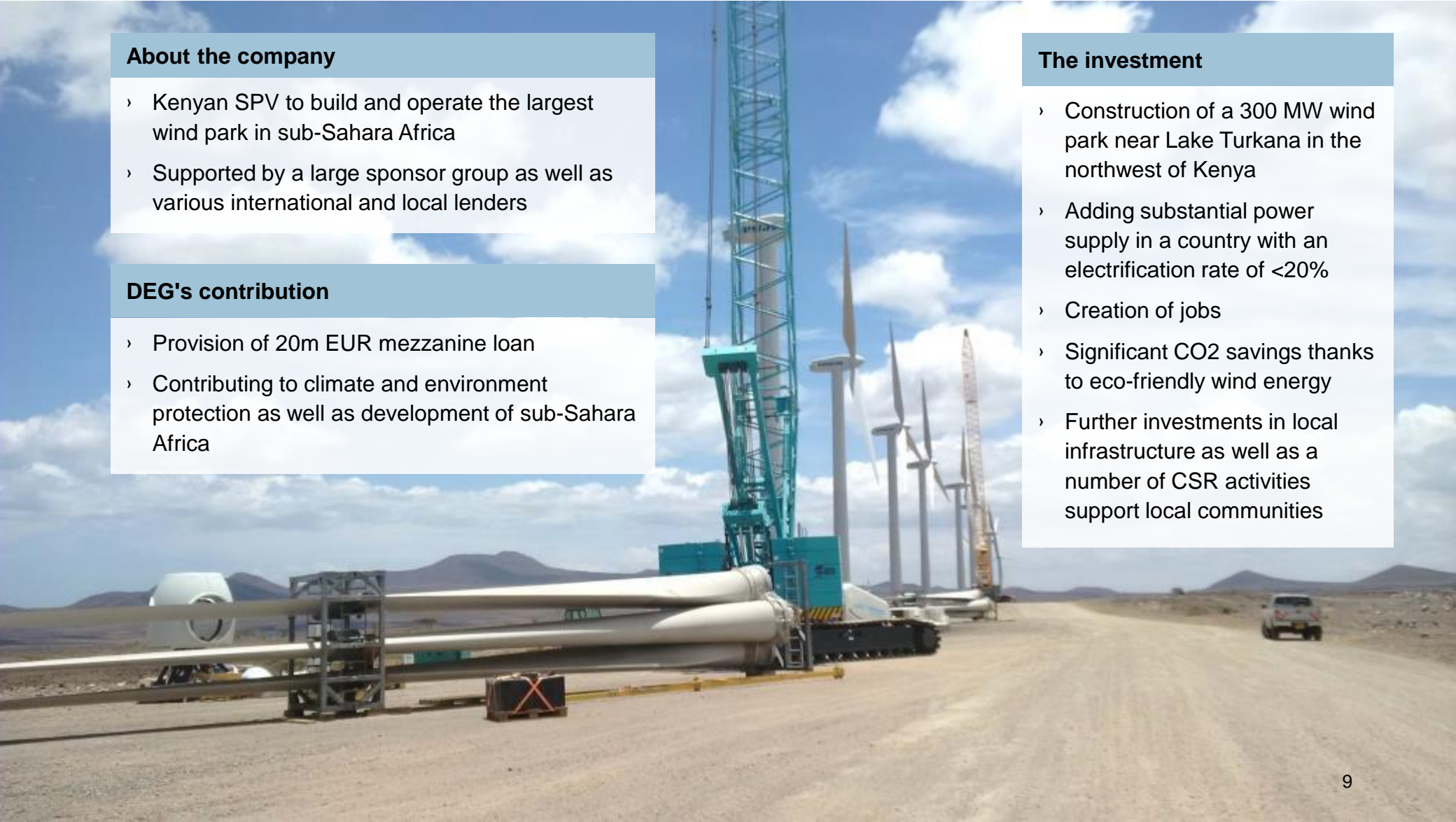
- › Kenyan SPV to build and operate the largest wind park in sub-Saharan Africa
- › Supported by a large sponsor group as well as various international and local lenders

DEG's contribution

- › Provision of 20m EUR mezzanine loan
- › Contributing to climate and environment protection as well as development of sub-Saharan Africa

The investment

- › Construction of a 300 MW wind park near Lake Turkana in the northwest of Kenya
- › Adding substantial power supply in a country with an electrification rate of <20%
- › Creation of jobs
- › Significant CO2 savings thanks to eco-friendly wind energy
- › Further investments in local infrastructure as well as a number of CSR activities support local communities



»» Success story: Affordable and clean energy supply

Customer: Triconboston Consulting Corporation Private Ltd. (“TBCC”) in Pakistan

About the company

- › TBCC is a SPV that was incorporated in Lahore in 2012
- › The Project Company was acquired by Sapphire Textile Mills Ltd. – the flagship company of the Sapphire Group

DEG's contribution

- › Parallel participation with IFC with a senior loan of up to USD 42mn (USD 22mn DEG commitment)
- › Contribution to the United Nations Sustainable Development Goals 7, 9 & 13

The investment

- › Construction of three Wind Power Projects, each 49.3MW, in the Sindh Province, Pakistan
- › The project contributes to the reduction of the significant power shortfall in Pakistan that is impeding GDP growth by estimated 2% p.a. and affecting quality of life

»» Project Assessment - Recommendations

- Engage DEG at the early stage. **Project teaser** is a good start.
- **Require main sponsor** to drive the project with technical and financial track records
- **Basic information / documentation** should be ready:
 - FIT/ PPA / Feedstock plan/ Wind data/ Grid connection
 - Business plan and Financial forecast
 - Audited financials of sponsors
- Require reliable / proven technology & EPC
- Be realistic
- Understand project risks and mitigations

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»» Q&A

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