

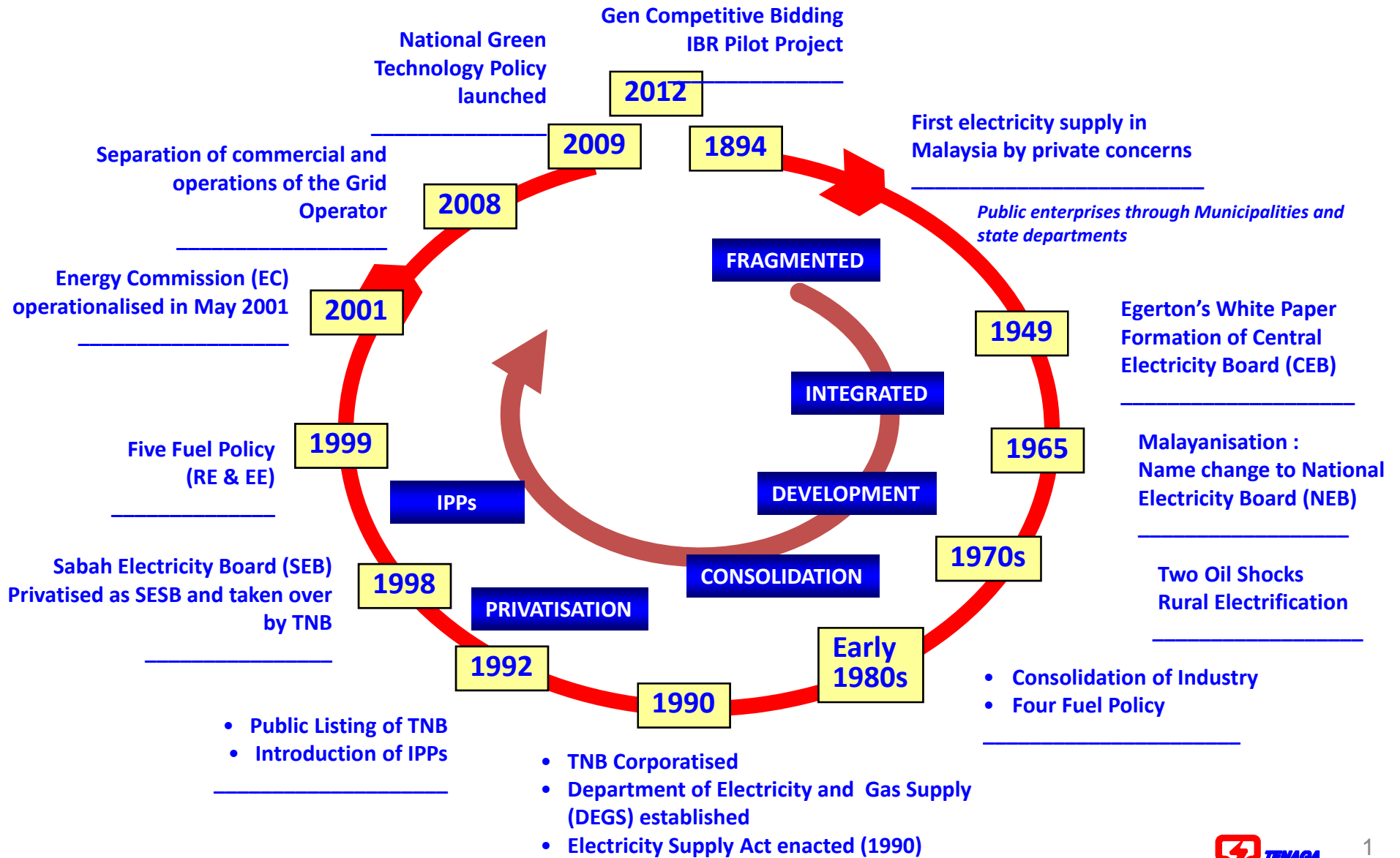
# ENERGY SECTOR, REGULATORY & POLICY: ARE WE READY?

TENAGA NASIONAL BERHAD, MALAYSIA

4<sup>th</sup> National Energy Forum  
Sheraton Imperial Hotel, Kuala Lumpur

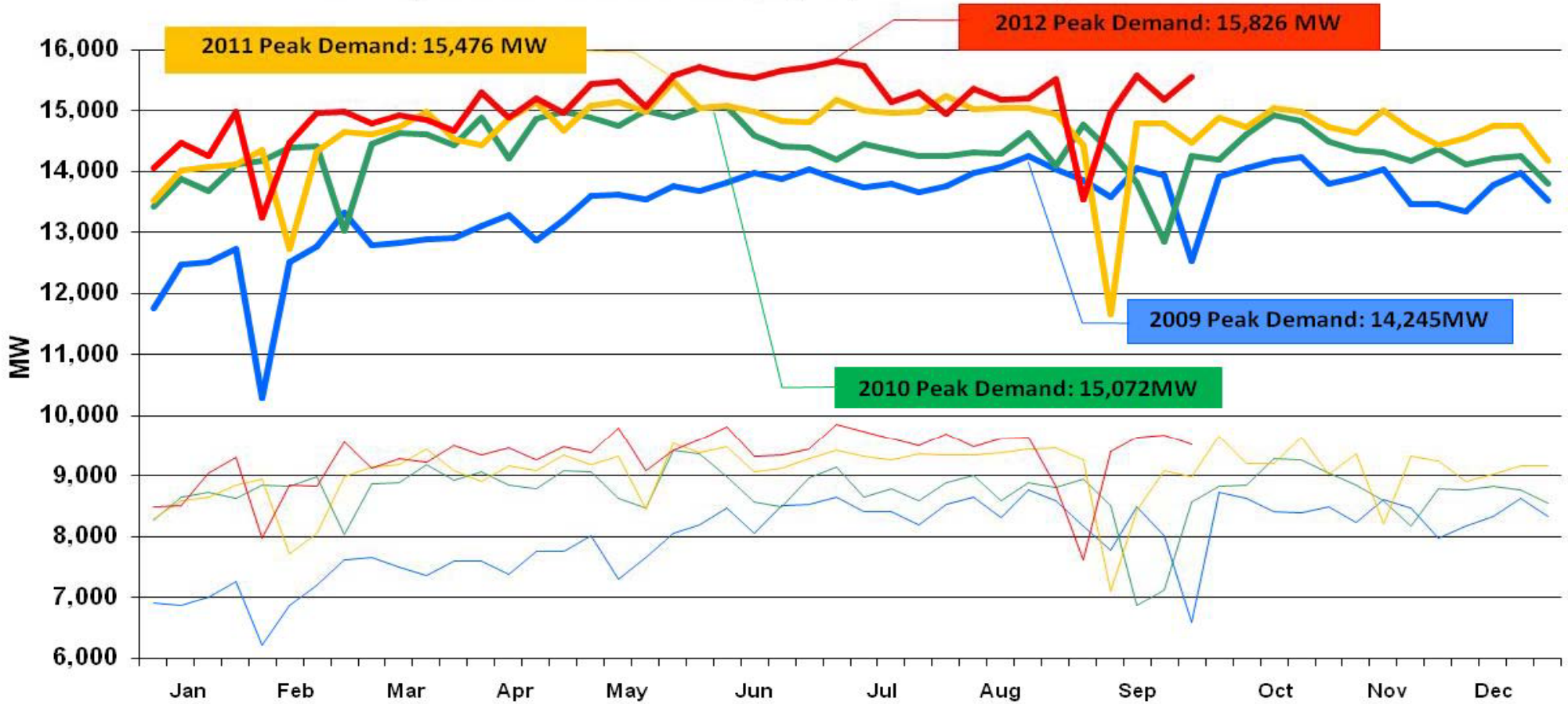
27<sup>th</sup> September 2012

# Evolution of Malaysian Electricity Supply Industry (MESI)



# Weekly Peak Demand and Trough

Weekly Peak Demand & Trough (MW) - Week Ending 23/09/2012



**ENERGY DEMAND CONTINUES TO GROW**

# FINDING AN OPTIMAL BALANCE

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## ENERGY SECURITY

Demand growth, depleting energy resource and fuel security issues

## COST COMPETITIVE

Cost-efficiency of generation choices vis-à-vis energy reliability

## GREEN ENERGY

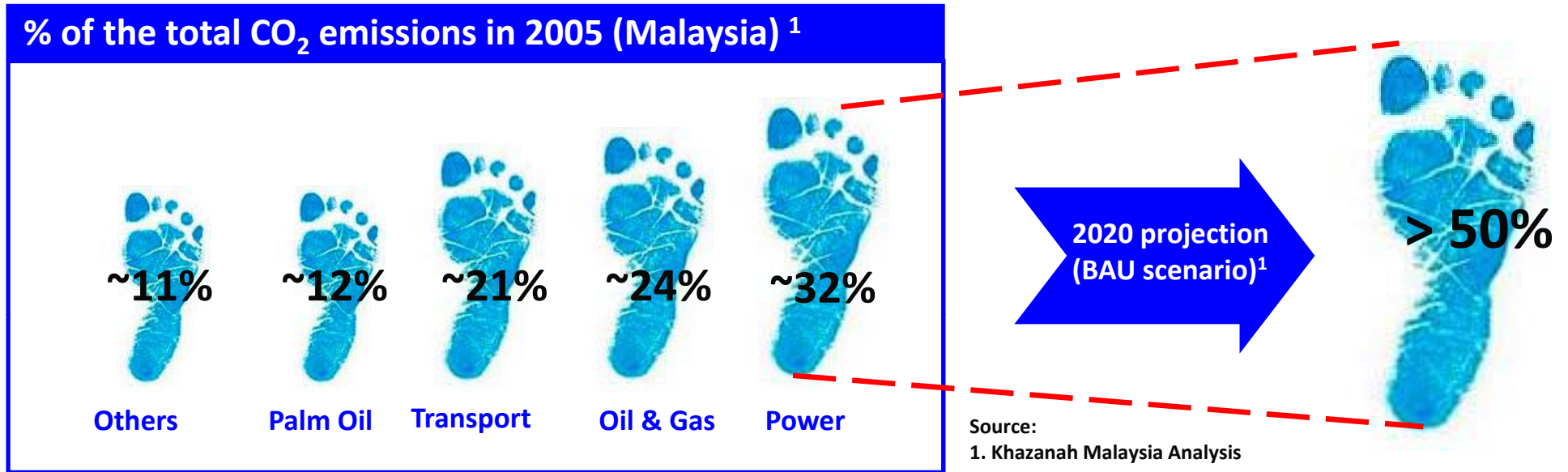
Climate change & sustainability drive, often conflicting with cost-competitiveness & energy security

## SAFETY ASPECT

Safety & regulatory aspects of fuel of choice e.g. coal with emissions & nuclear with radiation risks

Four differing elements creating a labyrinth of complexity, requiring a delicate balance to adequately achieve a state of optimal equilibrium for sustainability, security and stability

# POWER SECTOR CARRIES THE BURDEN OF EMISSION CONTROL



...because we are highly dependent on fossil fuels for electricity generation

...like it or not, fossil fuels will remain as the dominant sources of energy for decades to come...

# Climate Change & the Environment





# The Case For Energy Efficiency

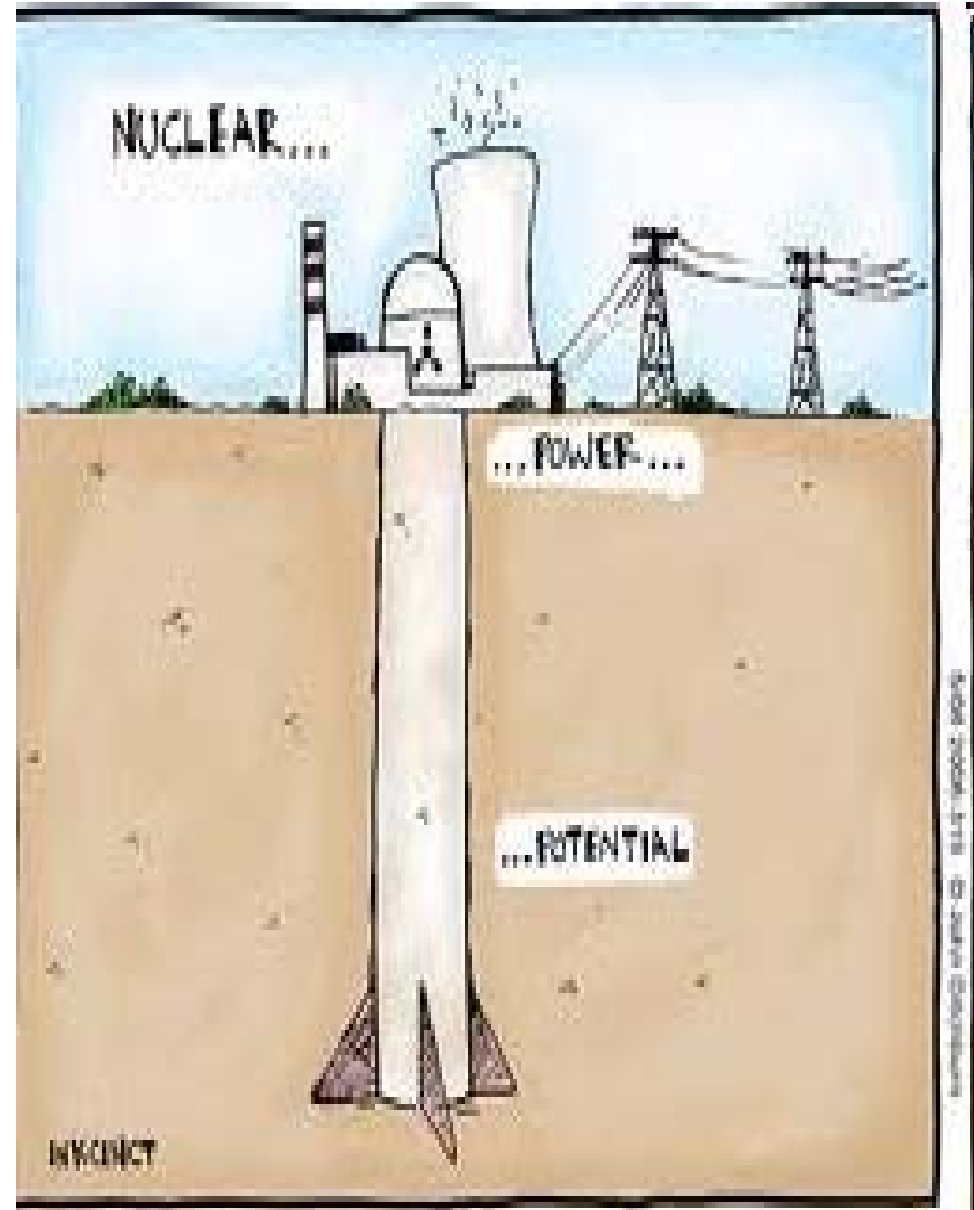




# CROSS BORDER POTENTIAL - ASEAN POWER GRID



# WHAT ABOUT NUCLEAR POWER ?



# N.I.M.B.Y B.A.N.A.N.A



Villagers protesting the 275kV Bkt Tarek – Chubadak which passes through Kg Sg Terentang, Rawang

# IBR Is A Form Of Economic Regulation



## What is Economic Regulation/IBR ?

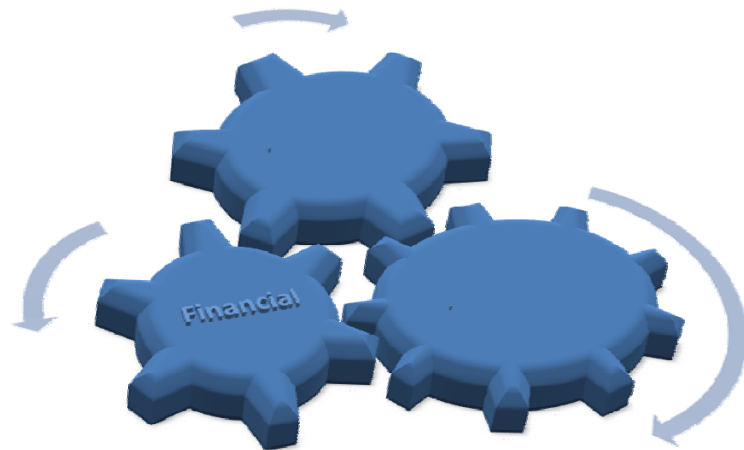
- Form of government intervention to address inefficiencies arising from monopolistic markets e.g. natural monopoly sectors of electricity transmission and distribution
- A substitute for competition where competition is not possible



## Aims to Ensure That:

- Customers of monopoly are protected
- Prices TNB charges will be based on efficient costs
- Quality of service and performance of the companies assets are maintained
- TNB gets the right incentives to improve their performance and increase investments on an on-going basis

## Broadly three kinds of incentives



### OPERATIONAL EFFICIENCIES

- Rewarded for seeking efficiencies in operational and capital expenditure

### FINANCIAL EFFICIENCIES

- Rewarded for maintaining an efficient capital structure

### PERFORMANCE EFFICIENCIES

- Rewarded for delivering improvements in network performance

\*\*These efficiency gains achieved are then shared with the customer