

Enrich
life
through
Power

Electricity
Sector in
Sri Lanka

Ceylon Electricity Board

Presentation Outline

OUR PROBLEMS

- Costs of Generation
- Absence of cost-reflective tariff
- Liabilities

OUR ACHIEVEMENTS

THE FUTURE

- Capacity enhancements
- Encouraging Innovation



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Our Achievements

- Improve Supply Quality : Enhanced accessibility
- Improved consumer services
- Reduced system losses
- Installed Generation Capacity
- Improved transmission capability
- Meeting the Demand – Conservation Measures



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Enhanced accessibility...

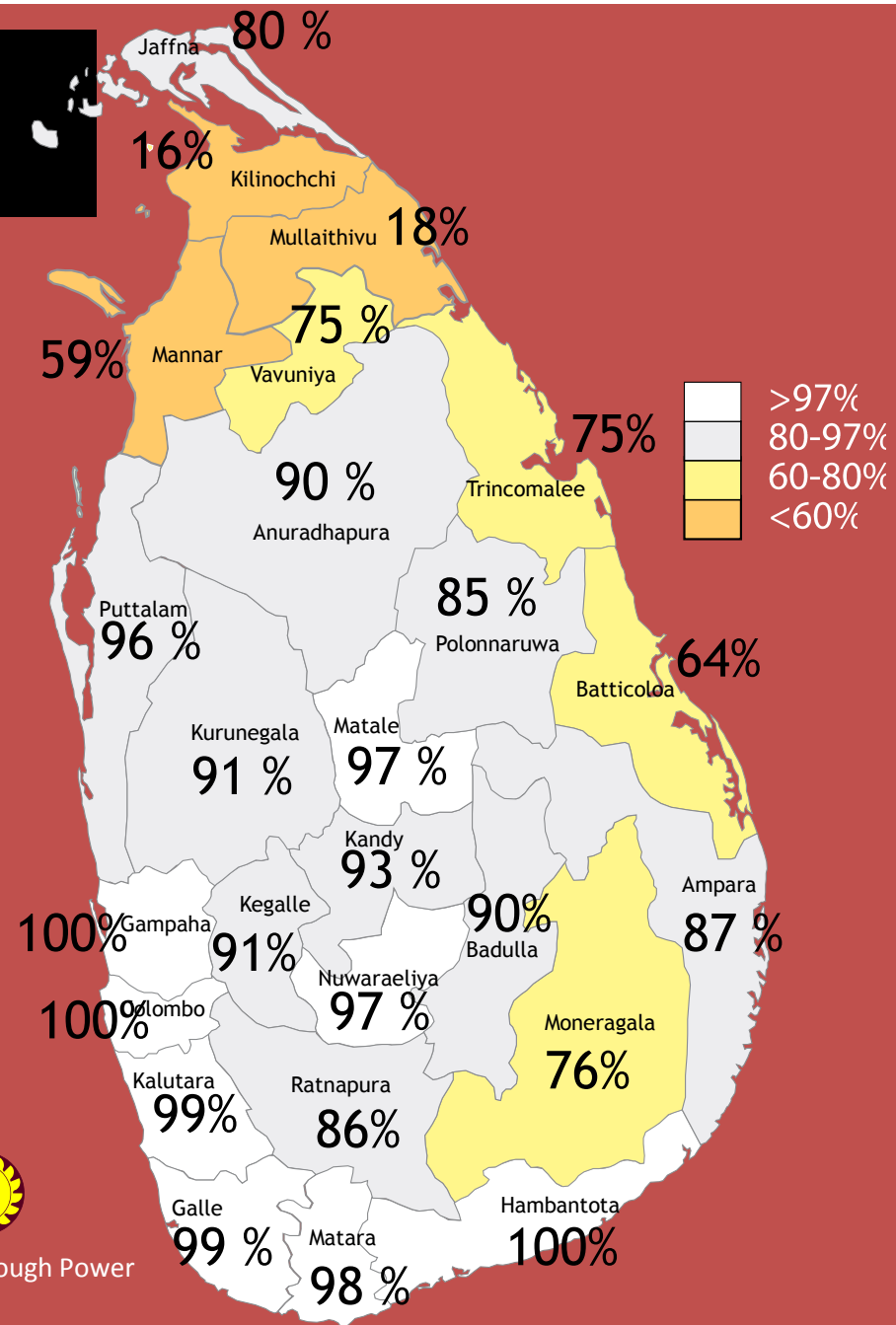
**Electrification Level in
June 2012**

92%

Target :

Electrification by end 2013

100%



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Enhanced Consumer Services...

- Establishment of new eCity consumer service centres
- Enhanced internet-based facilities for consumers for bill payment
- SMS-based facilities for outage notification



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132kV Transmission Lines from Vavuniya to Kilinochchi



Kilinochchi GSS

Vavuniya GSS

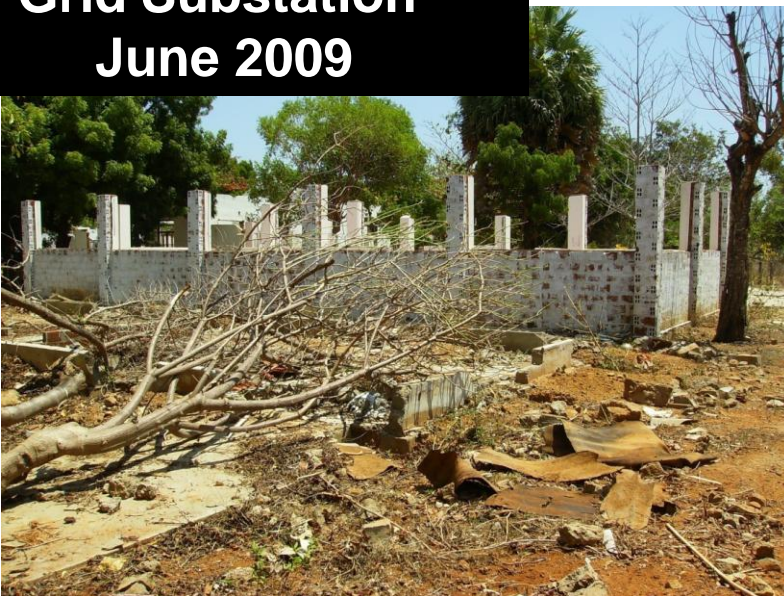
**Interconnection
at 33 kV Level**

Electricity Network expansion in the North





**Kilinochchi
Grid Substation
June 2009**



Electricity Network expansion in the North



**Kilinochchi
Grid Substation
September 2012**



Installed Capacity 2010-2012

Puttalam Coal Power 300 MW Stage I and Upper Kotmale Hydro 150 MW were added to the network.



**Puttalam Coal
Power 300 MW
Stage I**



**Upper Kotmale
150 MW**



Installed Capacity 2010-2012

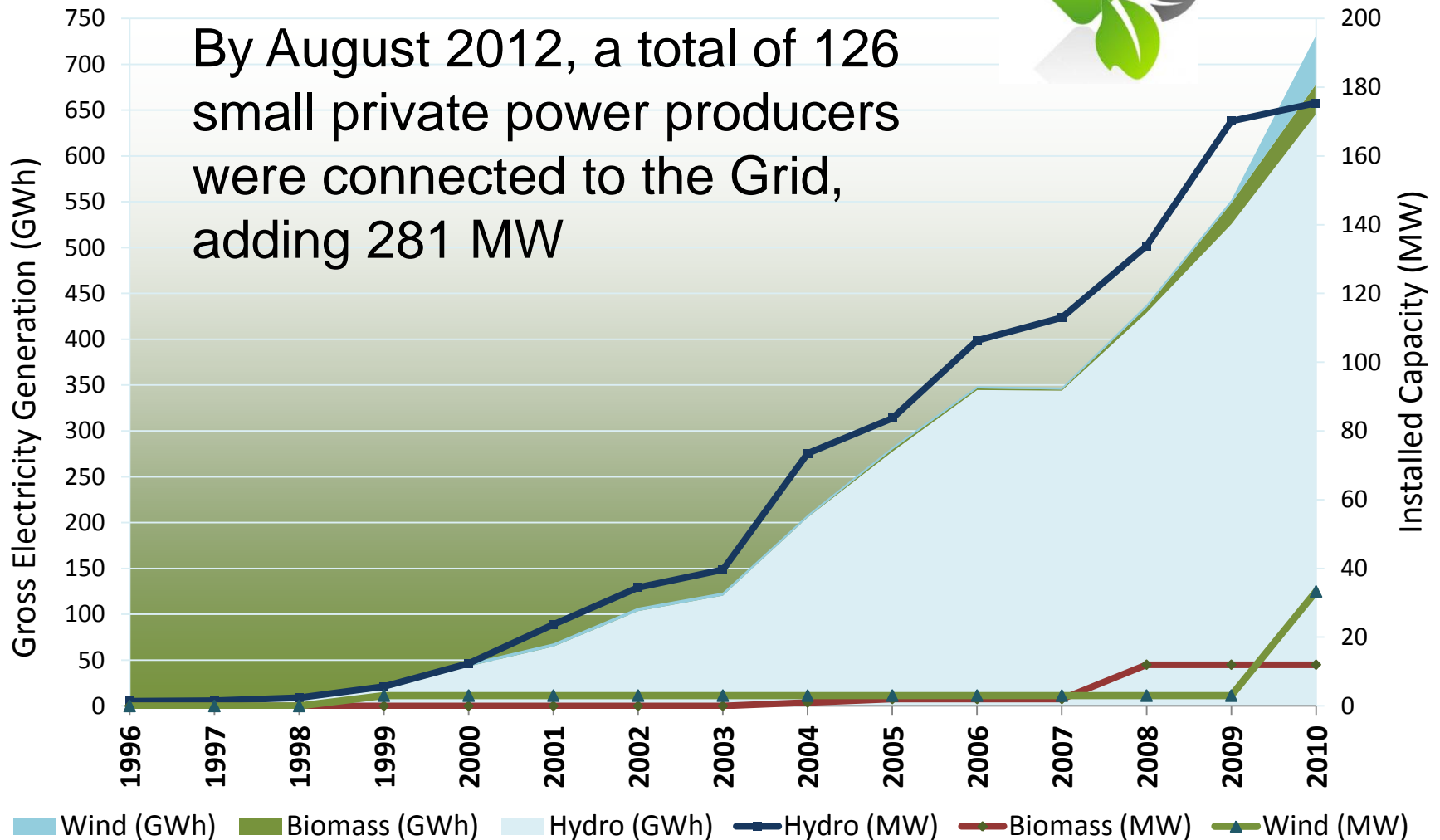


Puttalam Wind Power

Small-scale
Renewables of
32 MW from 7
power plants
were also added
to the network



Non Conventional Renewable Energy

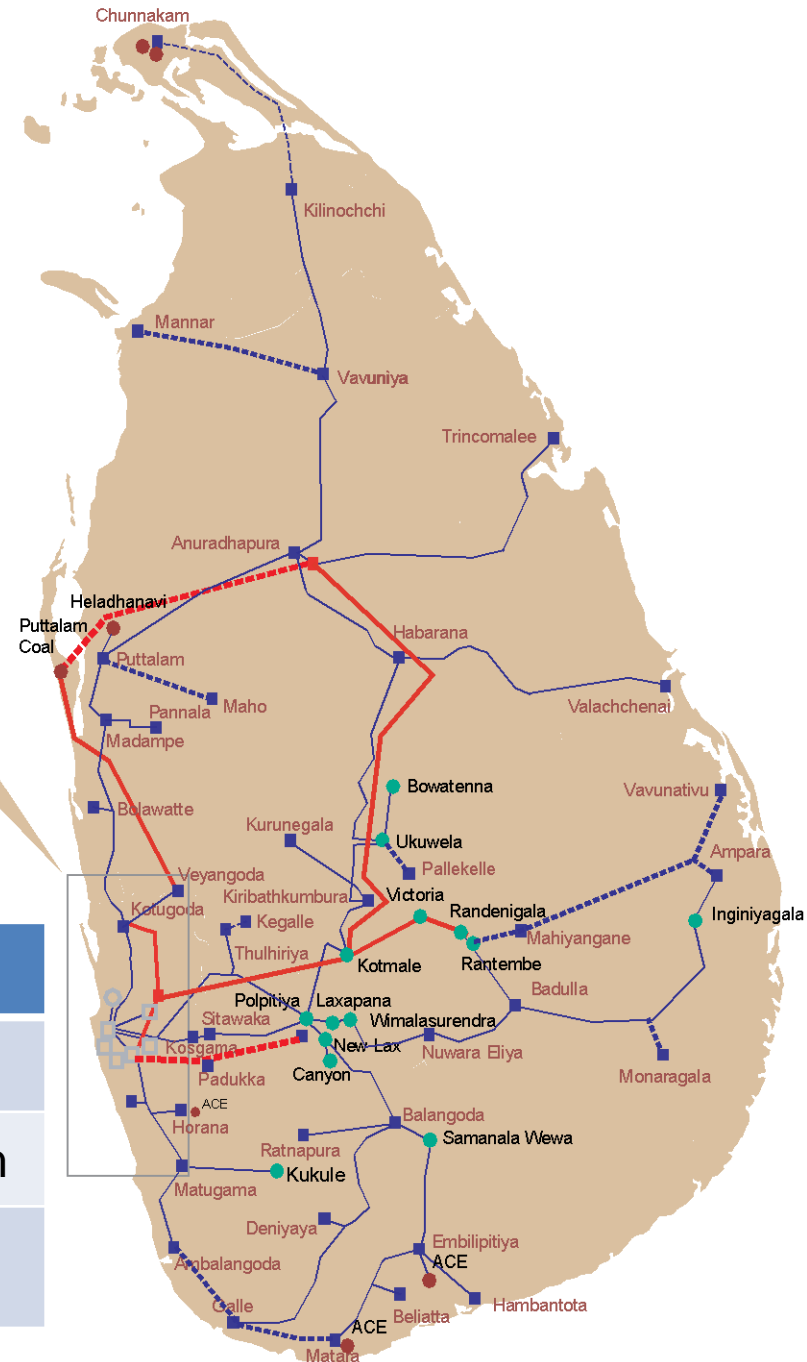
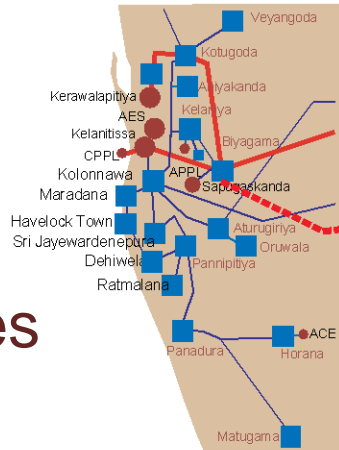


Transmission

CEB Transmission Network 2012

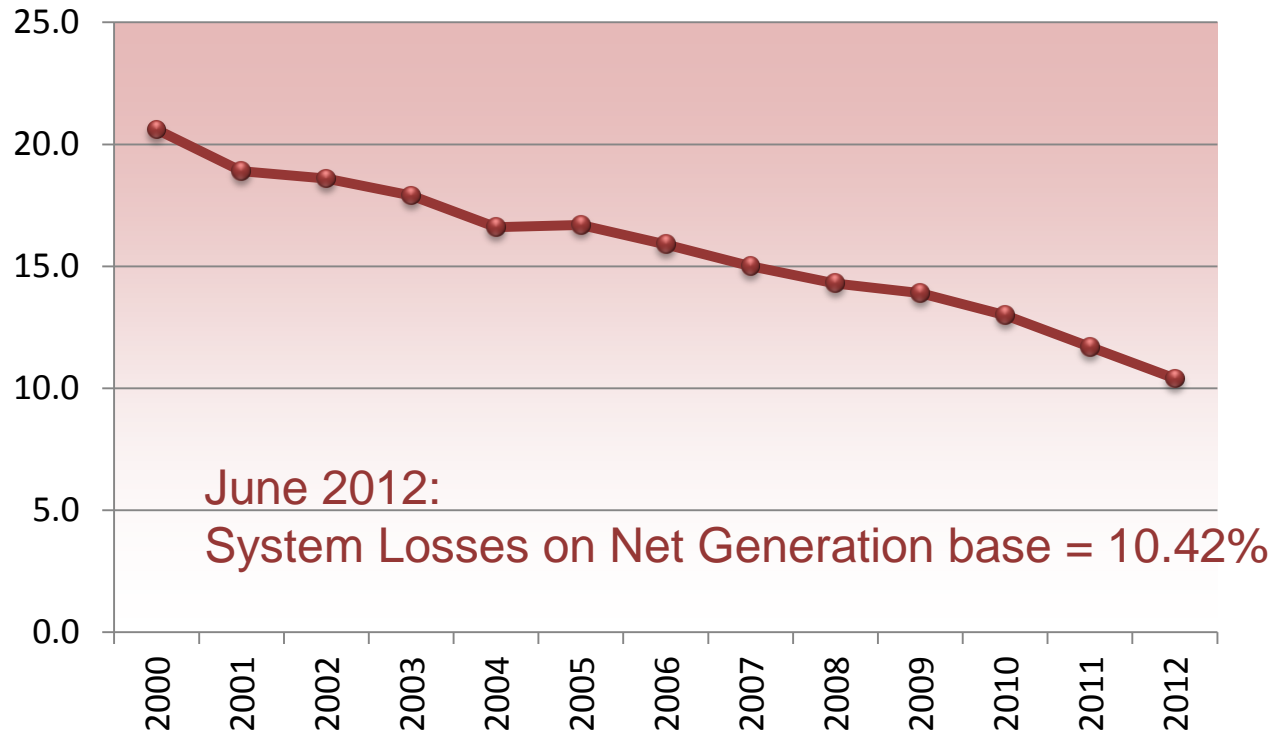
- 220 kV
- - - Under implementation
- - - 132 kV
- ■ 220 kV/ 132 kV Grid Substation
- Hydro Power Plant
- Thermal Power Plant

CEB owns and operates the entire transmission network that operates at 220 kV and 132 kV



	2010	2011	2012
220 kV	483 km	483 km	501 km
132 kV	1,755 km	1,774 km	1,840 km
Grid Substations	55	57	58

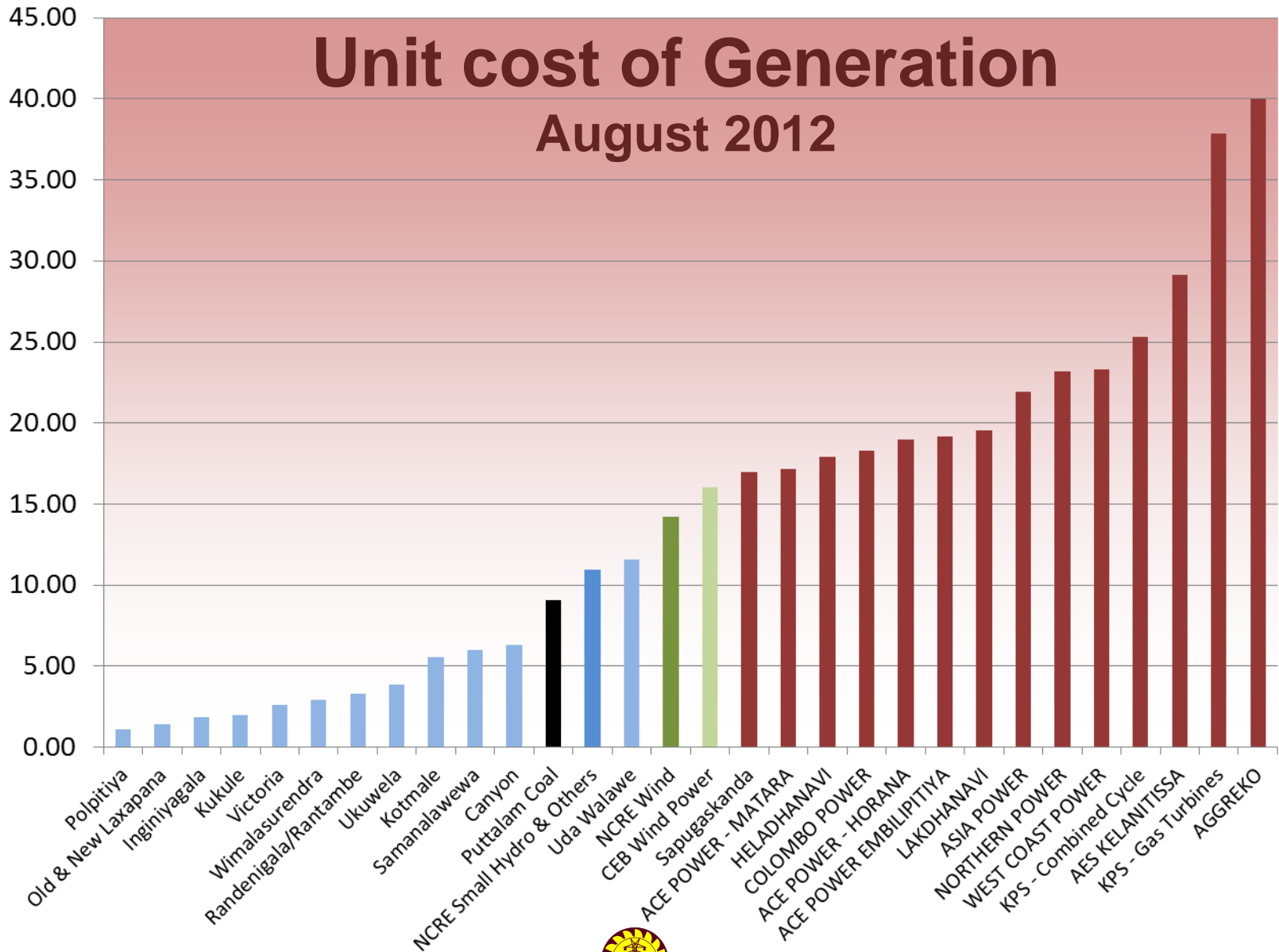
Reducing System Loss



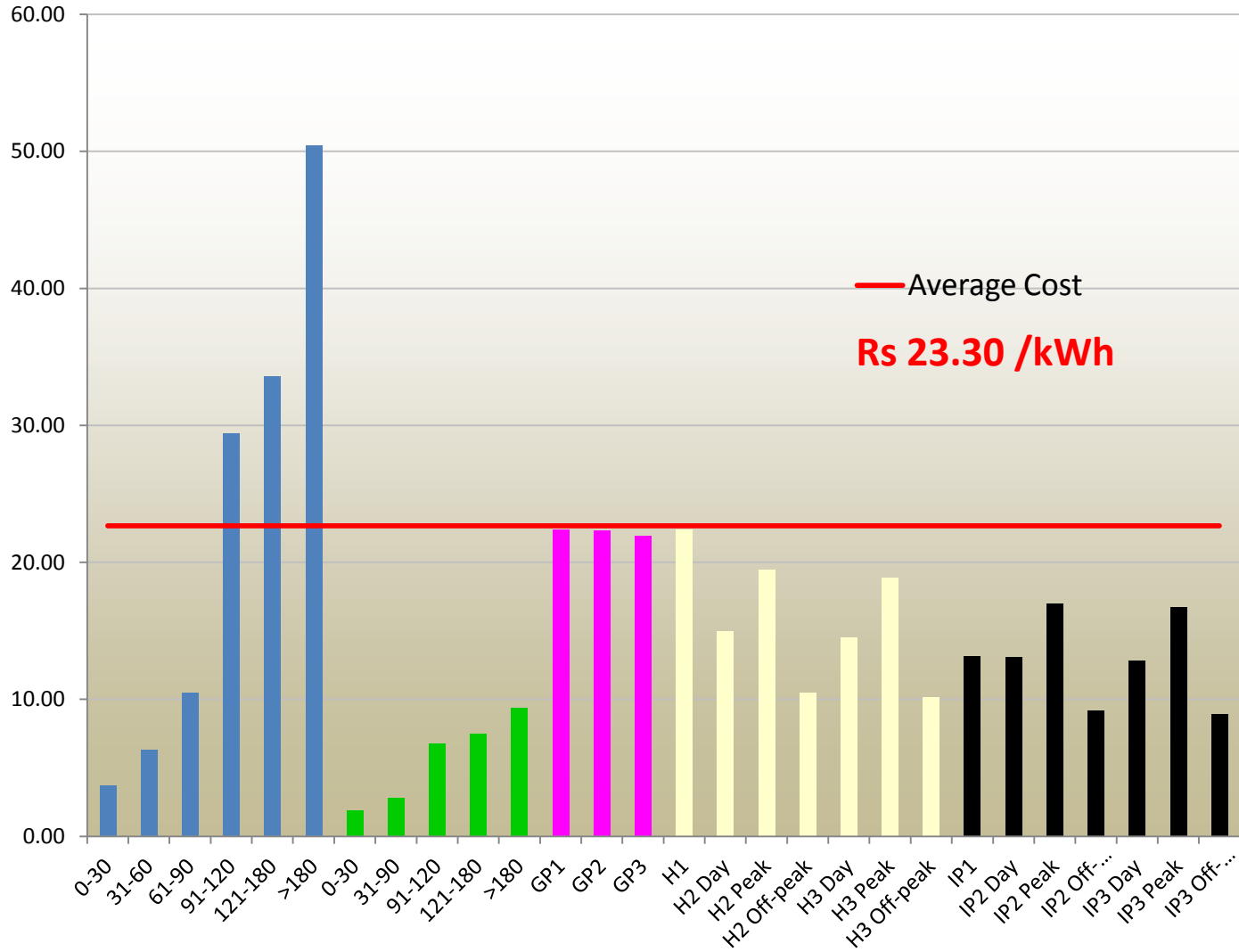
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Unit cost of Generation

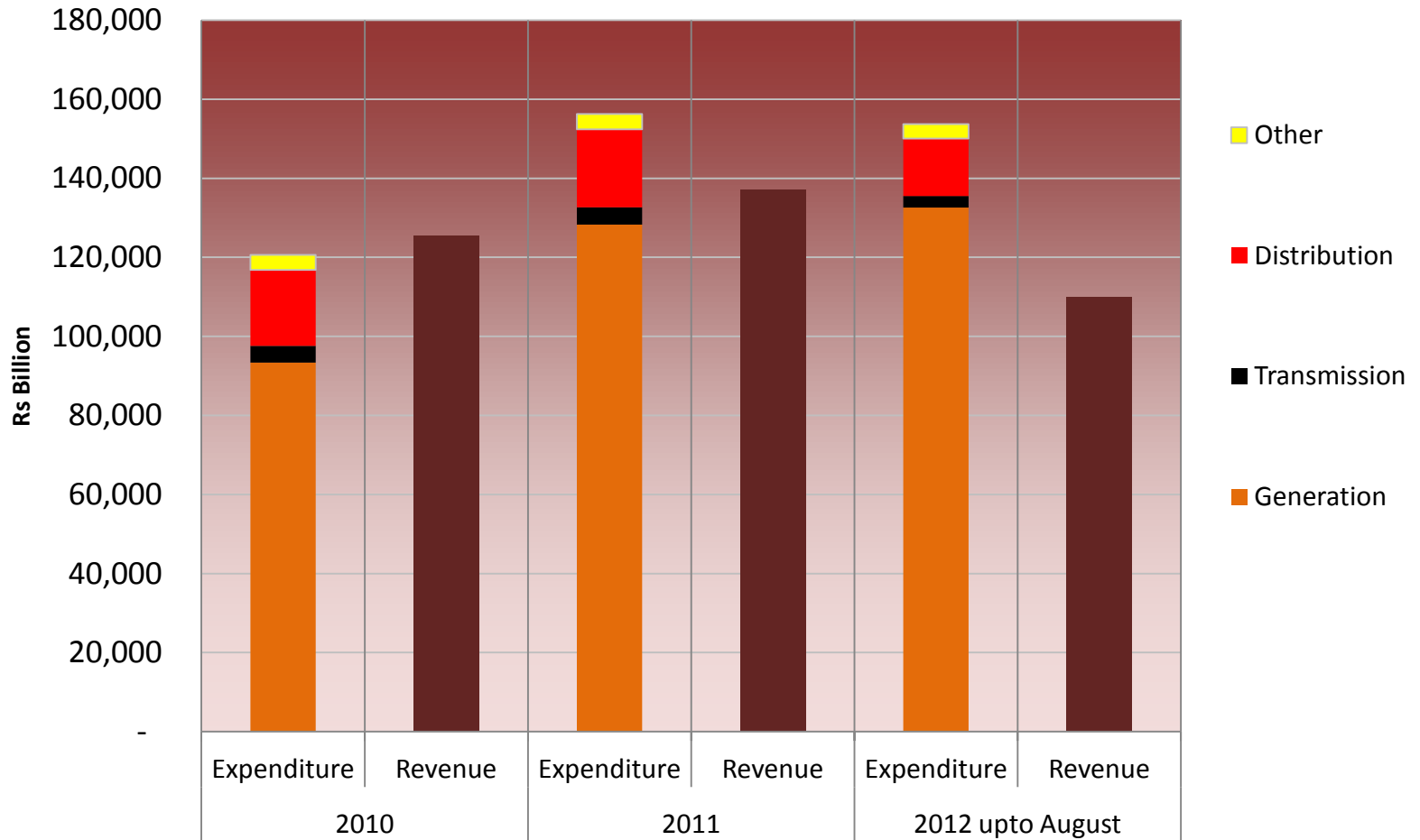
August 2012



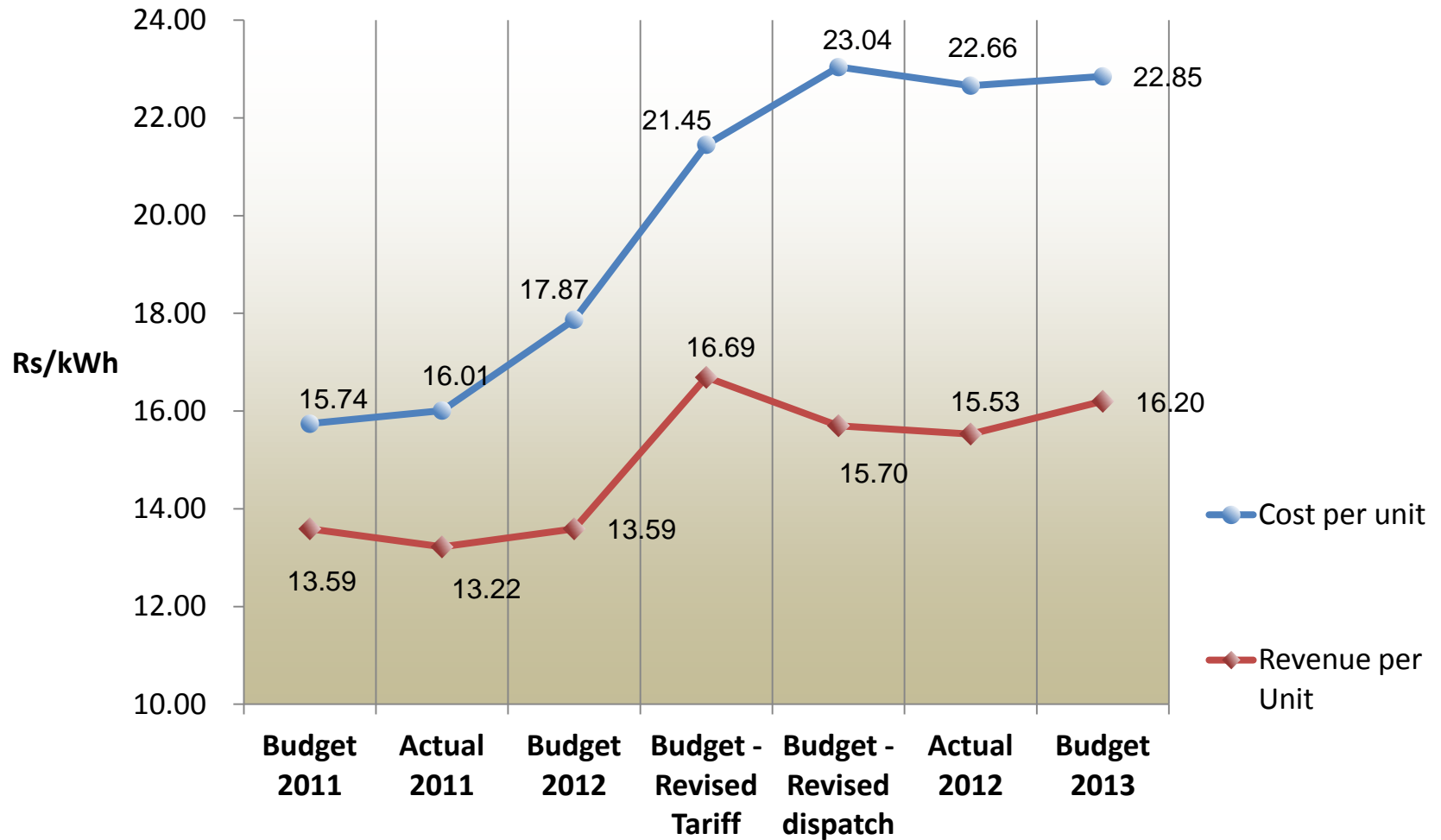
Comparison of Consumer Tariff vs Cost



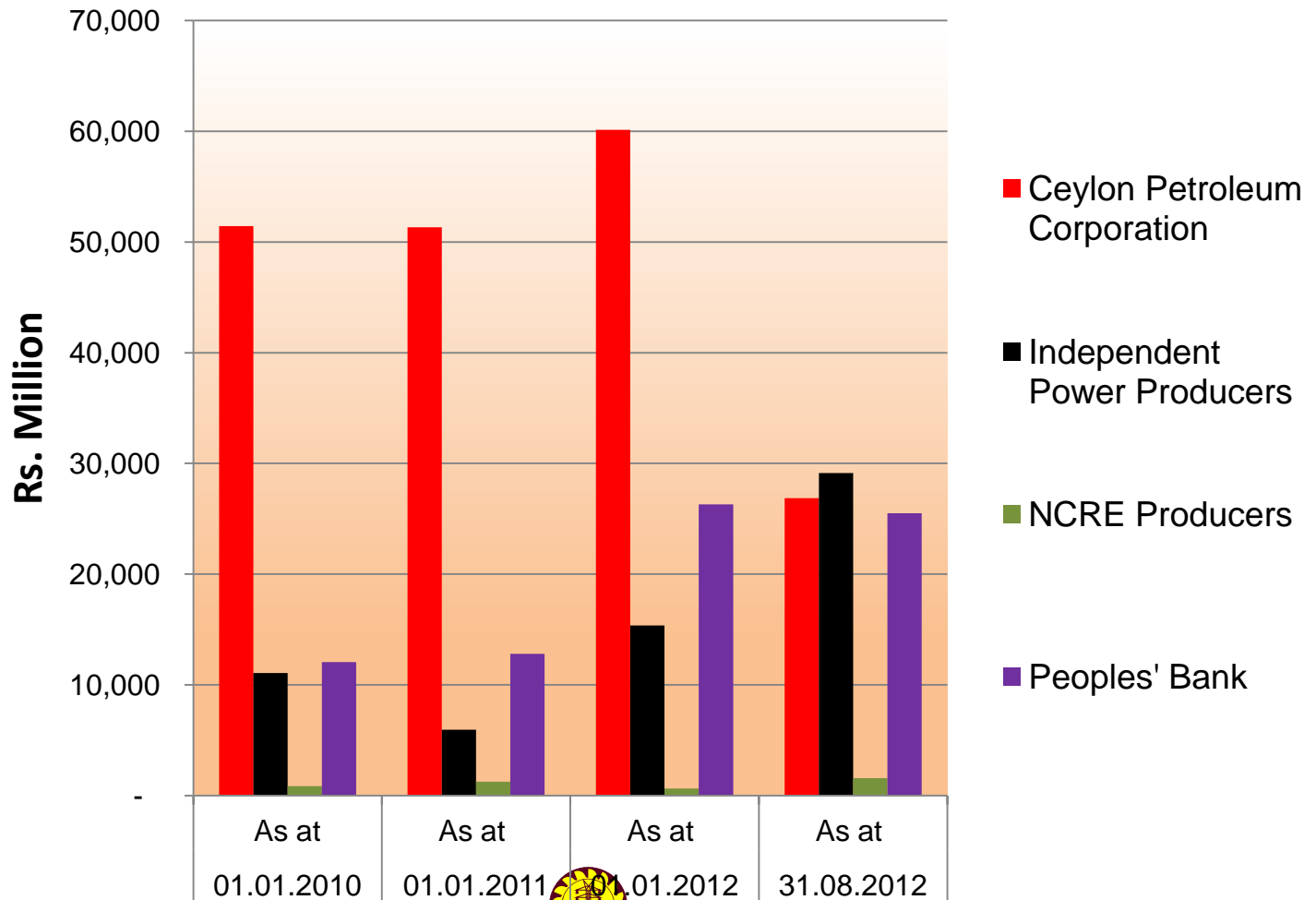
CEB Revenue and Total Expenditure



Comparison of Revenue and Cost



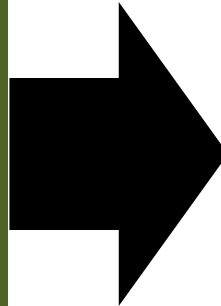
Liabilities



Energy Conservation

CEB conducted a Drive for Energy Conservation throughout 2012. The main features of this were:

- Public education through advertising, promotional walks, hand bills, community leader education etc.
- SMS-based conservation Raffle Draw



**A saving of 83
GWh during
three months**



Major targets for 2013

- **January 2013:**
 - Commissioning of 24 MW Jaffna Power Plant
- **October 2013**
 - Commissioning of Second Stage 300 MW of Lakvijaya Power Plant at Puttalam
- **2013**
 - 100% Electrification of Sri Lanka
- **2013**
 - System Loss to reach below 10% of Net Generation



Beyond 2013...

Capacity additions

Year		Capacity
2014	Puttalam Stage 3	300 MW
2015		
2016	Trincomalee Stage 1	500 MW
2017	Trincomalee Stage 2	250 MW
2018	Trincomalee Stage 2	250 MW



Beyond 2013...

Projected Loss

Year	Loss Rs Billion
2012	70,946
2013	45,862
2014	(29,459)

Main Assumptions

- Annual Tariff increase = 10%
- Price escalation of Oil = 5%
- Price escalation for coal = 5%
- No price escalation for NCRE
- Puttalam Coal Phase 2 available by October 2013
- Puttalam Coal Phase 3 available by April 2014
- Hydro inflow 2013 = 80% dry
- Hydro inflow 2014 = 63% dry



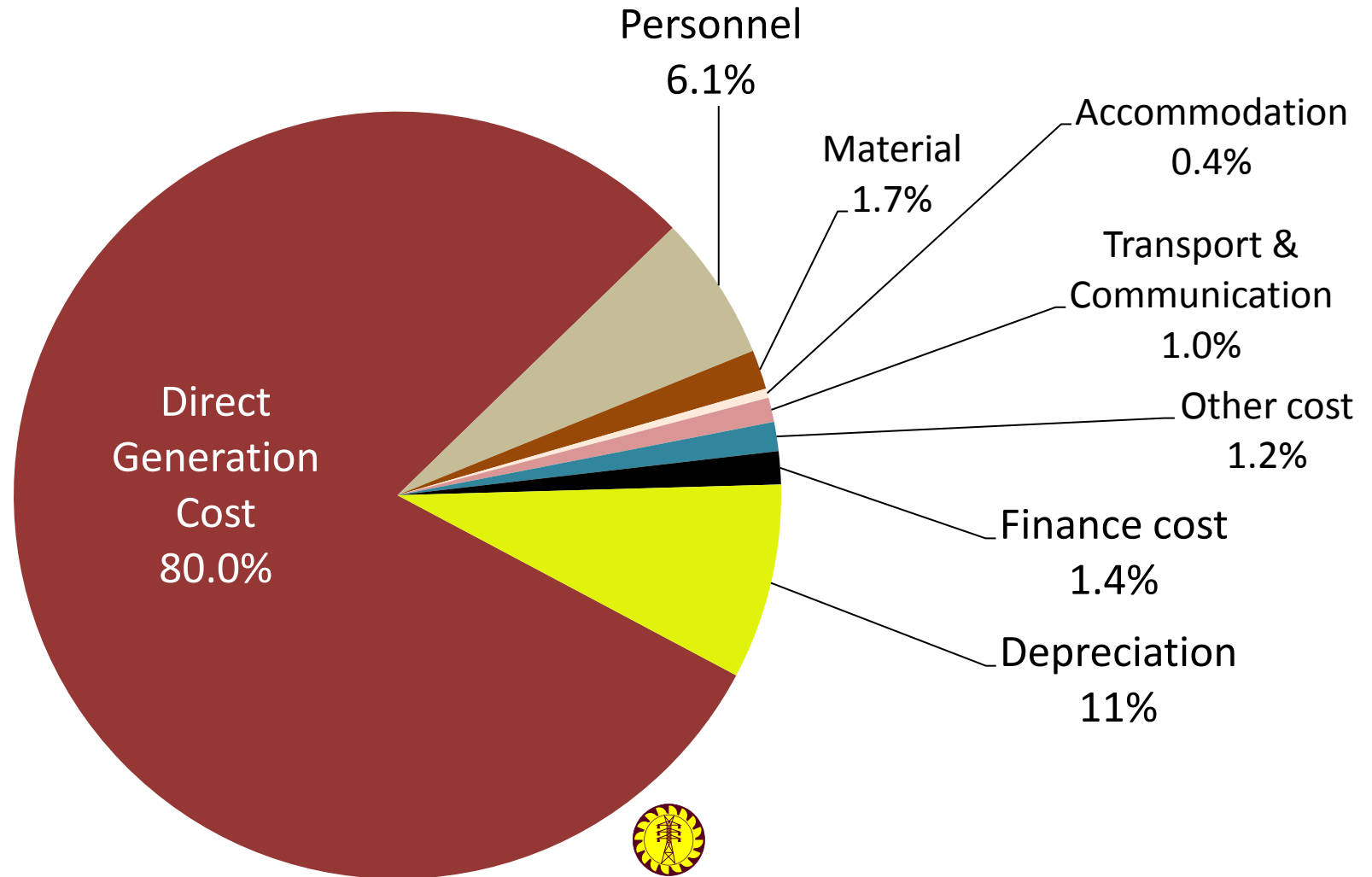


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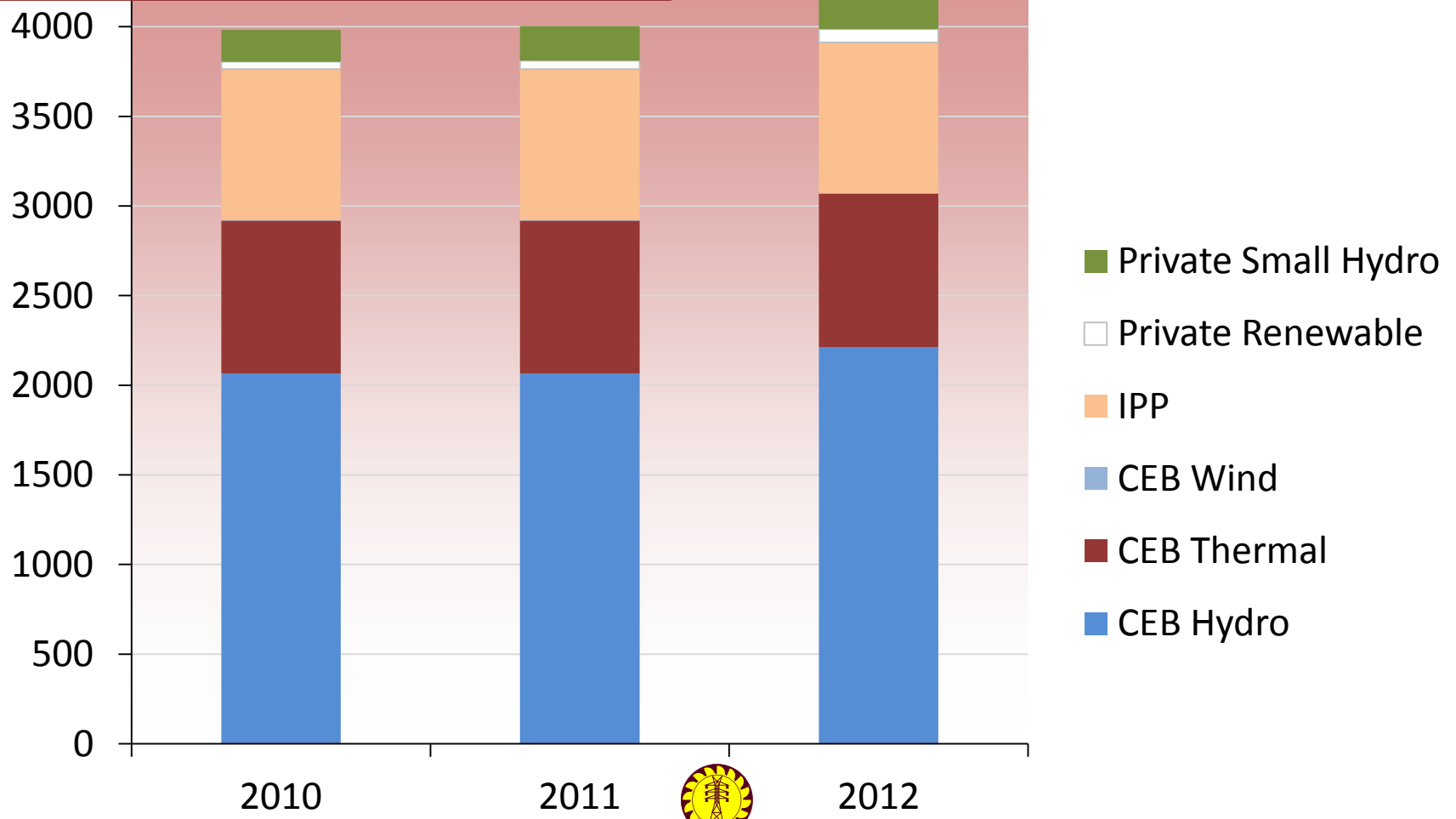


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CEB cost structure



Installed Capacity 2010-2012



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