



# Overview of Medium Term Policy for Alternative and Renewable Energy

## International Conference on Power & Alternate Energy

**27<sup>th</sup> March, 2010**

**Imran Ahmed  
Director REP, AEDB**

# Background

- First Renewable Policy prepared by AEDB and approved by ECC in December 2006
- Policy comprised of three phases:
  - *Short Term – Lenient Phase for rapid growth*
  - *Medium Term – Consolidation Phase for sustainable growth (2010– Dec 2014)*
  - *Long Term – Maturity Phase for competitive growth (Jan 2015 onwards)*

# Policy Formulation - 2006 till 2010

2007

2008

2009

2010

Short Term Policy

Medium Term Alternative & Renewable Policy Formulation

Medium  
Term ARE  
Policy

## Public Sector

- Ministry of Petroleum & Natural Resources
- Environment and Alternate Energy Department, Government of Sindh
- Planning Commission of Pakistan
- I&P Department, Government of Balochistan, Quetta
- Ministry of Finance, Islamabad
- Pakistan Council of Renewable Energy Technologies (PCRET)
- Engineering Development Board of Pakistan (EDB)
- Planning Dept., NWFP
- National Electric Power Regulatory Authority (NEPRA)
- CPPA, National Transmission and Dispatch Company (NTDC)
- Energy and Power Department, NWFP
- Irrigation & Power Department, Punjab

## Private Sector

- FPCCI, Islamabad
- Power Sector Experts
- IPP Developers
- ARE Manufacturers

## Civil Society

- IUCN
- Universities
- Energy NGOs
- Rural Dev NGOs

## Donors

- ADB
- GTZ
- USAID
- WB

# Short Term Policy

# Short Term RE Policy

- A Good Start to Cover Wind, Solar, and small Hydro
- Develops several good policy instruments concepts

|  |                                     |
|--|-------------------------------------|
| Guaranteed Electricity purchase                            | Convertibility of PKR into USD      |
| Protection against political risk                          | Wind Risk / Hydro Risk              |
| Attractive Tariff  | Net Metering                        |
| No Import Duties on Equipment                              | Banking of Electricity              |
| Zero Sales Tax   | Wheeling Provisions                 |
| No Income Tax / withholding tax                            | Grid Spill Over                     |
| Repatriation of Equity along with dividends freely allowed | Carbon Credits through CDM Facility |
| Permission to issue corporate registered bonds             |                                     |

# Short Term RE Policy

- **Good but not enough!**
  - Limited Scope; On Grid Wind, Solar and Small Hydro
  - IRRs not developed; Grid Codes, EIA Guidelines, Standardized Commercial Documents for Wheeling, Net Metering, Banking etc
  - Not supported by Law
  - Some conflicts with existing Policies
  - Lessons have been learned here and abroad
  - International best practice has revealed that incentives are not sufficient to guarantee RE penetration.
    - RE needs more than guaranteed purchase of power
    - Requires a direct revenue incentive
    - Innovative Tariff
  - Financing - A Major Hurdle!

# Intervening Events

- Oil Prices Dramatically Increase
- Other Countries More Advanced in ARE Policy & Incentives
- Backlogs Develop for Turbines
- Oil Prices Fall and Western Economies in Rapid Decline
- General Investment Climate Deteriorates
- Foreign Direct Investment Declines

# Medium Term Policy

# Medium Term Policy - Highlights

- **Addresses Concerns of Stakeholders**
- **Removes ambiguity**
- **Expanded Scope; Other Renewable and Alternative Resources defined**
- **Resolved policy conflicts eg., carbon credits**
- **Incorporates Lessons learned here and abroad**
- **Incorporates higher rate of return and innovative tariff**
- **Presents a policy for Biofuels**
- **Develops the Policy of non-electric RE**
- **Financing support**

# Scope

| 1. Renewable Energy Systems       | 2. Alternative Energy            |
|-----------------------------------|----------------------------------|
| Solar (Solar Thermal or Solar PV) | Biogas                           |
| Hydro – up to 50 MW               | Biomass                          |
| Wind                              | Biofuels (ethanol and biodiesel) |
| Geothermal                        |                                  |
| Tidal                             | Hydrogen                         |
| Wave                              | Waste                            |

## 3. Hybrid Energy Systems

Hybrid systems with a minimum of 10 MW or 10% of the annual energy output provided by the Renewable Energy Component.

# Incentives – Carried Forward from STP

| Incentives  | MTP                        |
|---|----------------------------|
| Custom Duty Exemption (Plant, Machinery, Equipment)         | YES (Added for Biodiesel)  |
| Tax Exemption (Income and Sales Tax)                        | YES                        |
| Exemption from Payment of Zakat on Dividends                | YES                        |
| Private Sector Participation (IPP, Grid Spillover, Captive) | YES                        |
| Repatriation of Equity along with Dividends                 | Allowed                    |
| Local & Foreign Financing                                   | Allowed                    |
| Issuance of Corporate Registered Bonds & Shares             | Allowed                    |
| Guaranteed Market   | YES                        |
| Grid Connection   | YES                        |
| Net Metering, Net Billing, Wheeling & Banking               | YES (IRRs being developed) |
| Resource Risk   | YES (for certain projects) |
| Security Package  | YES                        |
| Land & Site Access  | YES                        |
| Negotiated Tariff   | YES                        |

# Incentives – Added in MTP

| Incentives  | MTP                                     |
|---|---|
| Targets   | Being Developed                         |
| Innovative Financing  | AEDF, Counter Guarantee, Line of Credit |
| Carbon Credits  | 100% Project Proponent                  |
| Collection & Dissemination of Data  | YES                                     |
| Accelerated Depreciation of 90%   | Allowed                                 |
| Allocation of network investment cost                                     | YES                                     |
| Higher Rate of Return   | YES                                     |
| Premiums for Early Completion   | YES                                     |
| Upfront Tariff  | YES (Wind & Small Hydro)                |
| Withdrawal of Equity on BOOT  | YES                                     |
| Relaxation of Generation License Requirements for less than 5 MW projects | YES                                     |

A E D B

# Rural Energy Services Policy

# Rural Energy Service Policy - Highlights

- Long term master plan coordinated with grid extension
- Technical Standards
- Capacity Building
- Licensing of RES
- Joint Federal-Provincial Role
  - Federal Provide Incentives, develop standard documentation as templates for Provinces, pilot projects and R&D that provinces can benefit from, Financing for Provinces.
- Rural Energy Agencies
- Productive uses of energy promoted
- Possible Capital Grant
- Financing Through Rural Energy Account
- Performance Monitoring

# Biodiesel Policy

# Biodiesel Policy Highlights

- Mandatory Use
  - 5% (B5) by 2015
  - 10% (B10) by 2025
  - 1% within one year of policy coming into force
- Quality standards by the Ministry of Petroleum and Natural Resources
- At least 50% of B100 production from indigenous resources by 2015
- Conditional import allowed
- Import of B100 shall be exempted from Customs Duty, Income Tax and Sales Tax
- Financial support from Zarai Tarakiyati Bank Ltd (ZTBL) for biodiesel plantation and production
- AEDB's Concessional financing to local refiners of bio-diesel through AEDF

# Thank You

Draft Policy Document is available at our website

[www.aedb.org](http://www.aedb.org)

For comments please email directly to:

Mr. Imran Ahmed  
Director AEDB

Email: [enr\\_imran.ahmed@yahoo.com](mailto:enr_imran.ahmed@yahoo.com)