EU SUSTAINABLE ENERGY WEEK
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Challenges and opportunities for OCTs’ Sustainable Energy: The energy transition

1. Challenges
   1. Small markets and large territory
   2. Scattered and remote islands
   3. Dependency to fossil fuel
   4. Dominant operator
   5. Open markets to competition

2. Opportunities for French Polynesia
   1. Energy Transition Plan for 2020 and 2030
   2. Financing our plan: COP 21 and Green Climate Fund?
CHALLENGE: Small markets and large territory

Production d’électricité thermique 2014 (en GWh)

- Tahiti: 327
- Autres îles*: 129
- Moorea: 35
- ISLV: 67
- Tuamotu: 10
- Marquises: 10
- Australes: 6
CHALLENGE : Small markets

- Installed power plants in Tahiti:
  - Generator : 144 MW
  - Gas turbine : 14 MW
  - Hydroelectric power plants : 46 MW
  - Solar panels : 24 MW

  Total : 228 MW

- Maximum power in 2014 : 90 MW between 12 PM to 15 PM
CHALLENGE: Scattered and remote islands

- The fragmentation of our territory creates many fixed costs to be amortized
CHALLENGE: Dependency to fossil fuel

The share of electricity production from Renewable Energy sources is more than 30 % since 2010
CHALLENGE : Dominant operator

- 95% of energy is produced by the historical operator EDT (GDF – SUEZ, newly ENGIE) in the 19 main islands,
- 5% of energy is produced by municipalities in 29 of the smallest islands,
- The concession of electric distribution was entrusted to EDT in 1960 for 40 years, and then extended for 10 years twice,
CHALLENGE : Establish a regulatory framework

Open markets to competition

- Define clear and transparent rules,
- Full or partial unbundling for integrated operator
  - Power output
  - Transmission
  - Distribution
  - Sale
  - Dispatching
Opportunities for French Polynesia

Energy Transition Plan for 2030

- Main Goals:
  - 50% of Renewable Energy in the electricity mix for 2020
    - Hydroelectric power plants: 14MW in substitution of a fuel generator of 14MW
    - SWAC for Health Center of French Polynesia: 6 MWf
  - 75% of Renewable Energy in the electricity mix for 2030
    - 2 hydroelectric power plants: 20 MW in substitution of a generator of 17 MW
  - More efficiency for buildings (eco-construction guide)
  - Reduce our greenhouse gas from 3,4 in 2014 to 2,5 tep / inhab in 2030
Opportunities for French Polynesia
Financing our Energy Transition Plan for 2030

• Main Goals:
  – 50 % of Renewable Energy in the electricity mix for 2020
    • Hydroelectric power plants: 50 to 55 M€
    • SWAC for Health Center of French Polynesia: 25 M€
  – 75 % of Renewable Energy in the electricity mix for 2030
    • 2 hydroelectric power plants: 70 to 80 M€
  – More efficiency for buildings (eco-construction guide):
    • Tax free

• COP 21 is a great opportunity for large countries to cooperate with us in sustainable development

• In the same time, the Green Climate Fund could be mobilized to support us in adaptation and mitigation to climate change