

Transformational energy access



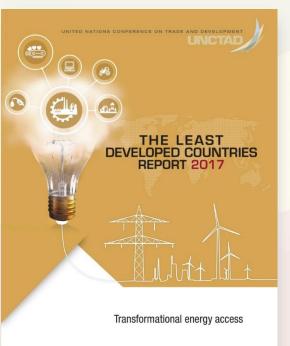
UNITED NATIONS CONFERENCE ON TRADE AND DEV

The Least Developed Countries Report 2017: **Transformational Energy Access**

Rolf Traeger

Chief, LDC Section, UNCTAD Trade and Development Board, 66th Executive Session Geneva, 5 February 2018





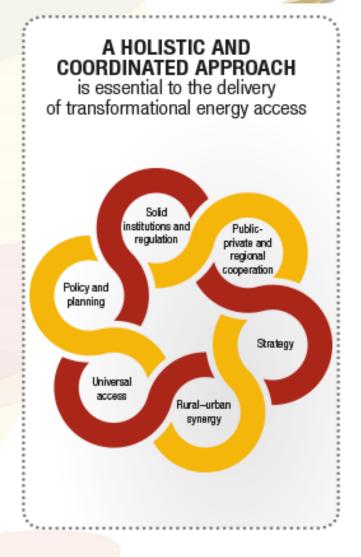


KEY POLICY IMPLICATIONS



A.Strengthen LDC electricity systems

- Strengthening LDC energy systems requires a combination of long-term system-wide *planning and coordination and flexibility*
- The effectiveness of systemwide energy planning hinges on policy consistency, realism and a sound information base
- Capacities must be built for incorporating gendered approaches into energy programmes and projects

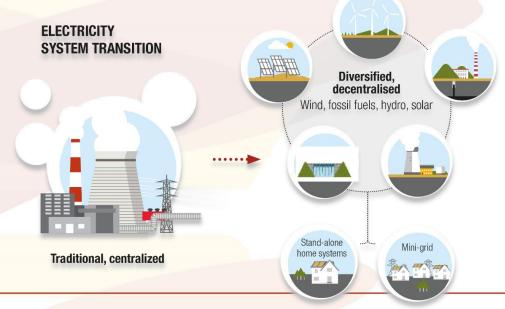




A.Strengthen LDC electricity systems

An *evolutionary approach* to power sector development is needed...

- ...based on planned capacity additions, progressive expansion and upgrading of supply and power generation mix
- LDCs need to *diversify their generation mixes*, comprising a *hybrid* of grid (expansion and upgrading), off-grid, centralized and decentralized solutions



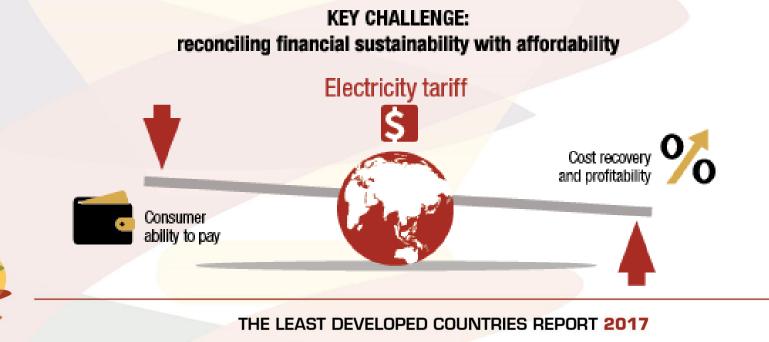


THE LEAST DEVELOPED COUNTRIES REPORT 2017

B. Address electricity system governance and UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT finance

LDC governance frameworks for transformational energy access must ensure:

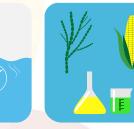
- Robust regulatory and governance systems
- Clear vision of the roles of the public and private sectors
- Reasonable affordability for users, matched by...
- ...financial sustainability of operators (e.g. through cost reflective tariffs)

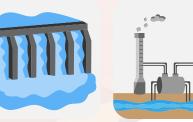


- Integrate energy policies and structural transformation strategies
- Opportunities from scalable renewable-energy technologies and mini-grids can be exploited to foster rural structural transformation...
- ...matched by complementary policies (in agriculture, finance, training and human resource development)
- Attention to building a domestic modern energy supply chain that develops linkages with other sectors...
- ...and to women empowerment policies that allow women to contribute actively to structural transformation



















THE LEAST DEVELOPED COUNTRIES REPORT 2017

D. Harness international cooperation:

- LDCs need to enhance the impact of foreign direct investment
 - Low-carbon FDI can be mobilized...
 - ... but foreign investors must not crowd out domestic actors in the energy sector
- Sovereign borrowing can be leveraged to finance energy infrastructure projects...
 - ...but beware of risks of debt unsustainability especially when commodity prices are falling and international conditions are worsening





D. Harness international cooperation Investments required to achieve universal access \sim \$40 billion to electricity in all LDCs by 2030 are of the order of \$12 billion to \$40 billion a year... \$12 billion □ ...but these are under-estimates as the figures \$3 billion do not include full costs for transformational energy access TRENDS IN DEVELOPMENT FINANCE OW Official development Annual estimated cost for 1.8% of total official assistance basic household needs in LDCs development assistance even without transformational to I DCs went to the energy access energy sector in 2015 ODA needs to be scaled up, given LDCs of this went to limited domestic public finances and private renewables sector reluctance to invest in energy sector in **LDCs** Increasing significance of sovereign borrowing and South-South financing

THE LEAST DEVELOPED COUNTRIES REPORT 2017

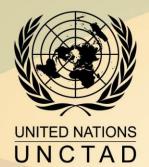
UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

High

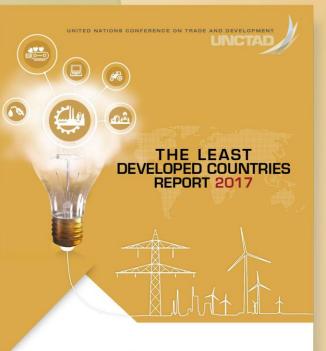
D. Harness international cooperation

- Closer integration of regional energy markets can help:
 - Cross-border trade in electricity can boost energy export revenues, lower energy import bills and offer a means of energy storage
 - Regional power pools can play a role
- International support measures to LDCs for technology transfer and absorption must be beefed up
 - International innovation network for LDCs
 - Global and regional research funds
 - South-South and triangular cooperation
 - Technology Bank for LDCs





unctad.org/ldc



Transformational energy access

