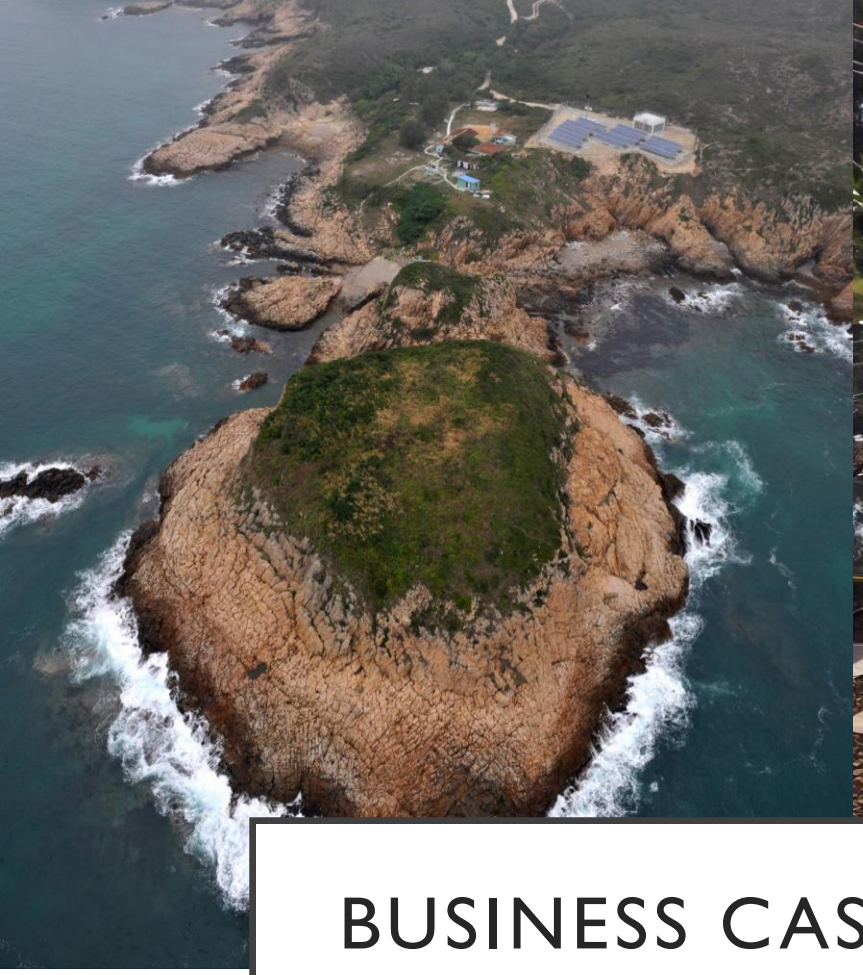

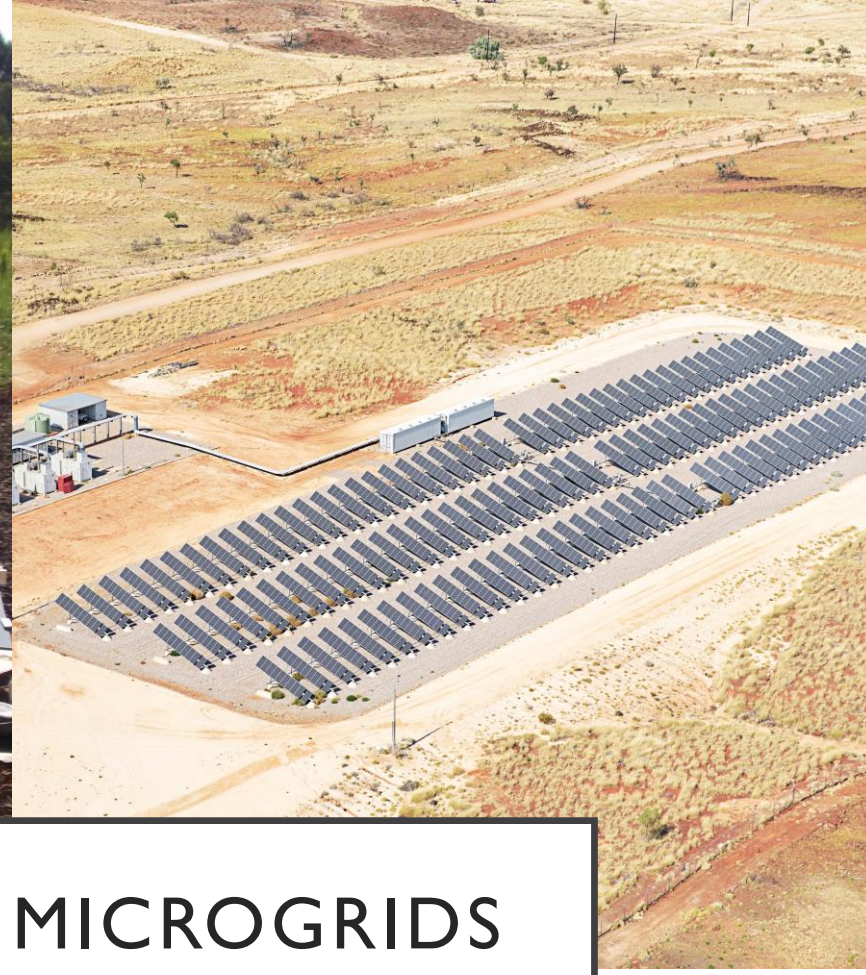

BUSINESS CASE FOR LOW-CARBON MICROGRIDS

PROVING MICROGRIDS AS VIABLE BUSINESS OPPORTUNITY

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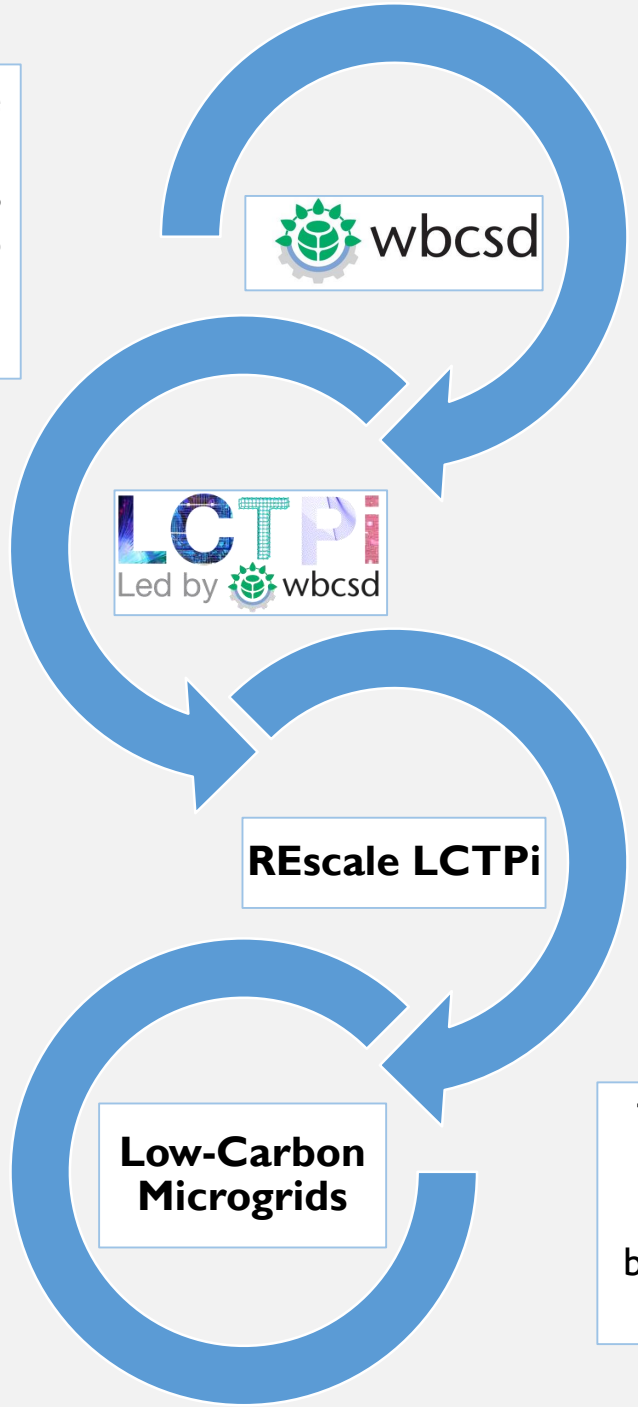
ABB CLP 中電 EDF edp Eskom First Solar nrg Schneider Electric wbcsd

The World Business Council for Sustainable Development (WBCSD) is a **CEO-led organization of forward-thinking companies** that galvanizes the global business community to create a sustainable future for business, society and the environment.



The **Low-Carbon Technology Partnership initiative (LCTPi)** is a unique, action-oriented programme that brings together companies and partners to accelerate the development of low-carbon technology solutions to stay below the 2°C ceiling. LCTPi has gathered over 150 global businesses with 70 partners to work collaboratively on the climate challenge.

REscale LCTPi

World-leading energy and technology companies committed to REscale, share the ambition to scale renewable deployment in line with the IEA 2DS – i.e. an additional 1.5 TW by 2025. REscale is comprised of four action plans:

1. Scaling green bond finance for renewable energy
2. Scaling corporate renewable energy procurement via power purchase agreements
3. **Deploying Low-Carbon Microgrids**
4. Improving integration of renewables into grids and electricity markets

The business solution on Low-Carbon Microgrids aims to **demonstrate successful business models and technologies,** which will allow business solutions to become business-as-usual and thus, achieve the scale necessary.

KEY MESSAGES

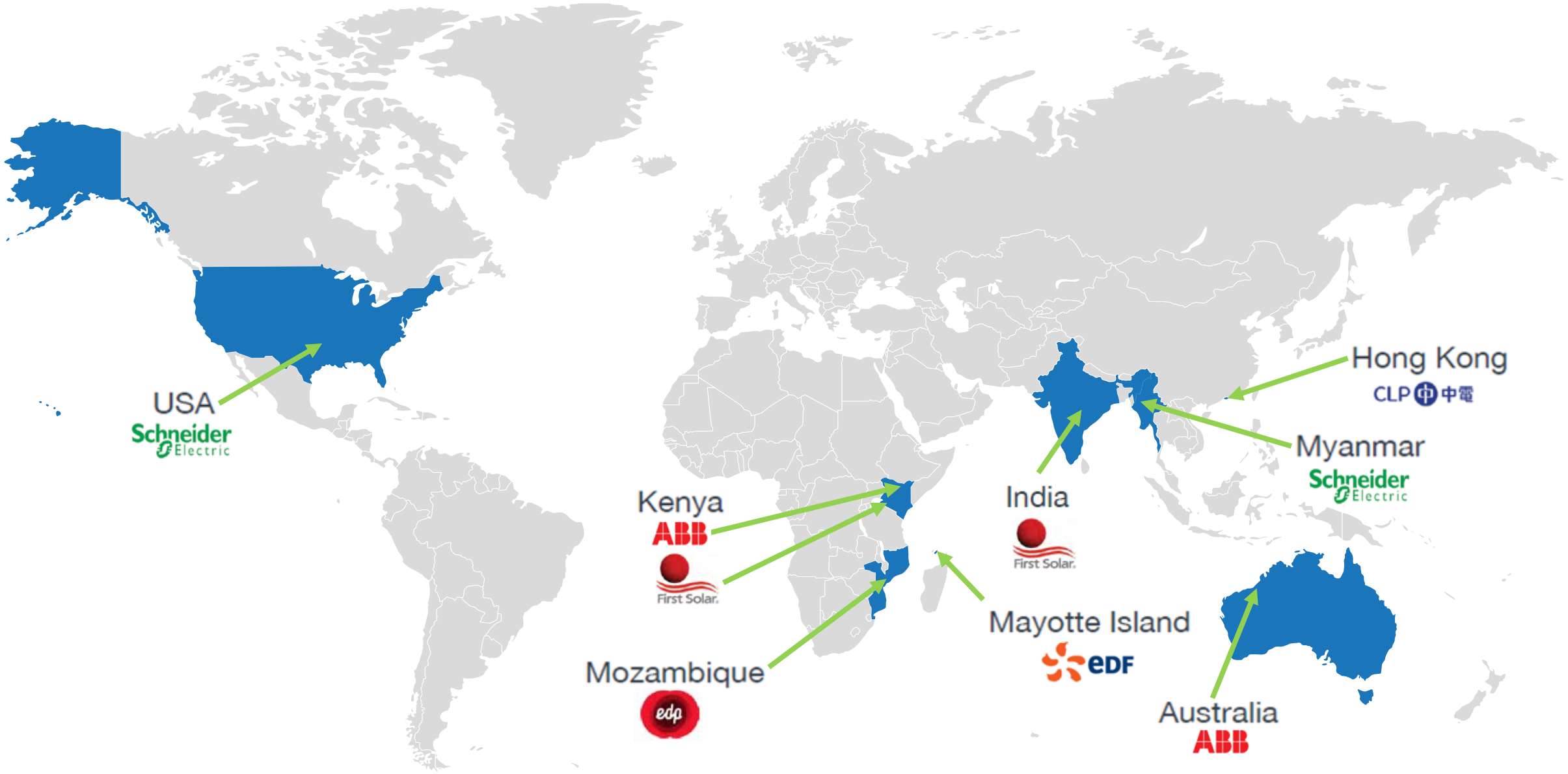
The 'Business Case for Low-Carbon Microgrids' report demonstrates **the economic and technical viability of Low-Carbon Microgrids using real project examples** from rural electrification in Kenya to improving reliability of power supplies in the US

The private sector is **ready to scale up decarbonized microgrids** to reach and supply more customers

Companies can provide **standardized, but modular and affordable solutions** to individual private customer needs

Microgrids are often the **most versatile solutions for off-grid electrification because they are reliable, resilient and have lower emissions**

CASE STUDIES



KEY SUCCESS FACTORS

POLICY AND REGULATION 	Set clear and stable policy and legal frameworks
	Encourage collaborative and well-defined participation by public and private sector stakeholders
	Define clear and distinct roles for independent actors and public utilities
	Set transparent electricity tariff structures and incentives
ECONOMICS AND FINANCE 	Educate investors on microgrids' economic benefits
	Support funders and lenders to adopt innovative financing schemes
	Establish long-term contracts with secured off-takers provides guarantees to investors
	Encourage community funded microgrids
TECHNOLOGY 	Support quality assurance and technical standards to ensure sustainability
	Choose modular and scalable technologies that are efficiently and easily implemented
	Support microgrids as a rich breeding ground for innovation
SOCIO ECONOMIC CONTEXT 	Study customers' ability and willingness to pay for electricity services
	Increase productive use over time
	Safeguard the longevity of microgrids with local employment and capacity building

WHAT'S MISSING FOR BUSINESS TO SCALE DEPLOYMENT?

THREE TASKS FOR POLICY MAKERS

- GUARANTEE STABLE REGULATORY AND LEGAL FRAMEWORK
- ABOLISH FOSSIL FUEL SUBSIDIES
- ENCOURAGE INNOVATIVE FINANCIAL INSTRUMENTS

THANK YOU FOR YOUR ATTENTION

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Report Link: http://lctpi.wbcsd.org/portfolio-item/renewables/