Renewables: The True Costs

Renewable Power Generation Costs in 2014

Michael Taylor
Renewables cost analysis at IRENA

Fills an important gap in knowledge

World-class database of costs

Cutting edge analysis, not just data

More products and analysis coming

Costing Alliance deepens engagement
The relentless improvement in competitiveness continues

Renewables competing head-to-head with fossil fuels

Integrating variable renewables doesn’t change the conclusions

Future cost reductions will be more challenging, policy driven
Renewables competitiveness continues to improve
Competing head-to-head with fossil fuels

2014 USD/kWh

Fossil fuel power cost range

Biomass | Geothermal | Hydro | Solar photovoltaic | CSP | Wind offshore | Wind onshore

- Africa
- Asia
- Eurasia
- Europe
- North America
- Oceania
- Central America and the Caribbean
- Middle East
- South America
High levels of variable renewables are competitive.
Cost reduction drivers are changing

Low equipment costs change the dynamics

Balance of project costs, O&M, financing will grow in importance

In some cases more challenging to unlock

But cost differentials are large and the policy levers exist
“I’d put my money on the sun and solar energy. What a source of power! I hope we don’t have to wait until oil and coal run out before we tackle that.”

Thomas Edison, 1931

RENEWABLES ARE COMPETITIVE

INTERNATIONAL RENEWABLE ENERGY AGENCY

THE FUTURE IS HERE TODAY

www.irena.org/costs