

The Gambia National Forum on Renewable Energy Regulation 31 January – 01 February, 2012 Banjul, The Gambia



ECREEE Financing Schemes and Potentials for Renewable Energy in the ECOWAS region



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DRIVERS FOR FINANCING



REFERENCE TO THE ECREEE PRESENTATION FOR:

- ENABLING ENVIRONMENT: Policy Framework***
- Information And Capacity To Access Finance***
- Networks And Information Sharing through various media***



Financing Options



- Donor Support: Bilateral and Multilateral Funds – Very useful in the upstream, set-up and assist in the creating the enabling environment
- The ECOWAS Renewable Energy Facility (EREF) for peri-urban and rural areas
 - A Small grand co-funding facility to promote feasibility studies, RE business start-ups, and small rural projects
- ECREEE-MICRO Finance Scheme
 - A Small credit scheme to support RE and EE projects in Rural Communities
- INVESTMENT FUNDS: Donor Support, Private Commercial Funding:
 - EREIF: Establishment of a RE Infrastructures Fund for West Africa
- Carbon Funds
- Nationally Mobilized Funds



ECOWAS Renewable Energy Facility (EREF)



- Grant Facility managed by ECREEE Secretariat in cooperation with the National Focal Institutions
- Undertakes regular call for proposals: 1st Call was from 31 May – 15 July 2011
- Co-funds small and medium sized RE&EE Investment and Business projects: EUR 5,000 – 50,000
- National and regional for rural and peri-urban areas
- One applicant or group of partners are eligible (int. applicants must have local ECOWAS partners)
- Maximum duration of projects: 24 months

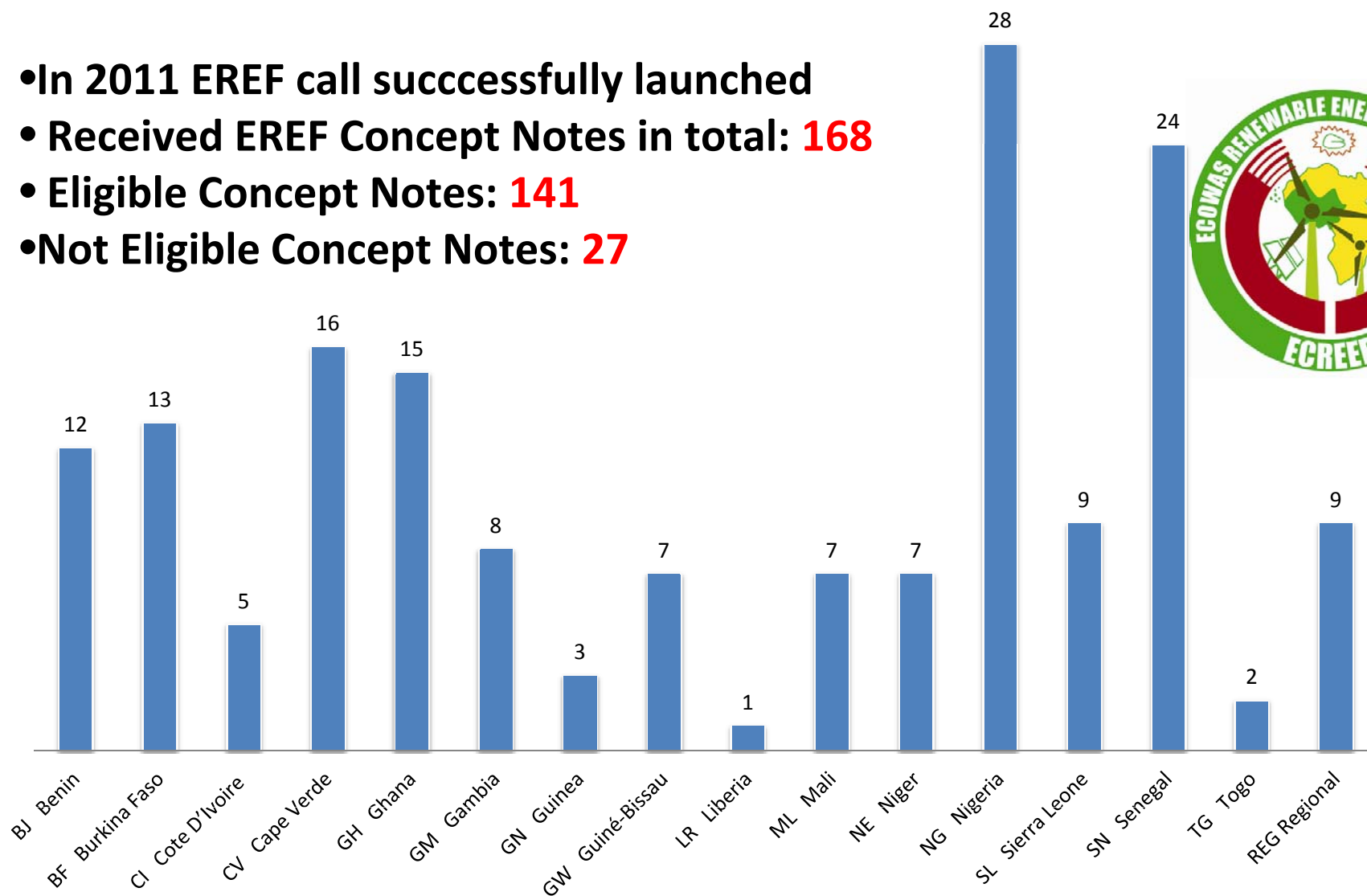




ECOWAS Renewable Energy Facility (EREF)



- In 2011 EREF call successfully launched
- Received EREF Concept Notes in total: **168**
- Eligible Concept Notes: **141**
- Not Eligible Concept Notes: **27**



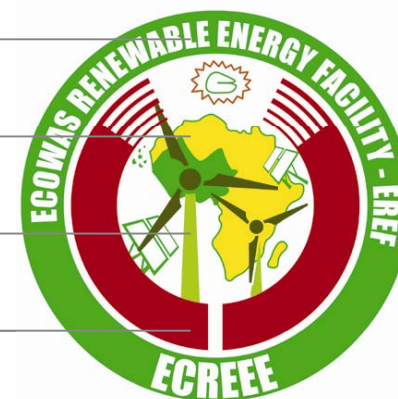
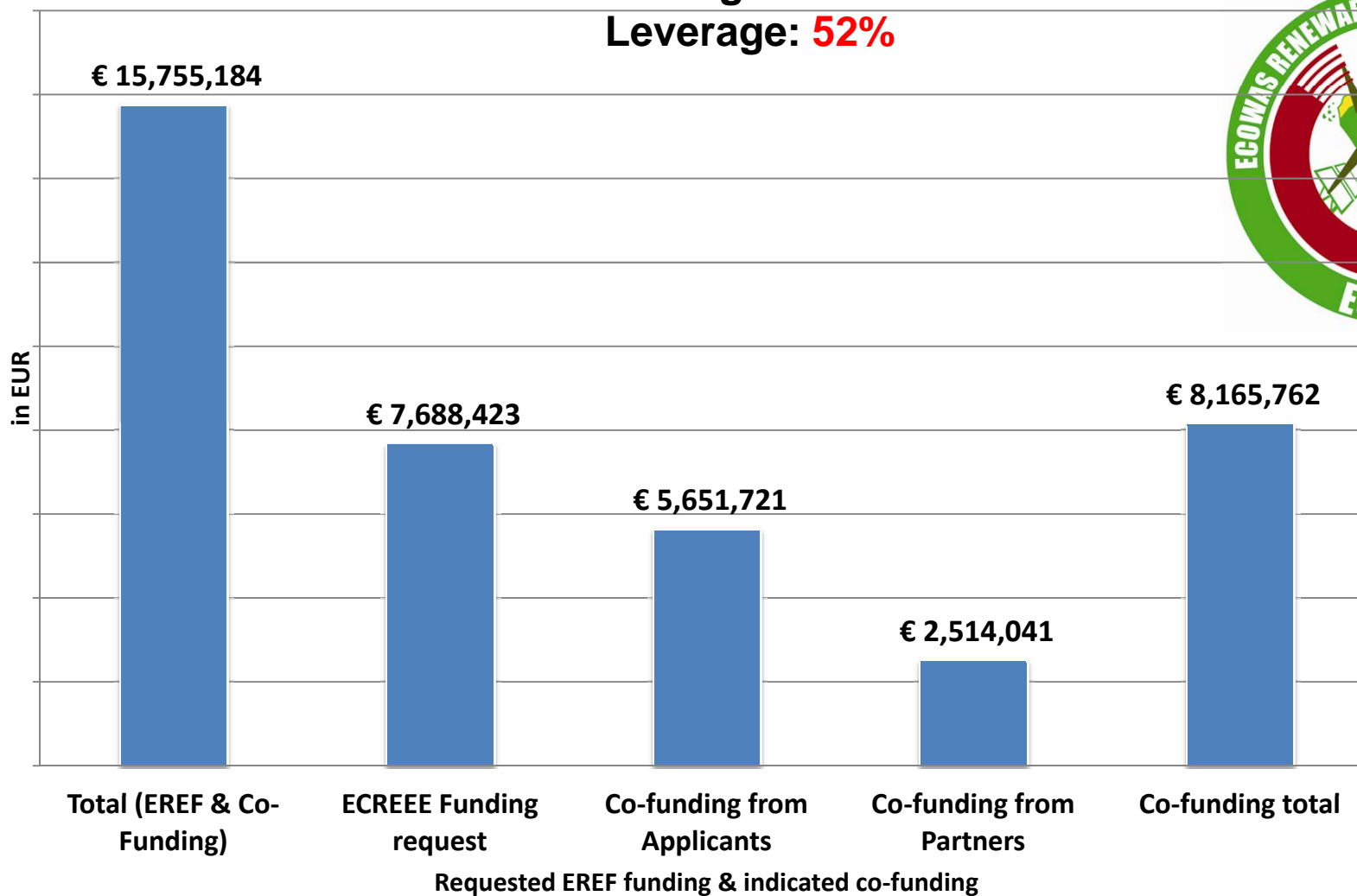


ECOWAS Renewable Energy Facility (EREF)



Received EREF funding requests & indicated co-funding
Average EREF Grant

Leverage: **52%**

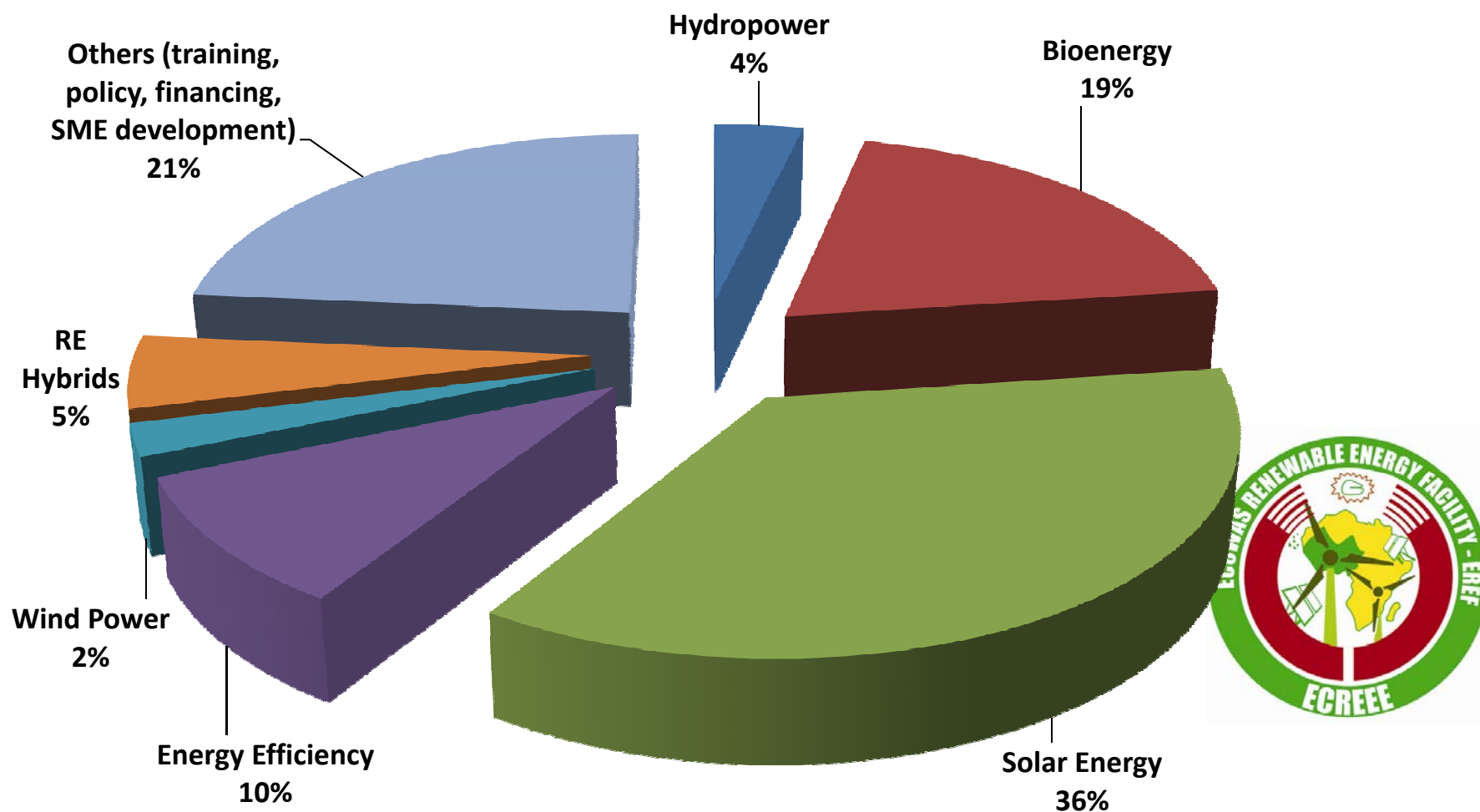




ECOWAS Renewable Energy Facility (EREF)

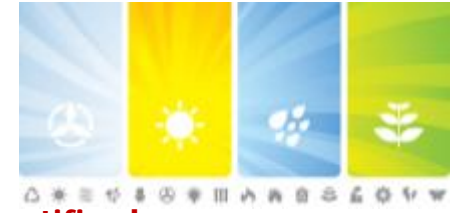


RE&EE Technology Focus of EREF Concept Notes





EREIF: RE Investment Fund



First pipeline of Medium-Large Scale Commercial Power Plants identified (November 2011)

65 Projects

STILL NEED FOR FURTHER PRIORITIZATION!

| | PV (MW) | CSP(MW) | Wind MW) | Small Hydro (MW) | Biomass (MW) | Other (MW) | TOTAL per country (MW) |
|-----------------------------|------------|------------|------------|------------------|--------------|------------|------------------------|
| Benin | 6 | | 10 | 26 | 20 | | 62 |
| Burkina Faso | 43 | 30 | | 39 | | | 112 |
| Cape Verde | 18 | | 27 | | | | 45 |
| Cote d'Ivoire | | | | 20 | 40 | | 60 |
| Gambia | 10 | | 15 | | 10 | | 35 |
| Ghana | 20 | 40 | 100 | | | | 160 |
| Guinea | | | | 20 | | | 20 |
| Guinea Bissau | 5 | | | | | | 5 |
| Liberia | | | | 10 | 38 | | 48 |
| Mali | 110 | 30 | | 16 | 15 | 30 | 201 |
| Niger | | 30 | 30 | | | | 60 |
| Nigeria | 40 | 40 | 20 | 139 | 20 | | 259 |
| Senegal | 10 | | 150 | | 30 | | 190 |
| Sierra Leone | | | | 10 | 100 | | 110 |
| Togo | 10 | | 20 | | | | 30 |
| TOTAL per Technology | 272 | 170 | 372 | 300 | 273 | 30 | 1,417 |



EREIF: RE Investment Fund



First pipeline of Medium-Large Scale Commercial Power Plants identified
(November 2011)

64 Projects

% RE Penetration in ECOWAS Grid: less than 20% (in capacity installed)

Investment needed:

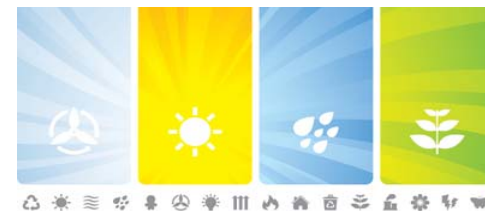
| | PV | CSP | Wind | Small Hydro | Biomass | Other | TOTAL |
|---------------------------------|-----|-----|------|----------------|---------|-------|-------|
| Investment (million EURO) | 952 | 680 | 752 | 420 | 658 | 90 | 3,582 |



Potentials for RE&EE to increase access to energy services



SOLAR & ACCESS



homes
and social
services

lighting

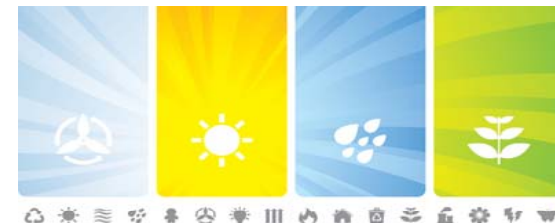


2/1/2012

www.ecreee.org



SOLAR & ACCESS



Powering cooling
devices For
productive/social
services



Water pumping,
desalination, etc





SOLAR & ACCESS



Powering
Communications
devices



Cottage Industry
(solar fruits, vege
drying)



Solar Water
Heating (hotels,
hospitals, homes)





BIOENERGY & ACCESS



Efficient & alternative
cooking fuels & stoves
cashew plantation mgt
for food & energy



Integrated Cashew
Program



Biofuels for fuel
substitution in MFPs



BIOENERGY & ACCESS



Biofuels (from agro-ind.
Waste, non-food crops/land)

WASTE TO ENERGY
(MSW, SEWAGE, IND, ETC)

Biogas (from agro-ind.
Waste)

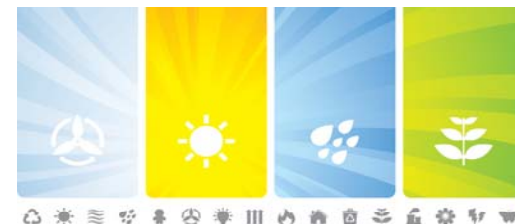
Re-forestation and
agro-forestry

Efficient wood and
charcoal stove





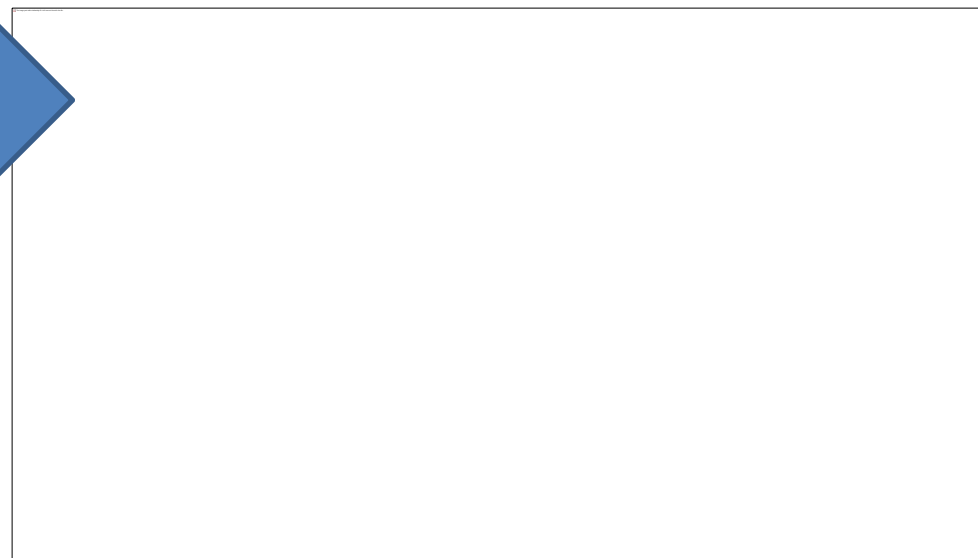
Wind Energy & Access



Electricity generation
for social &
productive uses



Water Pumping





Energy Eff. & Access



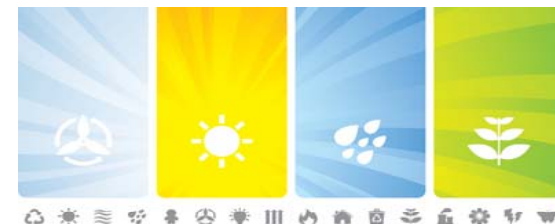
**Energy Efficiency
Promotion is KEY
to Sustainability:
bulbs**

Energy Efficiency is key in
freeing voltages for other
users to access and also
save energy expenditure

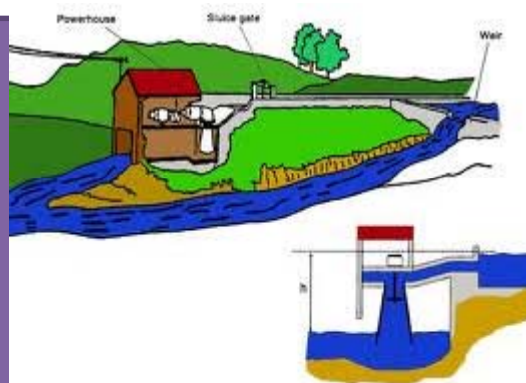




SHP & Access



Small hydro
power (SHP) for
power
generation: for
social &
productive uses





Promotion of medium to large scale projects



RE Projects existing and under construction



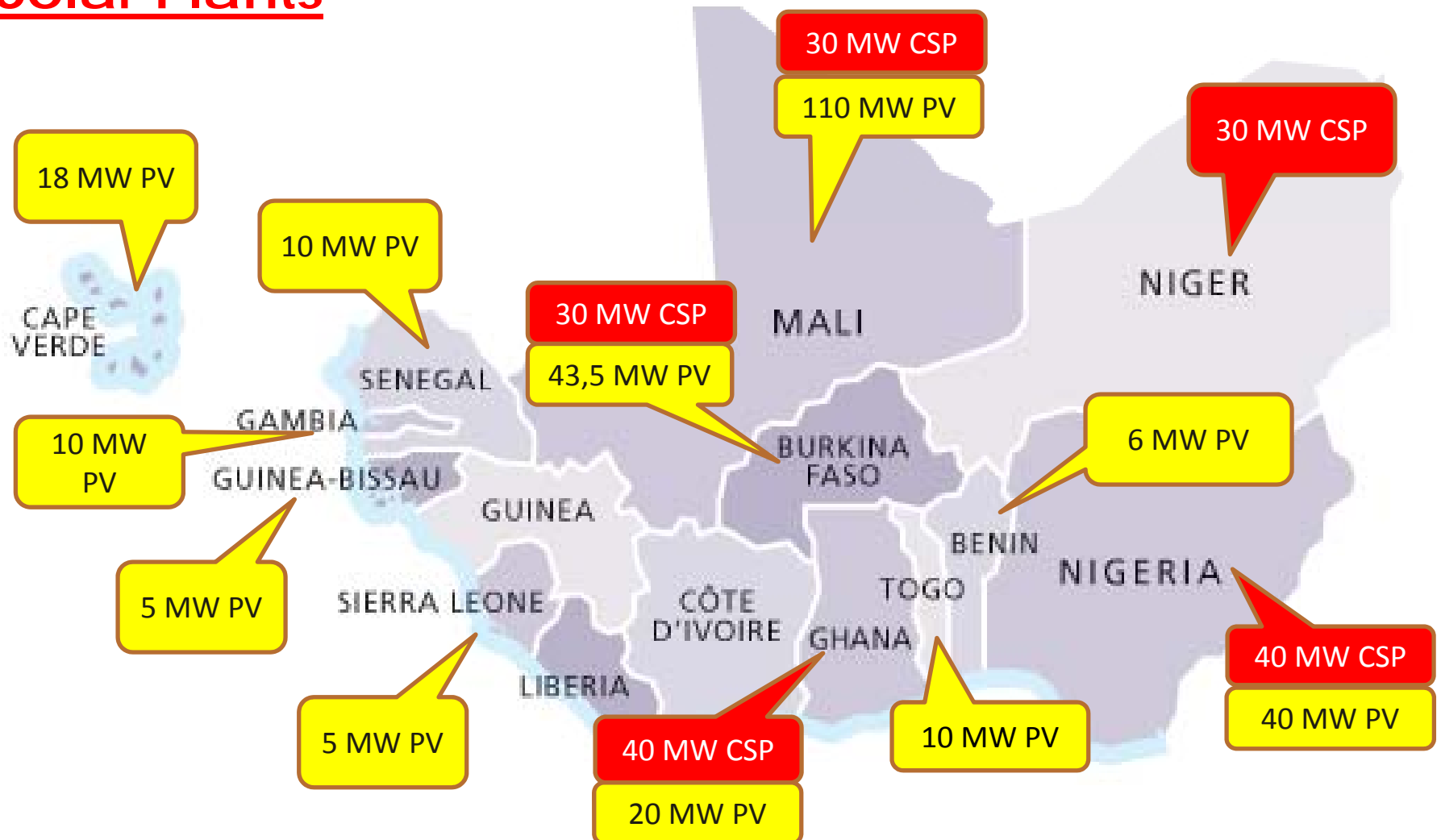


Identified and Potential Projects in the Region

2011-2020



Solar Plants



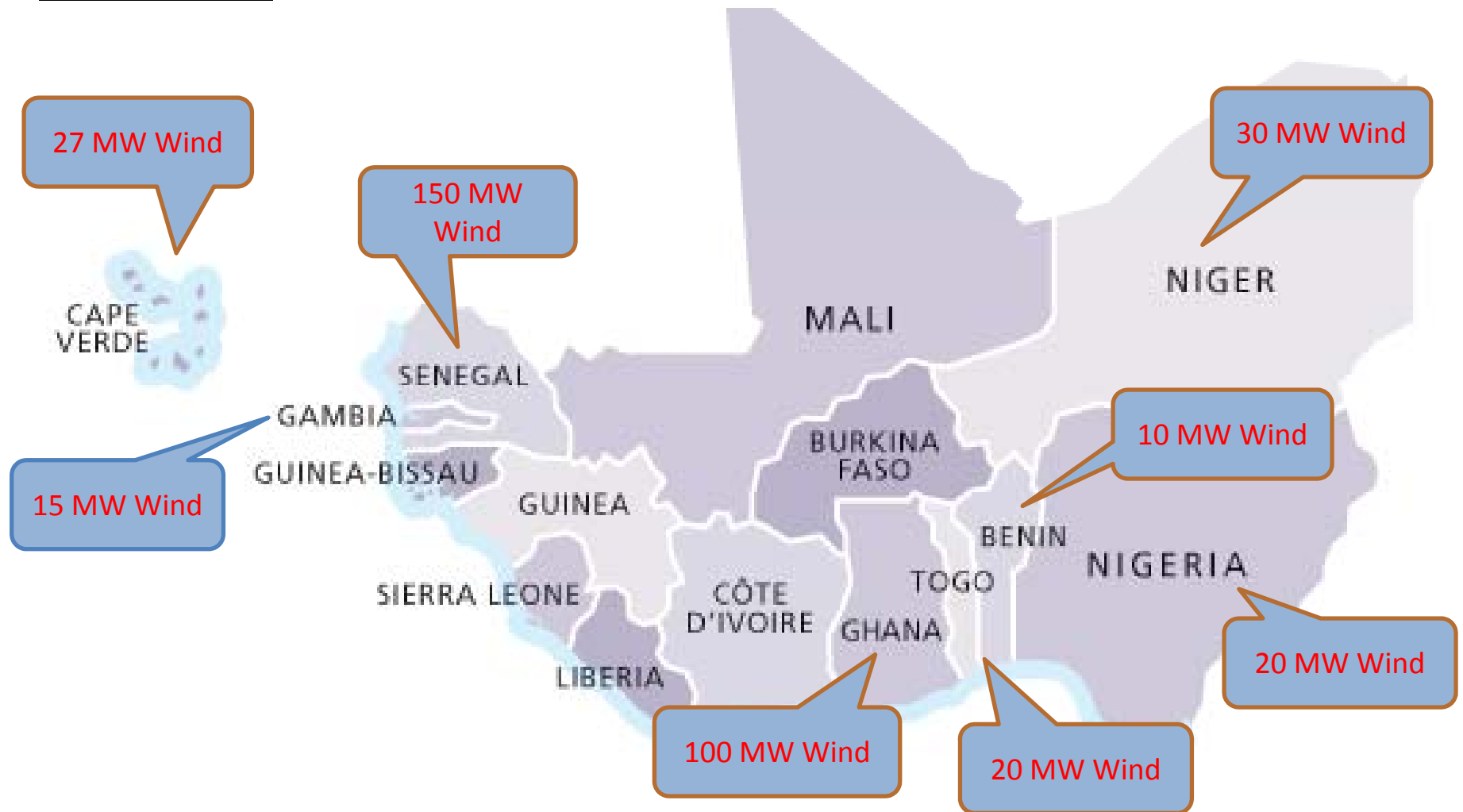


Identified and Potential Projects in the Region

2011-2020



Wind Farms



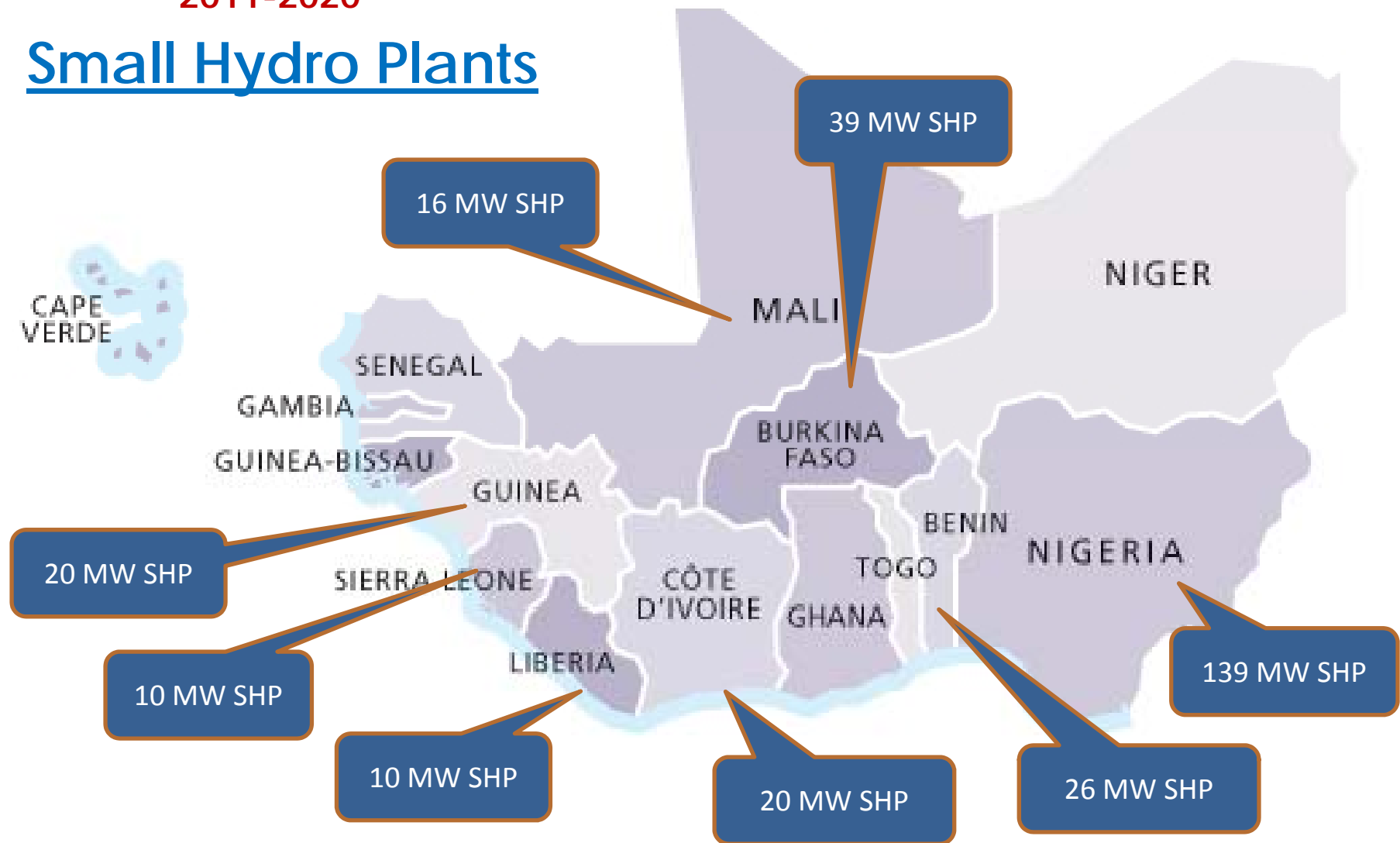


Identified and Potential Projects in the Region

2011-2020



Small Hydro Plants



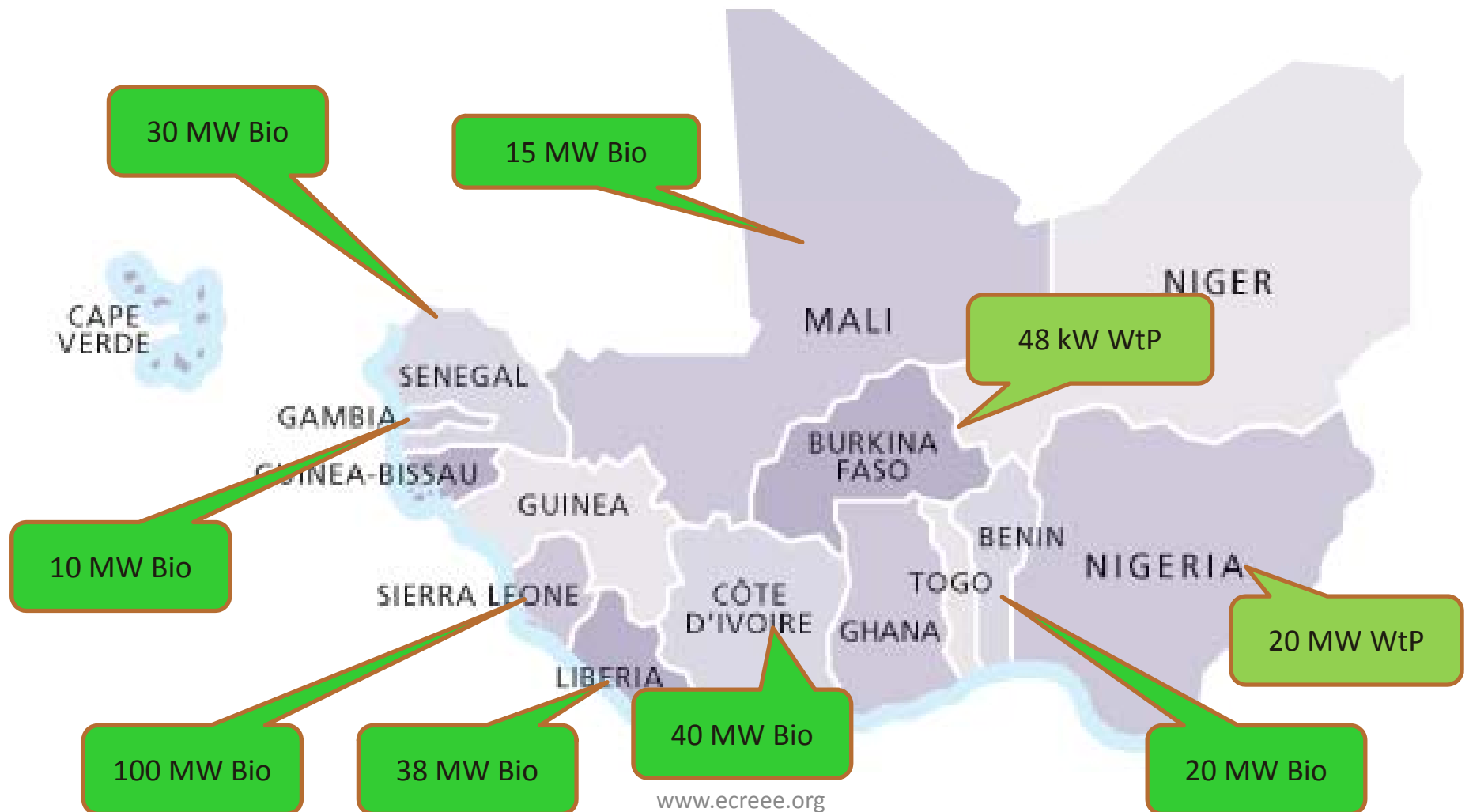


Identified and Potential Projects in the Region

2011-2020



Bioelectricity (including Waste)





RE&EE: Africa's Hope?



- In 2011, the total investments in renewable energy in Africa rose from \$750 million in 2004 to \$3.6 billion. By 2020, this sum is expected to grow to \$57 billion – a staggering 1,58% increase in nine short years. Will Africa be able to do what it takes to ensure its energy future?
- Modest starts in renewable energy have begun
- Wind power projects in Africa are under way in Egypt, Ethiopia, Kenya, Morocco, Nigeria, Tunisia, and Tanzania - including Kenya's 0.3 gigawatt Lake Turkana project and 0.7 gigawatt of capacity under construction in Morocco, while Cameroon, Kenya, Tanzania, and Uganda all have existing biomass power capacity or plans for future development.



Thank you! Merci! Muito obrigado!



*ECOWAS Regional Centre for
Renewable Energy and Energy Efficiency*

*Centre Régional pour les Energies Renouvelables
et l'Efficacité Energétique de la CEDEAO*

*Centro Regional para Energias Renováveis e
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