The Renewable Energy Feed-In Tariff in SA

ADEA conference

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Chronology

- November 2003: DME release of White Paper on Renewable Energies
  - Target of 10,000 GWh by 2013
- March 2009: NERSA publishes first guidelines for REFIT
  - Investors' interest in SA's RE potential
- July 2009: release of 'REFIT phase II' consultation paper
  - Gather comments from all stakeholders
- October 2009: Expansion of REFIT to 6 new technologies
- November 2009: Approval of PPA by NERSA



Reasons for implementation

- REFIT = best suited mechanism for development of RE in SA
- Need for:
  - Comprehensive and bankable framework to attract investment
  - Clear policy to reach Government's 10,000 GWh objective
  - Enforceable legal structure that satisfies all stakeholders



The market

- 8,000 MW+ of RE projects under development
  (incl. 5,000 for wind energy alone)
- Government's first phase objective might be capped to 1,600 MW
  - Competition for offtake of power
- Many joint ventures between SA local project developers and international companies



Challenges

- The single buyer model
  - Currently planned to be hosted by Eskom
- Licensing selection process still unclear
  - How will NERSA work with RFP?
- Guidelines' legal status still unclear
  - Need for a bankable PPA
- Capacity limits still to be determined



Licensing criteria prescribed by NERSA

Selection process key to attracting investment

Preference given to:

- Location that contributes to grid stabilisation and mitigates transmission losses
- Location that contributes to local environment
- Projects with a HDI advancement component
- Projects with viable network integration requirements
- Projects with proven ability to raise finance
- Small distributed generators
- Generators with short commissioning time

Technologies considered under the REFIT

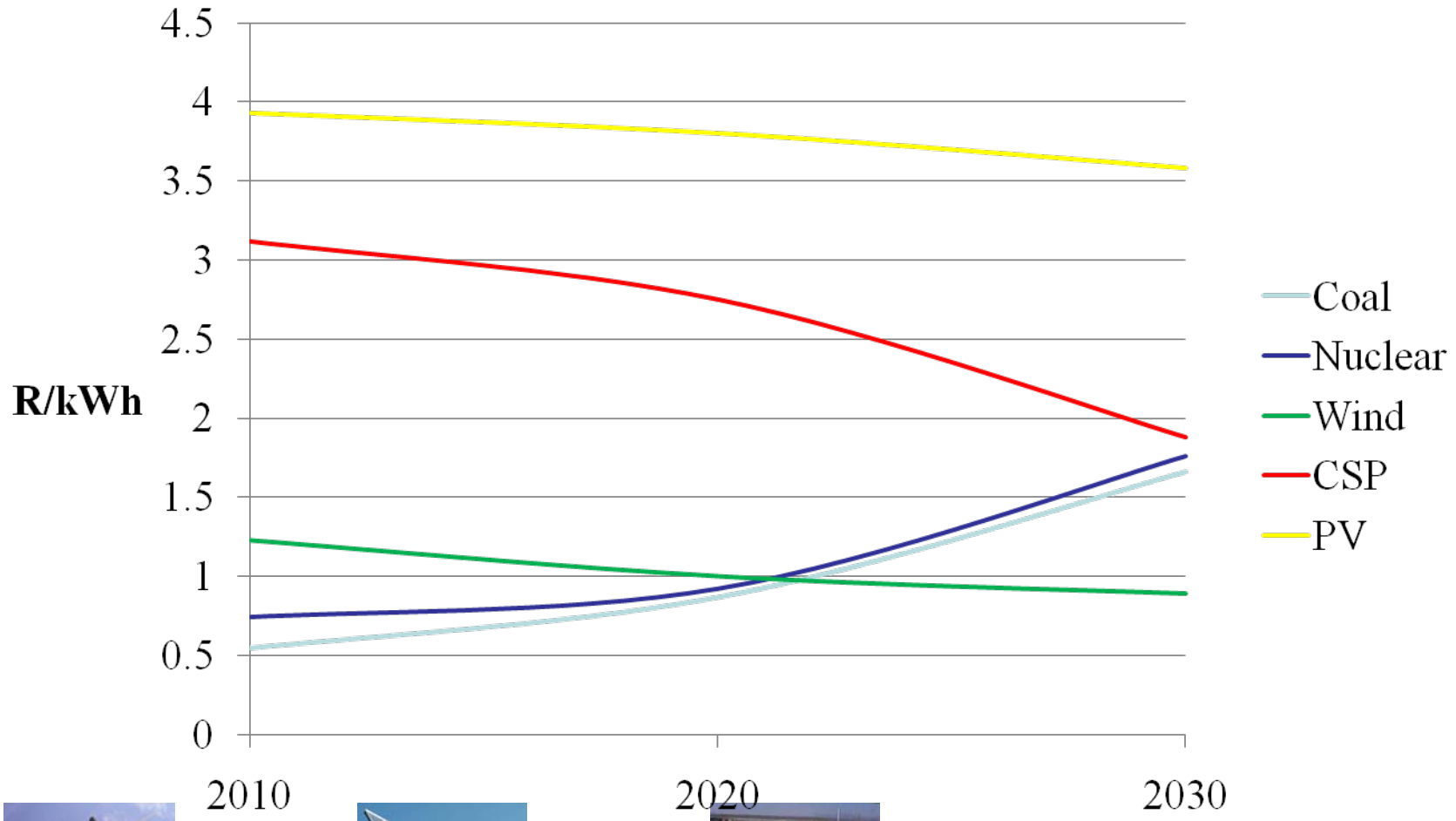
REFIT PHASE I

- Wind
- Small hydro
- Landfill gas
- Solar Thermal (STEG) with storage

REFIT PHASE II

- STEG without storage
- Large scale PV
- Solid biomass
- Biogas
- Tower STEG with storage
- Concentrated PV

Projected costs of generation technologies



Our business

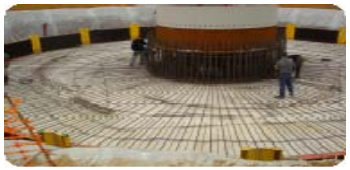
- Developing and operating wind farms in France since **2000**

- Generation portfolio : 150 MW in operation
  : 138 MW going to construction
  : 414 MW awaiting approval

  ⇨ **700 MW** business

- Turbine suppliers : Enercon (Germany)
  : WinWind (Finland-India)
  : Siemens (Germany-Denmark)

- Team of 25 project engineers and project developers





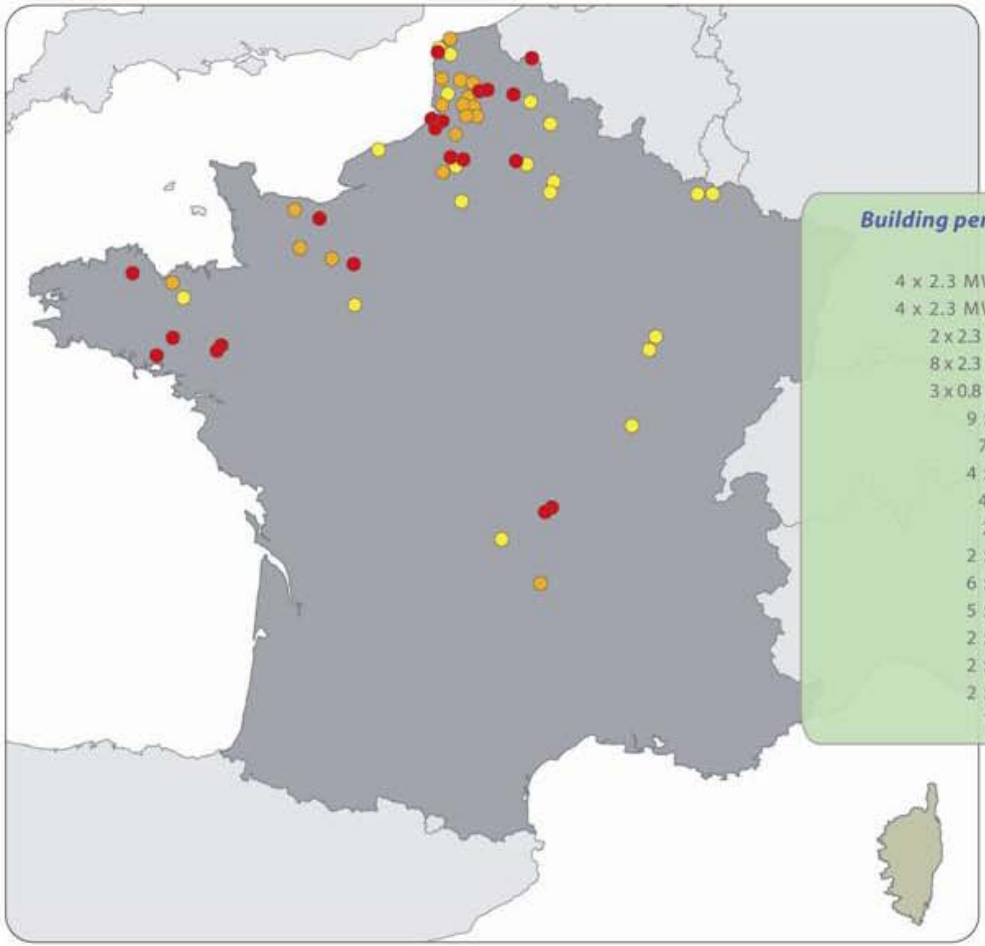

Our wind farms

Wind farms currently producing : 142.95 MW

- 1 x 0,75 MW *Lagerwey*
- 4 x 0,75 MW *Lagerwey*
- 10 x 2,3 *Siemens*
- 5 x 2,3 *Siemens*
- 8 x 2 MW *Enercon E-82*
- 6 x 2 MW *Enercon E-82*
- 6 x 2 MW *Enercon E-82*
- 6 x 2.3 MW *Enercon E-70*
- 2 x 2.3 MW *Enercon E-70*
- 3 x 2.3 MW *Enercon E-70*
- 2 x 2 MW *Enercon E-66*
- 6 x 2 MW *Enercon E-66*
- 5 x 1 MW *WWD-1*
- 4 x 1 MW *WWD-1*
- 3 x 1 MW *WWD-1*
- 2 x 1MW *WWD-1*
- 2 x 1 MW *WWD-1*
- 2 x 1 MW *WWD-1*
- 1 x 1 MW *WWD-1*
- 1 x 1 MW *WWD-1*

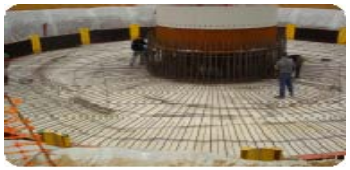
Building permits in validation process : 414.4 MW

- 12 x 2.3 MW Enercon E-82
- 8 x 2.3 MW Enercon E-82
- 6 x 2.3 MW Enercon E-82
- 4 x 2.3 MW Enercon E-82
- 3 x 2.3 MW Enercon E-82
- 2 x 2.3 MW Enercon E-82
- 2 x 0.8 MW Enercon E-53
- 24 x 3 MW *WWD-3*
- 16 x 3 MW *WWD-3*
- 7 x 3 MW *WWD-3*
- 7 x 3 MW *WWD-3*
- 12 x 3 MW *WWD-3*
- 9 x 3 MW *WWD-3*
- 7 x 3 MW *WWD-3*
- 6 x 3 MW *WWD-3*
- 6 x 3 MW *WWD-3*
- 5 x 3 MW *WWD-3*
- 5 x 3 MW *WWD-3*
- 5 x 3 MW *WWD-3*
- 7 x 1 MW *WWD-1*



Building permits obtained : 144.7 MW

- 4 x 2.3 MW *Enercon E-82*
- 4 x 2.3 MW *Enercon E-82*
- 2 x 2.3 MW *Enercon E-82*
- 8 x 2.3 MW *Enercon E-70*
- 3 x 0.8 MW *Enercon E-48*
- 9 x 3 MW *WWD 3*
- 7 x 3 MW *WWD-3*
- 4 x 3 MW *WWD 3*
- 4 x 3 MW *WWD-3*
- 2 x 3 MW *WWD 3*
- 2 x 1 MW *WWD 1*
- 6 x 1 MW *WWD 1*
- 5 x 1 MW *WWD 1*
- 2 x 1 MW *WWD 1*
- 2 x 1 MW *WWD 1*
- 2 x 1 MW *WWD 1*
- 1 x 1 MW *WWD 1*






InnoWind in South Africa

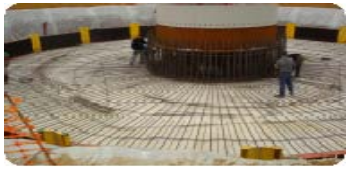
Two ‘model’ projects:

St Helena Bay Wind farm

- 20-30 MW
- Community-based
- Tripartite collaboration with Oxfam UK and Saldanha Bay Municipality

Grahamstown Wind farm

- 20-30 MW
- Creation of an educational Trust
- Official collaboration with Rhodes University






Thank you

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