



**European Bank**  
for Reconstruction and Development

TURSEFF was developed by  
EBRD



Turkey Sustainable Energy Financing Facility  
Türkiye Sürdürülebilir Enerji Finansman Programı

TUSIAD 2011

Istanbul  
December 2011

TURSEFF is supported by:

**CLIMATE  
INVESTMENT  
FUNDS**



**European Union**



**European Bank**  
for Reconstruction and Development

# What is TURSEFF?

❑ TURSEFF was developed by EBRD (European Bank for Reconstruction and Development)

❑ TURSEFF Technical Assistance is donor financed by the CTF (Clean Technology Fund) and the EU

❑ The EBRD's Sustainable Financing Facilities (SEFFs) are based on a well developed formula:

❑ Started in 2004.

❑ Total of US\$ 1.3 million committed.

❑ SEFF is now running in 14 countries.

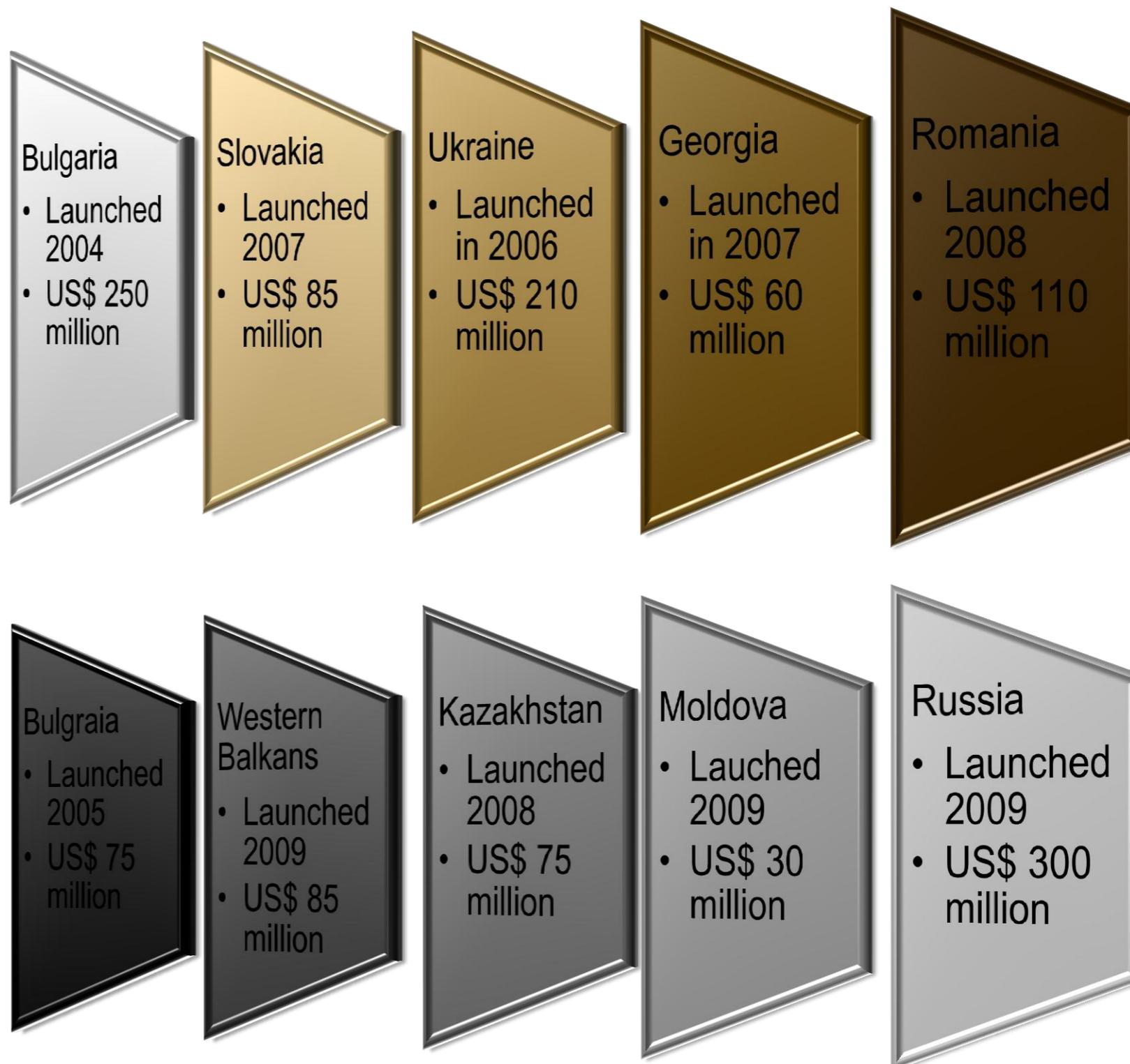
❑ More than 35 partner Banks and US\$ 700 million disbursed



## Other SEFFs

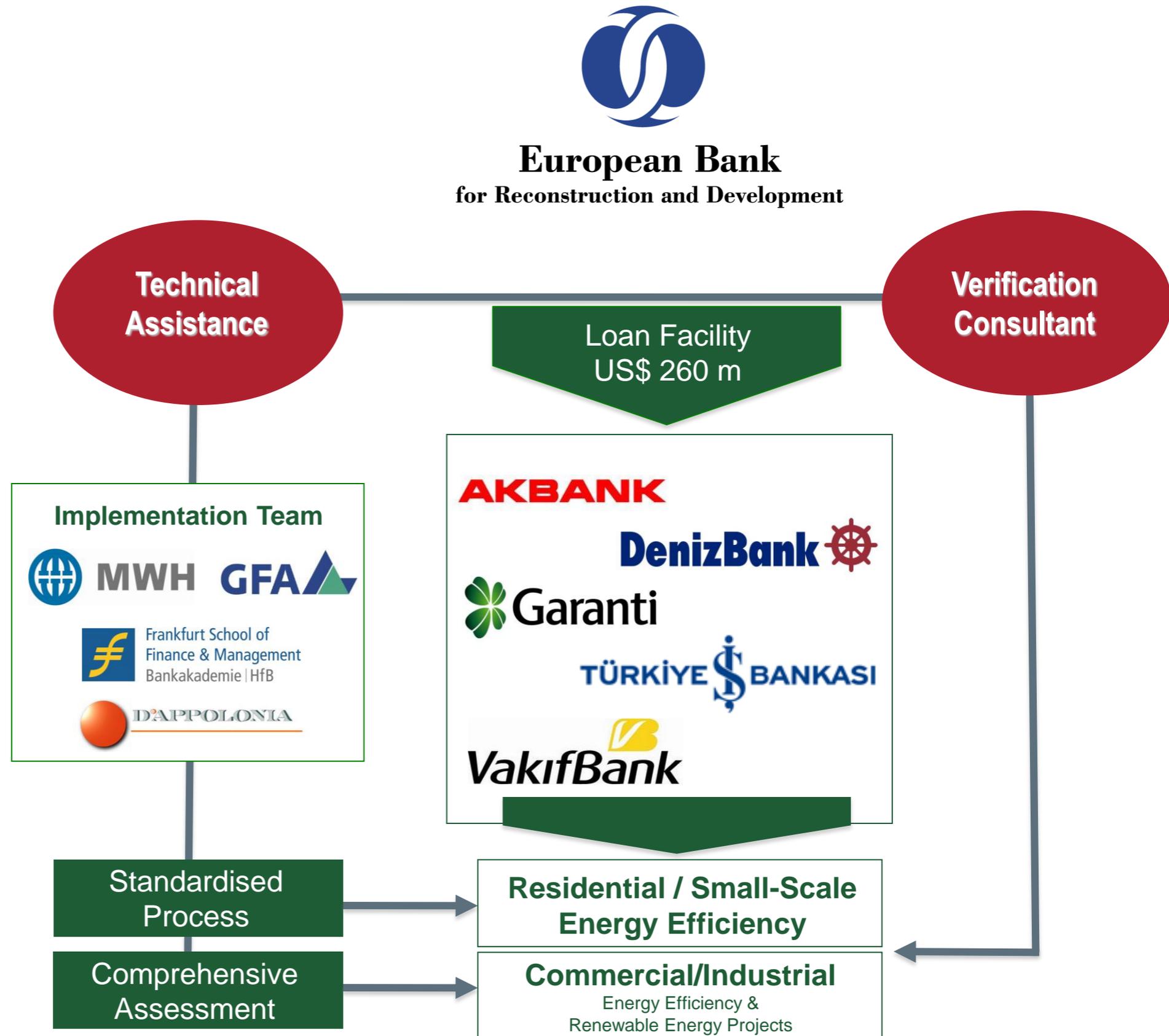
The latest SEFF was launched in Turkey in 2010 with US\$ 260 million

New Countries:  
Poland  
Belarus  
Armenia





# How TURSEFF works



# Credit Categories & Criteria

- ▶ **Credit Categories**
  - ▶ Large Scale: up to US\$ 5 million
  - ▶ Supplier: up to US\$ 1 million
  - ▶ Small scale: up to US\$ 300,000
  
- ▶ **Criteria**
  - ▶ SME criteria
    - ▶ <250 employees, <EUR 50 million turnover
  - ▶ Technical:
    - ▶ Renewable Energy: > 2.1 kWh/US\$ 1 invested
    - ▶ Energy Efficiency: >20% Energy Saving
  - ▶ Financial
    - ▶ IRR >10%

# Real Companies — Real Benefits



- ▶ Cattle Farm secures energy supply with biogas plant
  - ▶ US\$ 2 million investment
  - ▶ Over 3 million kWh electricity and 3.7 million kWh heat produced per year
  - ▶ Waste utilization
  - ▶ Annual savings: US\$ 620,000
  - ▶ Payback 3.3 years



# Real Companies — Real Benefits



- ▶ With US\$ 16,000 investment in burner controls and gas valve block
- ▶ Reduced natural gas consumption by 25,613 M3/year
- ▶ US\$ 12,500 SAVED – EACH YEAR
- ▶ Payback period – 15 months
- ▶ IRR – 81%

# Real Companies — Real Benefits



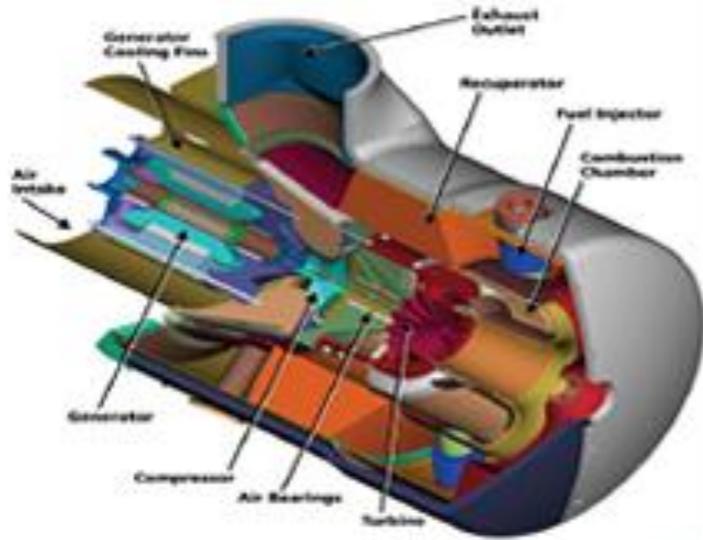
- ▶ Hotel Complex
  - ▶ US\$ 0.6 million investment
  - ▶ 1 Wind turbine
  - ▶ 628 MWh electricity produced per year, mainly own consumption
  - ▶ 388 tCO<sub>2</sub> reduction
  - ▶ Payback 6.9 years



# Real Companies — Real Benefits

Shopping Mall / İstanbul

- ▶ With US\$ 3,653,000 investment in micro turbine combined heat and power generation plant
- ▶ 2,000 kWh turbine power generation
- ▶ 1,894 kWh cooling and 2,614 kWh heating
- ▶ US\$ 1,092,000 SAVED – EACH YEAR
- ▶ Payback period – 4.6 years
- ▶ IRR – 30%





# Real Companies — Real Benefits



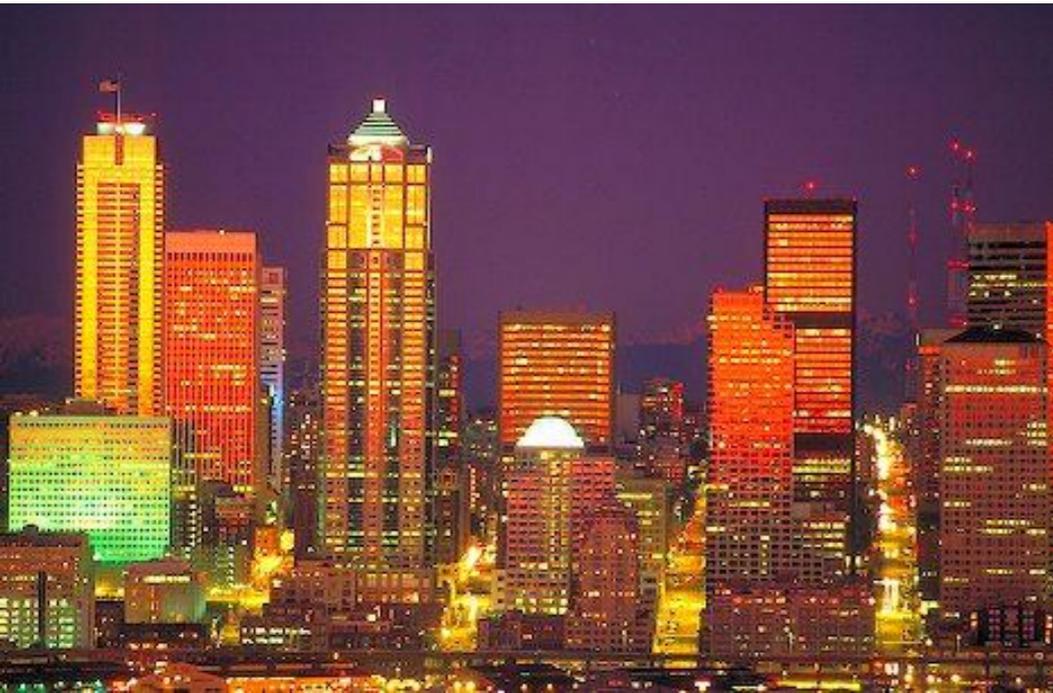
- ▶ A US\$ 1.4 million investment in biomass boilers “spices up” savings
- ▶ Savings – US\$ 0.6 million per year
- ▶ Payback – 2.8 Years



# Real Companies — Real Benefits



- ▶ Company invests US\$ 2 million in landfill biogas project
- ▶ Annual energy production 9.4 GWh
- ▶ US\$ 1.3 million revenue / year
- ▶ Payback period < 2 years



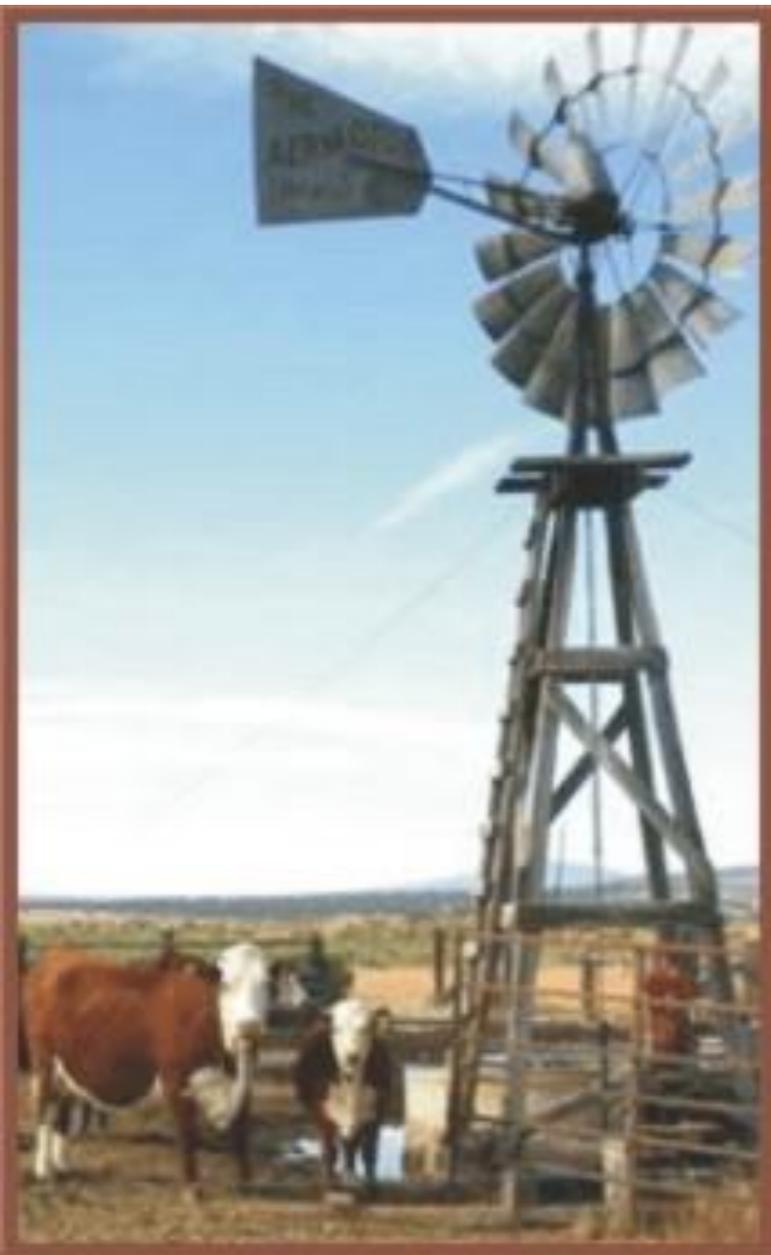
# Real Companies — Real Benefits

## Small Hydropower Plant



- ▶ Financed US\$ 4.1 million
  - ▶ State of the art plant
  - ▶ 3.46kWh per each US\$1 invested
  - ▶ Payback period – 10 years

# Real Companies — Real Benefits



- ▶ Small Dairy Farm
  - ▶ US\$ 100,000 investment
  - ▶ 1 Wind turbine of 65 kW
  - ▶ 160 MWh electricity produced per year, for own consumption
  - ▶ 98 tCO<sub>2</sub> reduction
  - ▶ Payback 6.5 years



**Thank You!**