The Great Electricity Con

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Traditional Electricity Supply

- Government enterprise
  - Private sector unwilling
  - Natural monopoly
  - Essential service
  - Need for planning, coordination
  - Need for equity
- Goal - affordable, accessible, reliable
- Largely successful

Private vs Public in the US

- Private, municipal, industry
- Holding companies
- Propaganda campaign
- Political maneuvers
- Federal intervention

Ownership	Rates c/kWh
Private	2.51
Public	1.57
Rural Cooperative	2.33

California 2000

	PG&E	Palo Alto	LA	Sacramento
Customers	4.6 m	27, 638	1.3 m	495,167
Rates	$94	$53	$74	$65
>$250,000	47	0	1	1
Lobbying	$2 m	0	0	$127,000
Parent	$5.1 b	0	0	0
Public	0	$7.3 m	$124 m	0

Drivers for Change: 70s & 80s

- Rising prices
- Oversupply
- Economic rationalism/ neoliberalism
- Business pressures
- Changing technology
- Anti-unionism

Rationale

- Reducing government debt
  - Attracting private capital
- Enabling competition
  - Increasing efficiency
- Reducing role of government
- Reducing power of unions

Why electricity is different

- Supply = demand
- Variable demand
- Inelastic demand, essential service
- Interdependence of network
- Cannot easily be stored
- High infrastructure costs
- Long lead times
- Maintenance requirements

Selling points

- Cheaper electricity rates
- Superior service
- Choice of providers
- Private finance
- Government funds freed up

Consequences

- Job losses
- Wholesale price volatility
- Retail price increases
- Blackouts, undersupply
- Shifting cost burden
- Government bailouts
- Consolidation
- Environmental problems

Job Losses

- In name of efficiency
- Before privatisation
- After privatisation
- Maintenance, service suffers
- No benefits to consumers

Prices

- Markets = volatility
- Price Manipulation
- Retail Risk
- Hedging contracts
- Vertical integration

Blackouts

- Cost cutting
  - Maintenance
  - Equipment
  - Infrastructure
- Lack of investment in generation
  - Scarcity=high prices
  - Low reserves
  - Unwillingness to take risks
  - Requires high prices

Shifting Costs

- Government - Cross subsidies
  - Equity
  - Social objectives
- Private - no social obligations
- Private preference for big consumers
- Higher prices for poorer homes
- Social obligations - tax payers

Government Debt

- Traditional funding mechanism
  - Spread costs over life of infrastructure
  - Low interest
  - Low rate of return
- Stigmatised in 1980s
- World bank/IMF lending
  - IPPs

Independent Power Producers

- Build, own, operate, transfer (BOOT)
- Power Purchase Agreements (PPA)
- Source of funds
  - World bank/IMF money
  - Public money (export credit agencies)
  - Local Money
- Government guarantees
  - Currency
  - Demand
  - Fuel costs
  - Utility default
- High prices

Dabhol Project, Maharashtra

- 1992 agreement with Enron
- $3 billion - $1 b from Enron
- Tariff - $1.3 b/yr for 20 years
- Pay for 90 percent of capacity
- 1999 started operations
- Electricity too expensive
- 2001 payments stopped
- Enron goes bust

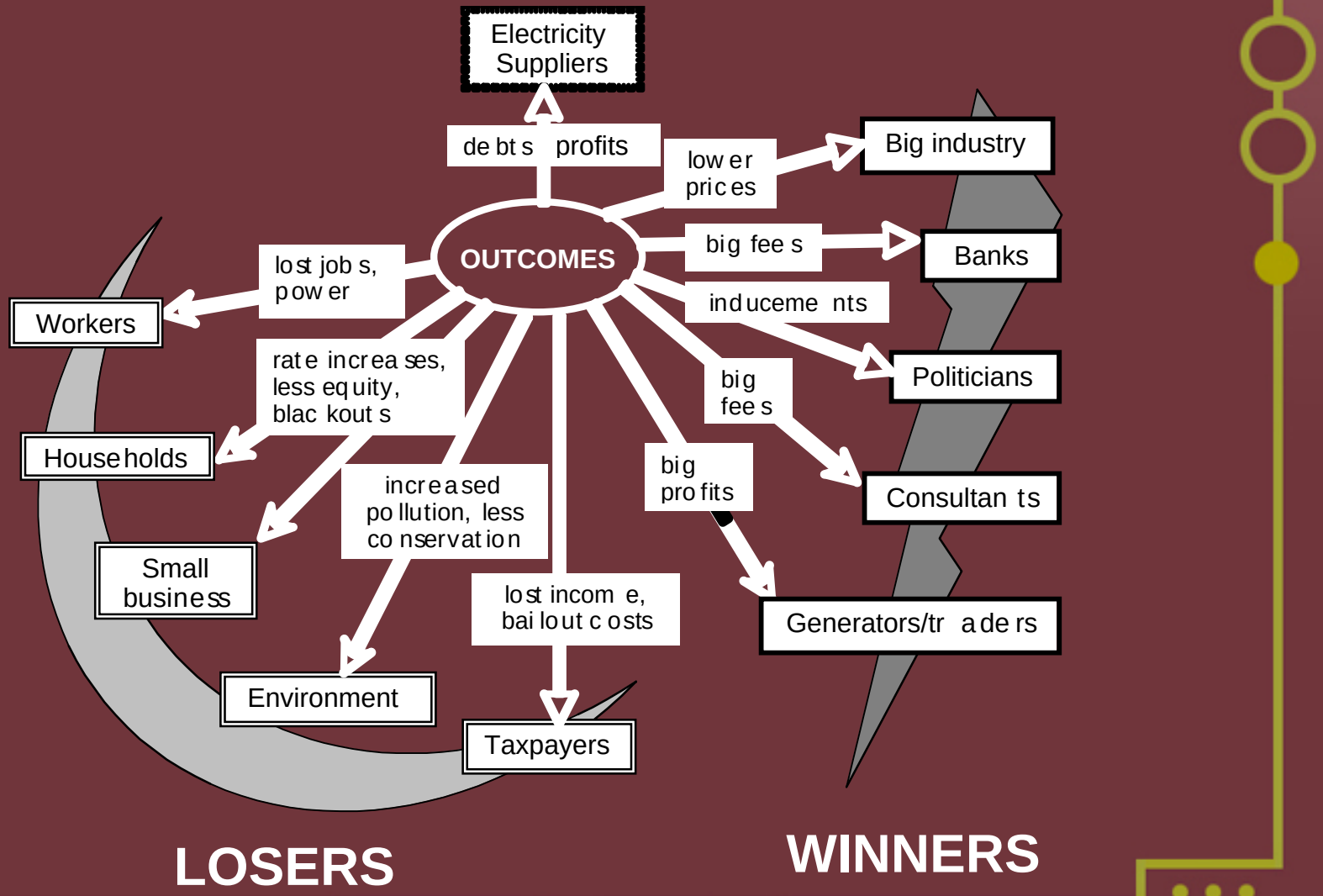
Environment vs Profit

- Choice of energy source
- Maximising demand
- Keeping old polluting plant
- Regulatory mechanisms
  - Mandatory renewable target
  - Emissions trading
  - Carbon tax

Consolidation

- Reducing risk
- Economies of scale
- Reducing competition
- Convergence
- Increasing market power
- Increasing political power
- Growth of transnational conglomerates

Winners and Losers



Objectives

- Accessibility
- Affordability
- Reliability
- Environmentally sound

- Efficiency
- Choice
- Small government