

Introduction to ECA

ECA provides economic consulting advice in infrastructure services for utilities, investors, regulators, and governments worldwide

25 years
in business

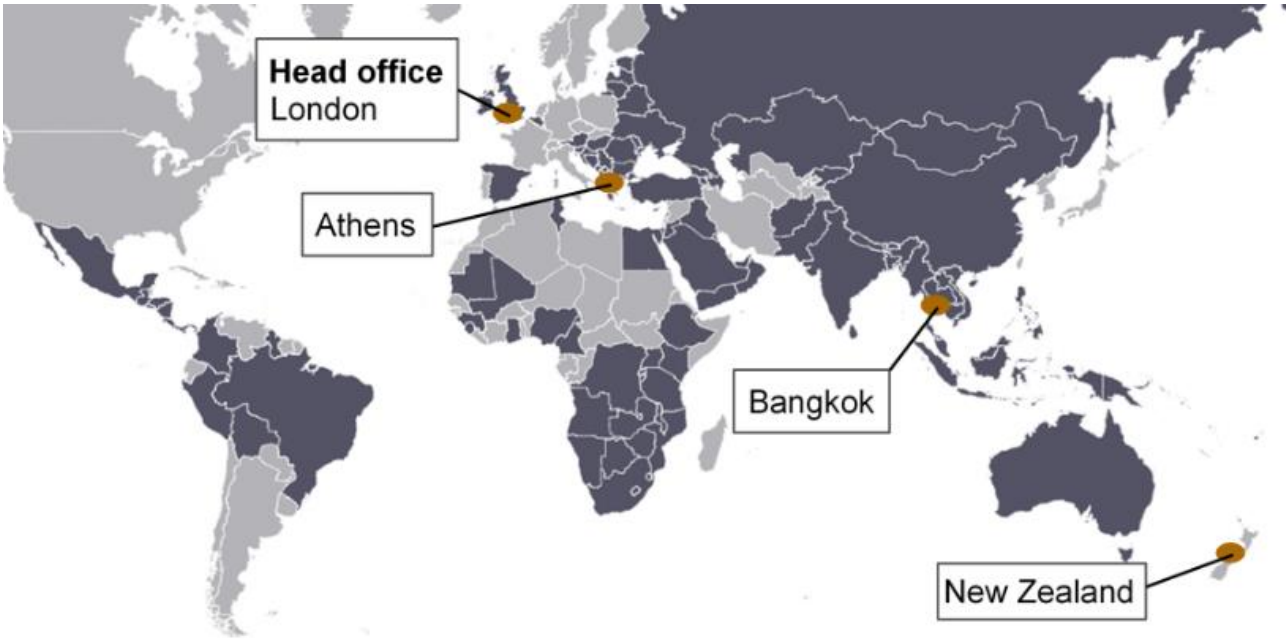
60+
assignments
annually

15+ years
average experience

24
Consultants

100%
Employee owned

40+
Utilities and
regulators advised



65+
Countries worked in

4
Regional
representations

£6m
Annual
turnover

Our experts support clients across four cross-cutting service areas

Economic Regulation



- Network and retail tariff design
- Cost of capital advice
- Allowed revenue determination
- Design of regulatory frameworks and incentive mechanisms
- Regulatory due diligence
- Development of regulatory tools and materials
- Contentious proceedings support
- Cost assessment
- Tariff setting methodologies
- Off-grid and energy access regulatory framework design

Decarbonisation Strategy



- RE market integration mechanisms
- Energy efficiency regulation and policy
- Hydrogen strategies and integration
- Low carbon strategy and policy
- Energy storage investments
- Carbon pricing instrument assessments
- Green electrification and mini-grids

Markets & Commercial



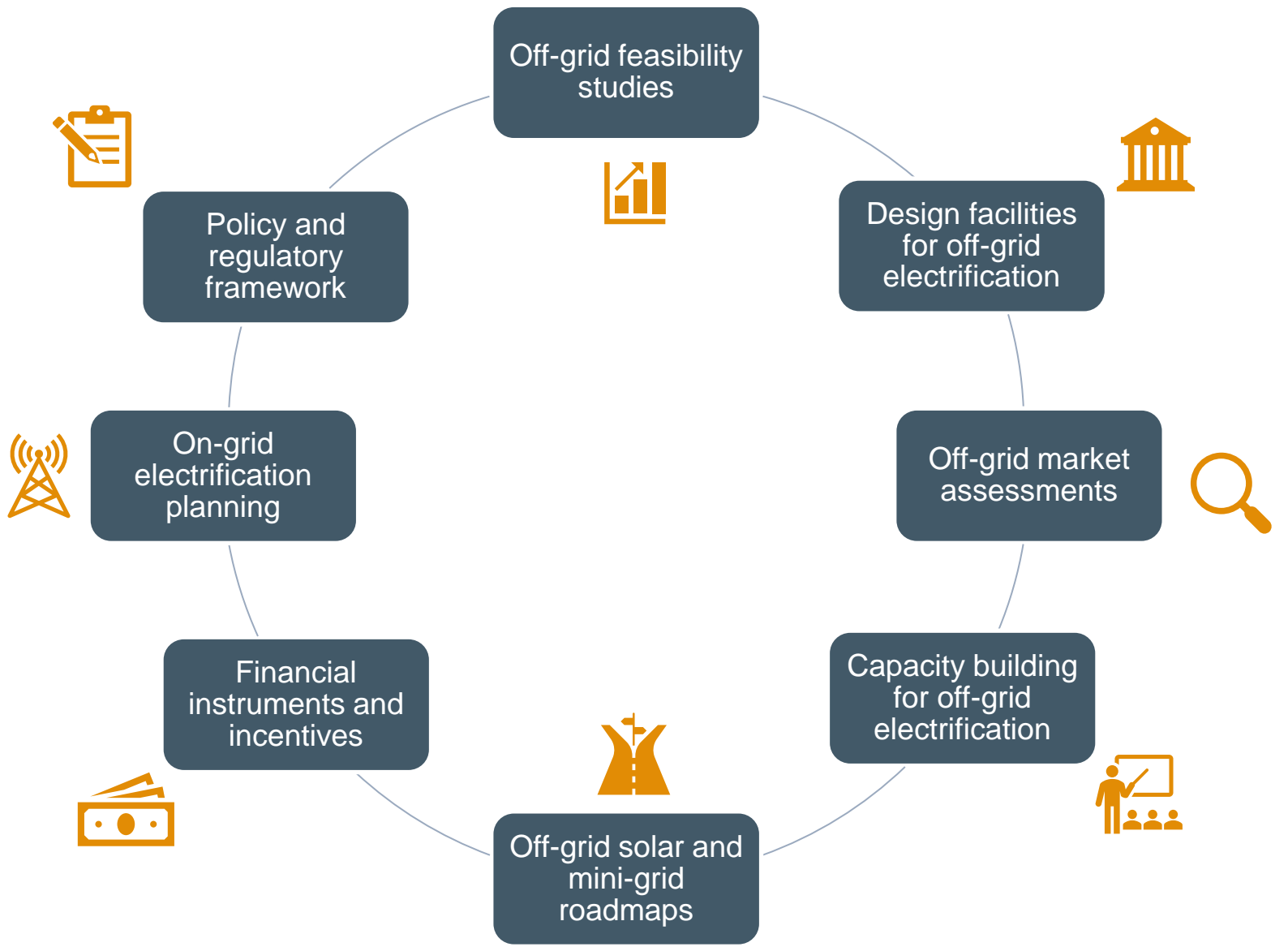
- Market due diligence
- Asset valuation
- Generation and storage revenue projections
- Wholesale power market design
- Ancillary service remuneration mechanisms
- Energy market reform
- Power market modelling (Plexos licence)
- Market studies for off-grid applications
- Risk assessment for network investments
- Commercial support on energy contracts

Investment Planning

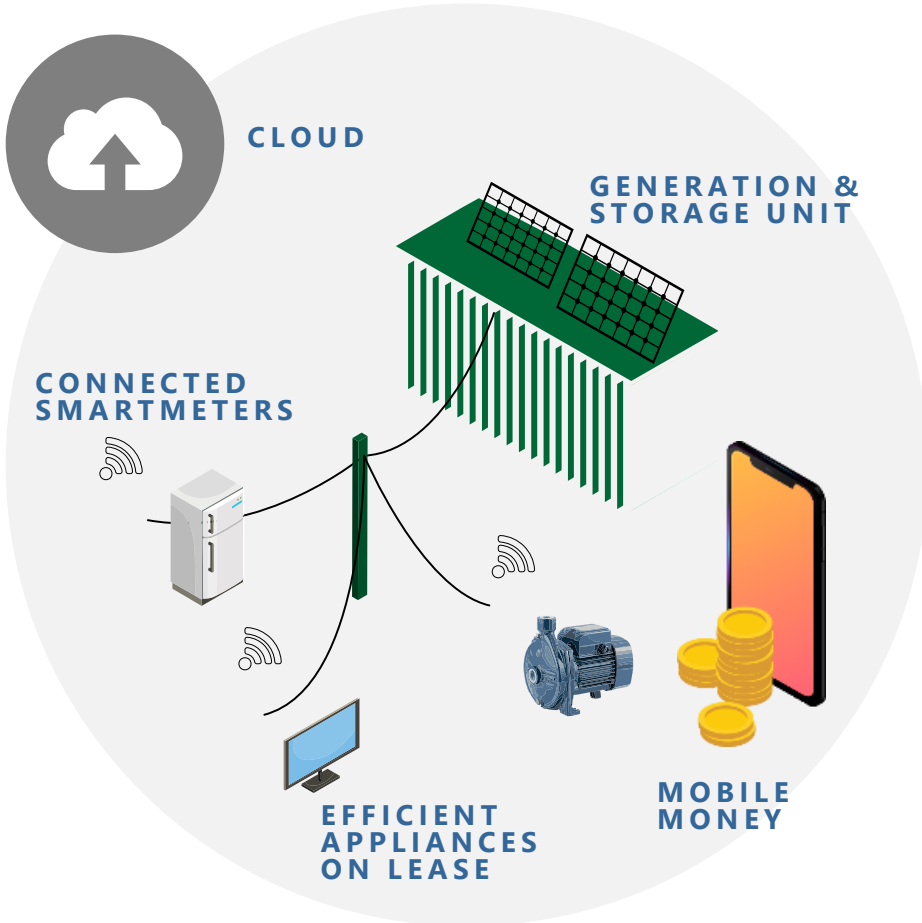


- Least cost development plans
- Investment strategy
- Electricity load forecasting
- Energy and water sector masterplans
- PPP policy and regulation frameworks

We have extensive experience in energy access and off-grid electrification across all technologies



What is a mini-grid?



Localised off-grid & grid-tied generation, storage, distribution



Capacity ranges from 1 kW to 10 MW



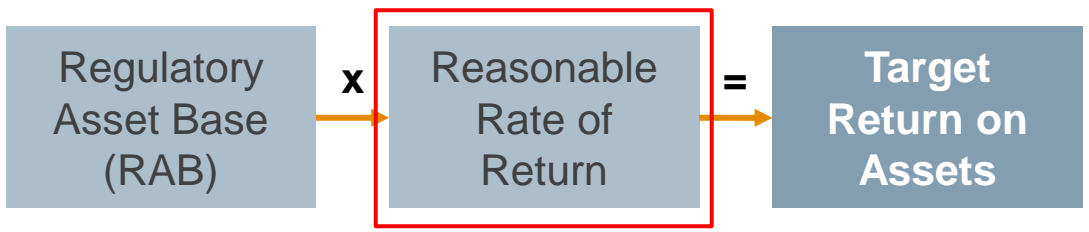
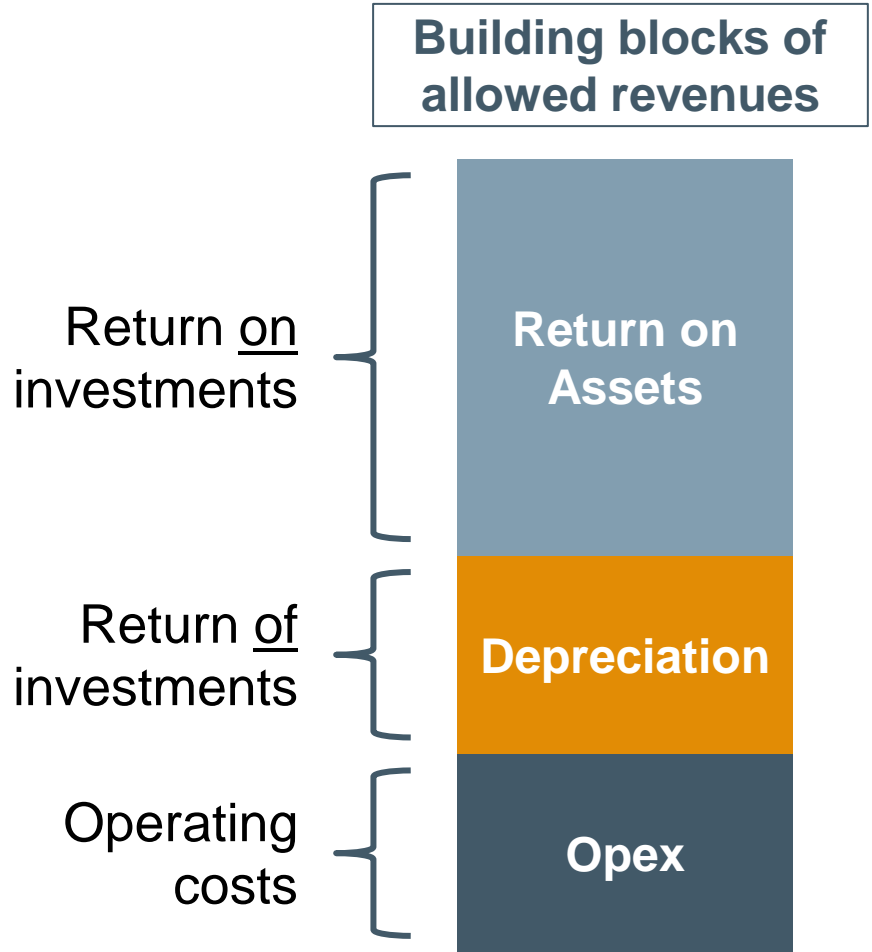
Power generation with solar PV, wind, hydro, biomass and diesel



End users: local households, businesses and institutions



What is the cost of capital?



$$WACC = \frac{d}{d+e} r_{debt} + \frac{e}{d+e} r_{equity}$$

$\frac{d}{d+e}$ is the debt ratio and $\frac{e}{d+e}$ is the equity ratio

r_{debt} is the real cost of debt

r_{equity} is the real cost of equity

Agenda

Mini-grid market development and regulatory considerations on allowances for the recovery of financing costs

- Mr Tom George (AMDA)
- Mr Samuel S. Bunnya (AFUR)
- Mr Dafe Akpeneye (NERC, discussant)

Structuring finance for green mini-grids from a development finance institution's perspective

- Mr Benjamin Curnier (SEFA and AfDB)
- Q&A

Mini-grid procurement approaches; generation of different financing options and determination of cost benchmarks – case study

- Mr Chris Kanani (Winch Energy)
- Q&A

Panel discussion on challenges of financing mini-grid projects

- Ms Mukabanji Mutanuka (Engie - Power Corner, Zambia)
- Mr James Wakaba (Infracore Africa)
- Ms Ziria Tibalwa Waako (ERA, Uganda)
- Q&A