

Pacific: Summit on Sustainable Development, Oceania 21

New Caledonia: Evolution of renewable energy

COTSUEL



Fédération Internationale pour la Sécurité des Usagers de l'Electricité
International Federation for the Safety of Electricity Users
Federacion Internacional para la Seguridad de los Usuarios de la Electricidad

Oceania 21

30.06 to 02.07.2014

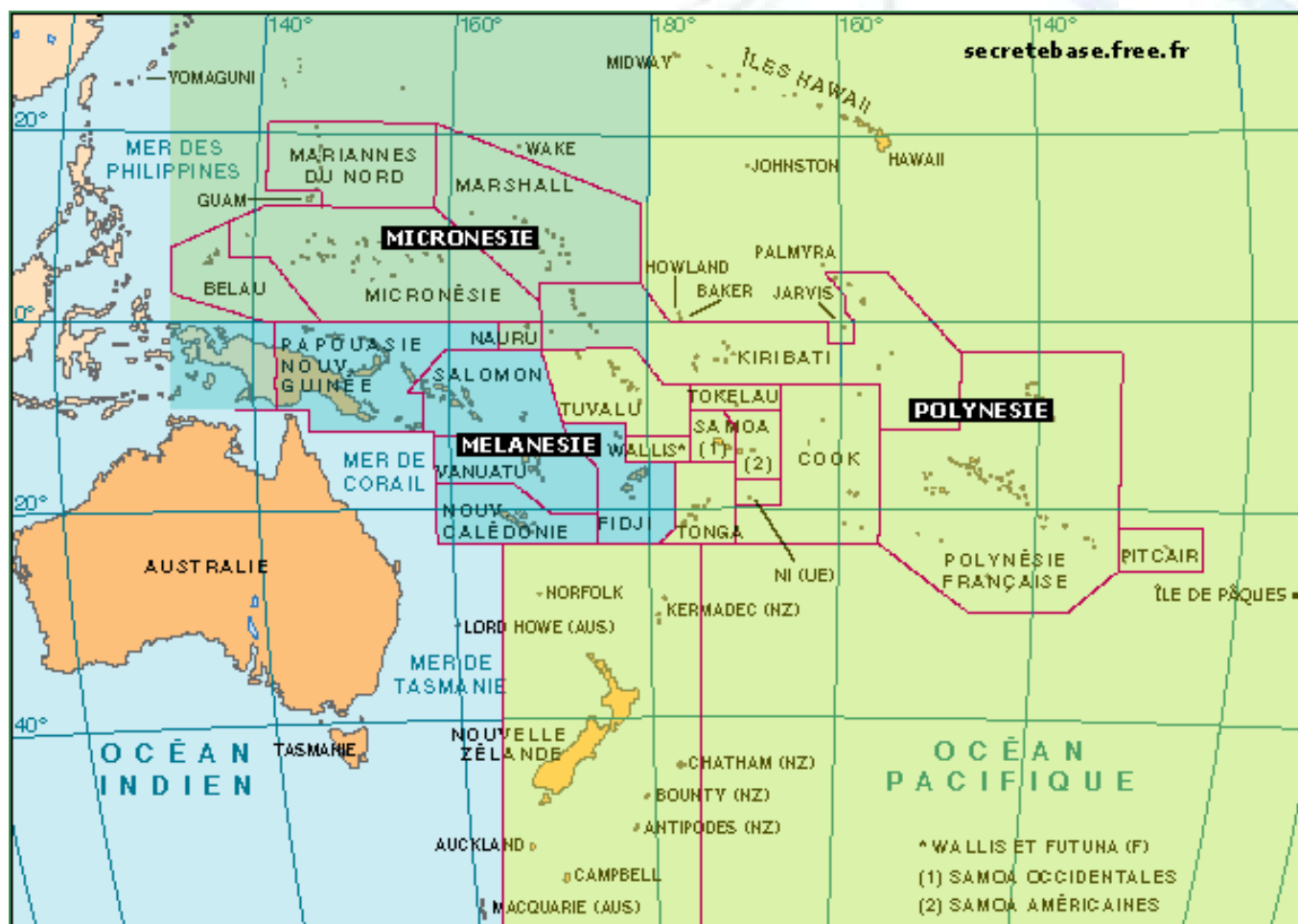
Symposium Fisuel – Maroc – 11 & 12 Mai 2016

Fisuel Symposium – Morocco – 11th & 12th of May, 2016

Under New Caledonia initiative, it's the second summit of 17 Pacific Island Countries and Territories (The PICTs)

- Îles Cook
- Etats Fédérés de Micronésie
- Polynésie Française
- Kiribati
- Îles Marshall
- Nauru
- Niue
- Nouvelle Calédonie
- Palau
- Papouasie Nouvelle-Guinée
- Samoa
- Îles Salomon
- Timor oriental
- Tokelau
- Tuvalu
- Vanuatu
- Wallis et Futuna

Local Situation



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Subject of the summit

- Explain the main problems of PICTs to the delegations which attend the COP (Notably COP21 and 22)
- Consider the emergence of solutions taking into consideration all environmental issues

The essential themes

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- A large, faint, light blue globe with a grid of latitude and longitude lines is positioned in the background, centered behind the list of themes.
- Oceans
 - Renewable Energies
 - Waste
 - Water
 - Biodiversity and Agriculture

Renewable Energies

- Currently PICTs have the highest dependency on fossil fuels in the world (70% to 100%, New Caledonia, 76%)
- Still, PICTs represents only 0.03% of global WW Greenhouse Gas Emissions*
- * Gaz à Effet de Serre

Objective of PICTs

Engagements of the PICTs:

- Establish a regional platform for exchange of knowledge, experience and technology
- Set ambitious objective, 40% renewable in the short term, energy independence in the medium term.
- Implement sensitization actions to people and especially younger for energy management (reduction of consumption).

- COTSUEL, working directly with New Caledonian authorities, in charge of energy and environment, is in the process and offer its experience in people safety .
- COTSUEL will participate in exchanges of the regional hub for renewable energy.

A large, faint, light blue globe with a grid of latitude and longitude lines is centered in the background of the slide.

New Caledonia

Evolution of the Renewable Energies

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Objective

- New Caledonia wanting to be leader in PICT meetings, works on the energy transition
- By 2030, all public distribution (purchased power <40kVA) must be made with renewable energy, approximately 40% of total consumption
- Create a great communication plan for energy efficiency (reduction of consumption).

Installed Power in 2014

Site	Technologie	Fonctionnement	Puissance nette installée (MW)
Centrale de YATÉ	Hydraulique	Base / Pointe	68
Centrale de DONIAMBO	Chaudière Fuel	Base	148
Centrale de PRONY	Chaudière Charbon	Base	100
TAC DUCOS	Turbine à combustion	Pointe	43
Centrale de NÉAOUA	Hydraulique	Base/Pointe	7.2
Aménagement de la THU	Hydraulique	Fil de l'eau	2.2
Centrale de NÉPOUI	Moteurs diesel	Semi Base	53
Ferme éolienne de KAFEATE	Eolien	Intermittent	11.5
Fermes éoliennes du Mont Dore	Eolien	Intermittent	25
Ferme solaire d'HÉLIOS BAY	Photovoltaïque	Intermittent	2.1
Centrale diesel de La Coulée	Moteurs diesel	Pointe	10
Ferme solaire TIEA Energie	Photovoltaïque	Intermittent	2
Ferme solaire HELIO PANC	Photovoltaïque	Intermittent	1
Ferme solaire CET Ducos	Photovoltaïque	Intermittent	1
Puissance totale installée sur le réseau interconnectée (MW)			460

Segmentation of the electricity production in New Caledonia

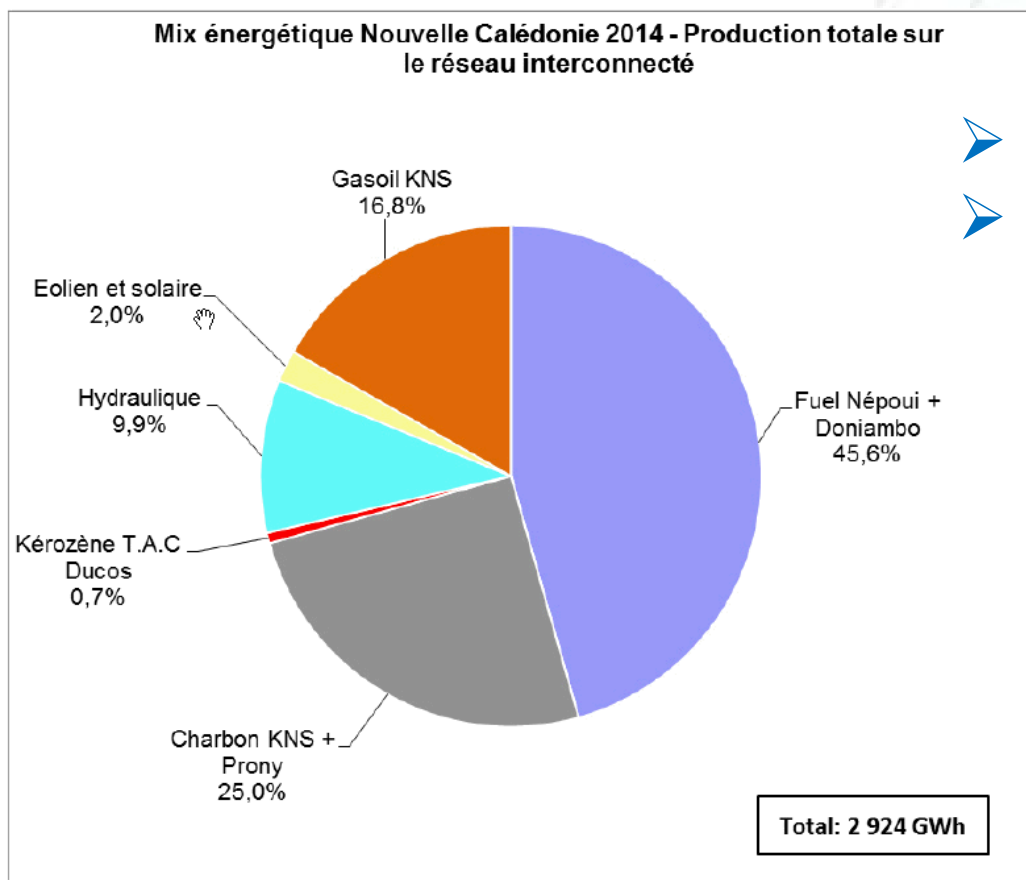
Installed power: 474 MW interconnected

- Thermal: 354 MW or 74.7%
- Hydraulics: 77.4 MW or 16.3%
- Wind power: 36.5 MW or 7.7%
- Photovoltaic: 6,1 MW or 1,3%

Then a segmentation of the installed power:

- Fossil energy: 74.7%
- Renewable energy: 25.3%

Total Production in 2014



➤ Fossil Energy: 88,1%

➤ Renewable energy: 11,9%

Decisions:

The government of New Caledonia has decided to promote photovoltaic installations:

- connected to the grid for individuals

Decree of December 1st, 2015

- connected to the network for professionals ($P < 40\text{kVA}$)

Law provided in August 2016

For individuals:

reference to the French standard UTE C 15-712-1

- Promote “auto-consumption”
- Establish of a feed-in tariff (2/3 of the sale price)

Obligation:

- Limit the power of the PV system to the contracted power
- Obtain authorization to operate, validated by the government
- Obtain a certificate of conformity under COTSUEL
- Be connected to a double meaning counter.

Attestation of Conformity decree December 1st, 2015

- Obligation of the certificate of conformity
- Established and signed by the author of the work
- Signed by COTSUEL
- Allows the putting in service the PV system.

Control Process

- The author of the work buys a form to COTSUEL, completes the file and sends it, 20 days before the end of the work
- COTSUEL systematically inspects and signed the certificate
- The concerned energy distributor implements the contract specifying the particular specification.

For Professionals (P<40kVA)*

reference to the French standard UTE C 15-712-1

- Promote “auto-consumption”
- Establish of a feed-in tariff (2/3 of the sale price)

* Beyond 40 kVA sales rates are adapted to the client's situation and often below the proposed feed-in tariff

Obligation:

- Limit the power of the PV system to the contracted power, in the limit of 40kVA
- Obtain authorization to operate, validated by the government
- Obtain a certificate of conformity under COTSUEL
- Be connected to a double meaning counter.

Certificate of conformity: Law in progress

- Obligation of the certificate of conformity
- Established and signed by the author of the work
- Signed by COTSUEL
- Allows the putting in service the PV system

- The installer gives to COTSUEL the certificate of compliance form with the technical file and the report of the certified inspector.
- COTSUEL performs checks and unexpectedly during the work in progress or at the end.

Controls

- Individuals :
 - Control : COTSUEL
 - Visa : COTSUEL

- Professionals:
 - Control : Private Certified Body
 - Visa : COTSUEL



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THANK YOU

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