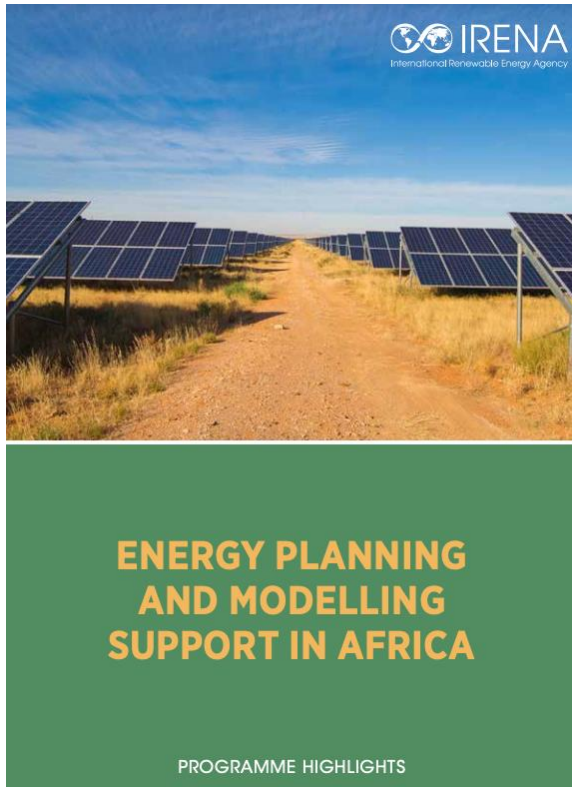# IRENA's capacity building in energy modelling and planning

Energy planning support team
Innovation and Technology Centre, IRENA

29 November 2021

Institutional capacity building in energy planning

ENERGY PLANNING AND MODELLING SUPPORT IN AFRICA

PROGRAMME HIGHLIGHTS

Basis for good planning

- Ownership of the skills and processes

- Transparent methodology

- Robust data

Support countries to devise their own strategies

National masterplan development support programme
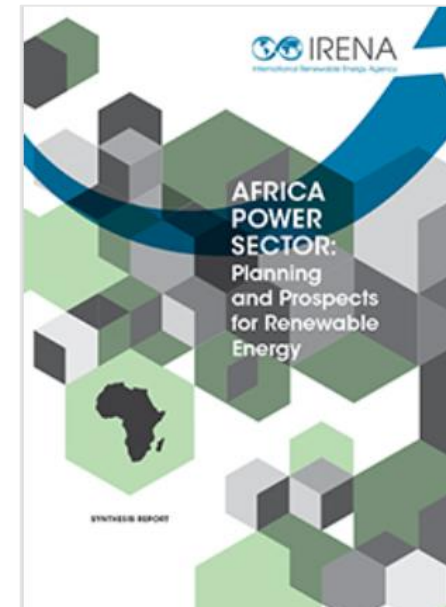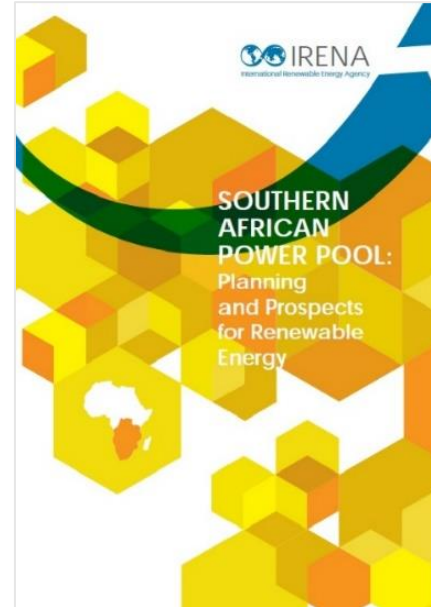
E.g. Eswatini 18 month programme

Regional model analysis and planning programme

E.g. West Africa 6 month programme

IRENA's **SPLAT model** and databases are used a a starter model in these programmes

Scenario based planning using IRENA's SPLAT models

- Capacity expansion models for African power system using MESSAGE modelling framework

- Used as a starter model kit
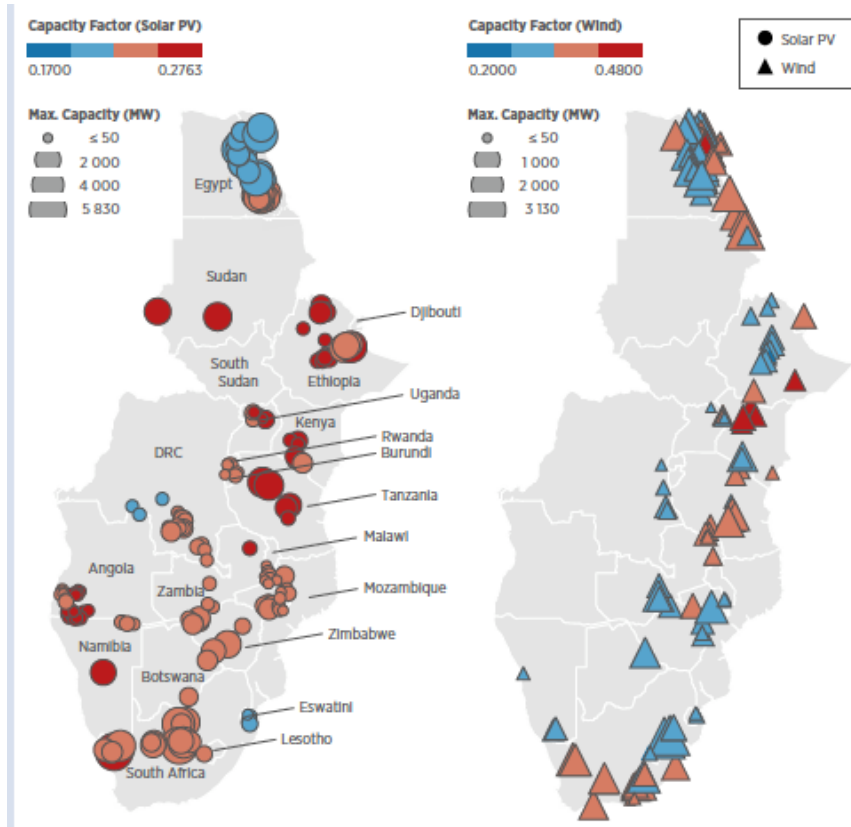
- Built with IRENA's renewable energy databases

"Planning and prospects for renewable power in Africa series" since 2012
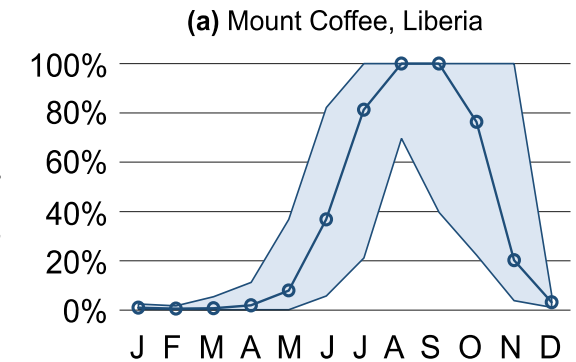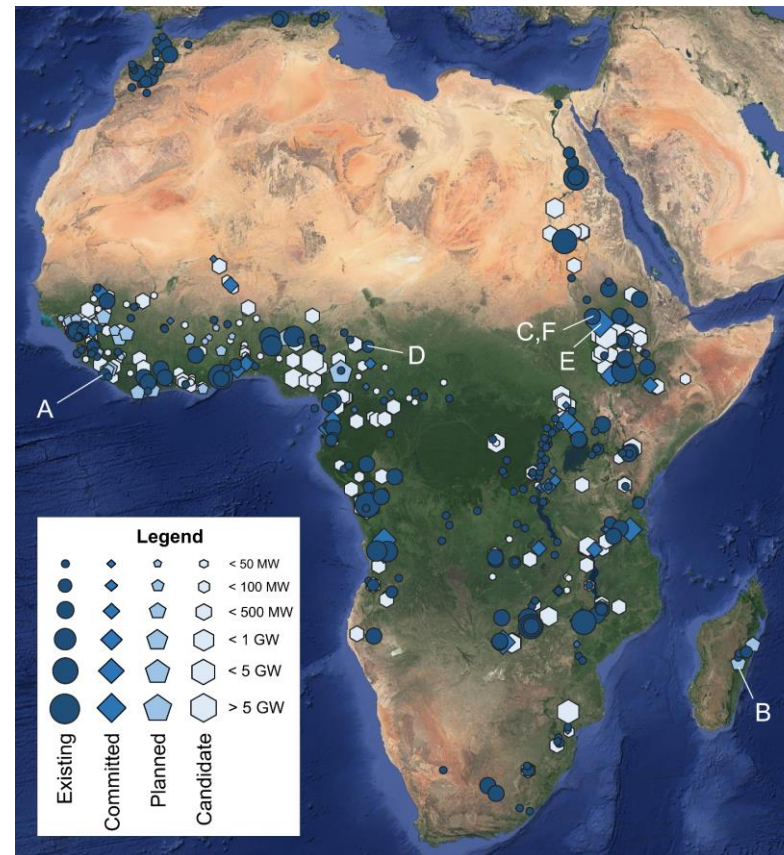
Disseminate renewable data for planning models

Solar and wind GIS based investment options

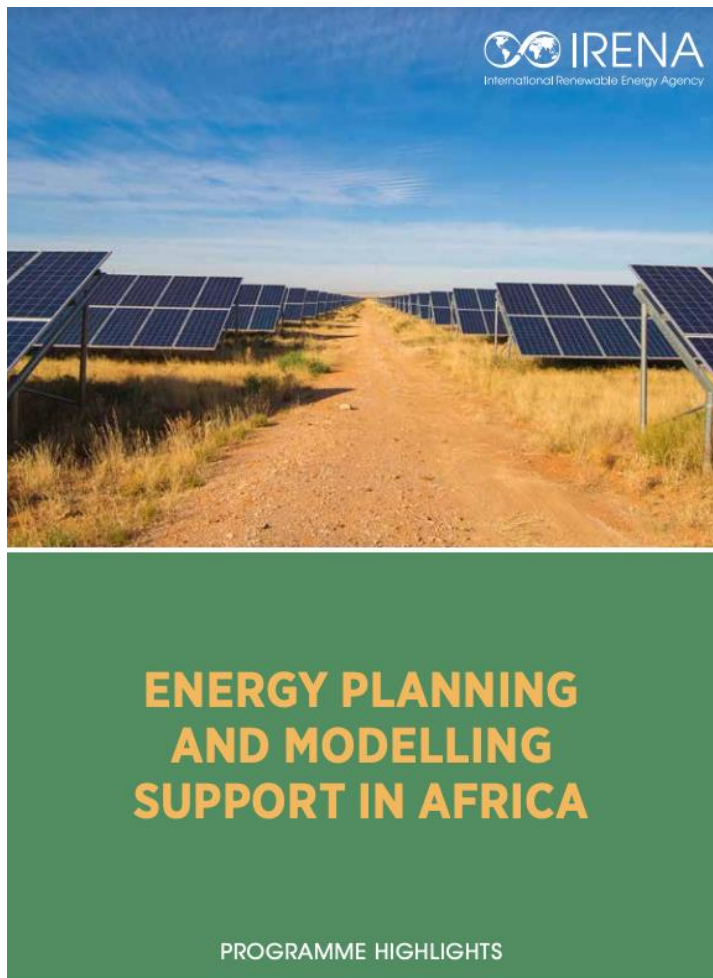## Africa hydro power plant and profile database

Towards establishing a process for an integrated masterplan

- IRENA is supporting Continental Masterplan development

- Will provide modelling methodologies and trainings

IRENA and IAEA to Help African Union Develop Continental Power Master Plan with EU support

01 September 2021 | Articles

The International Renewable Energy Agency (IRENA) and the International Atomic Energy Agency (IAEA) have been selected as modelling partners for the development of the African Continental Power Systems Master Plan (CMP). The initiative is led by the African Union Development Agency (AUDA) with the technical and financial support of the European Union (EU), and is aimed at establishing a long-term continent-wide planning process. The two agencies' modelling tools will be the official planning models utilised in this initiative.

For more info:

www.irena.org/energytransition/
Energy-Planning-Support