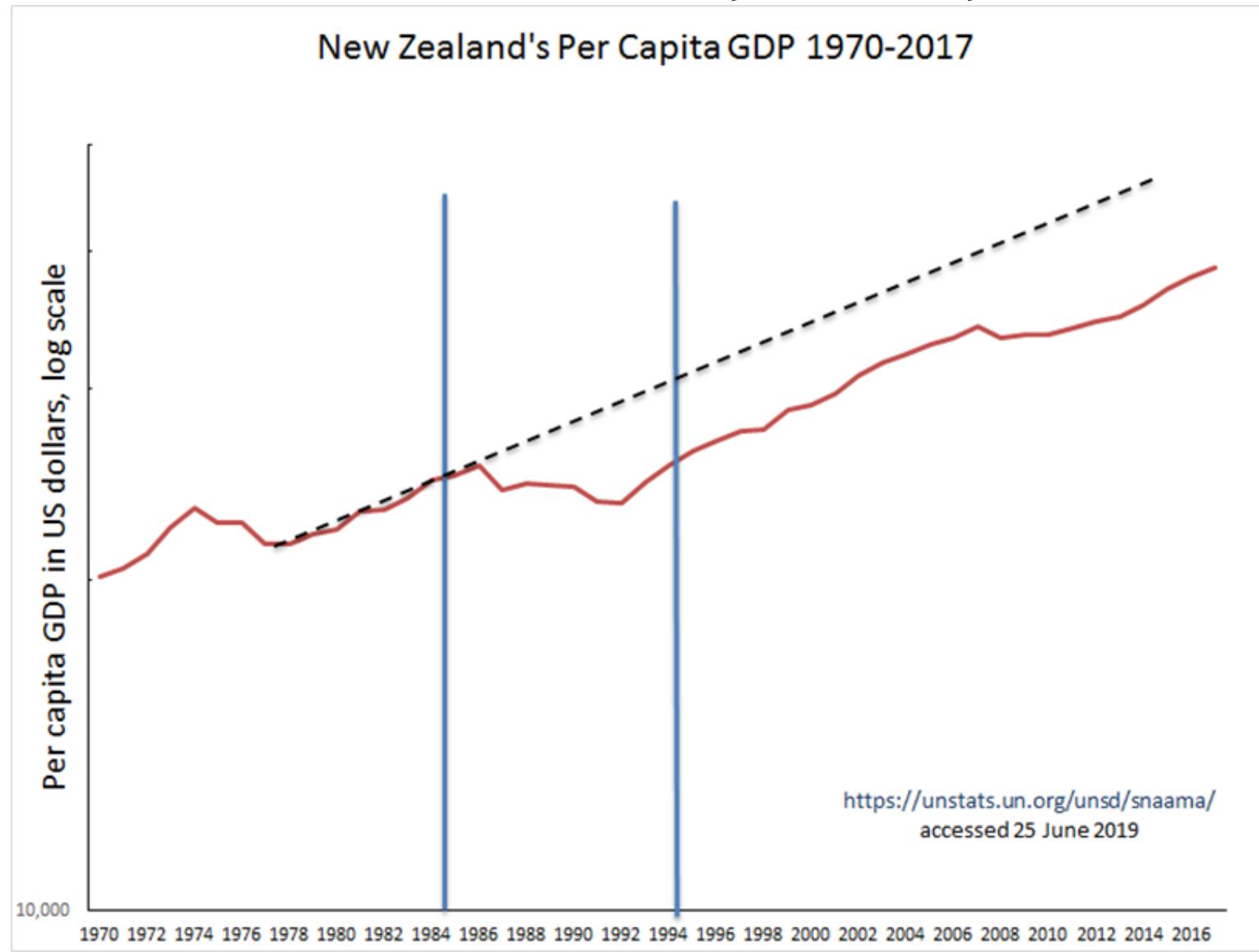


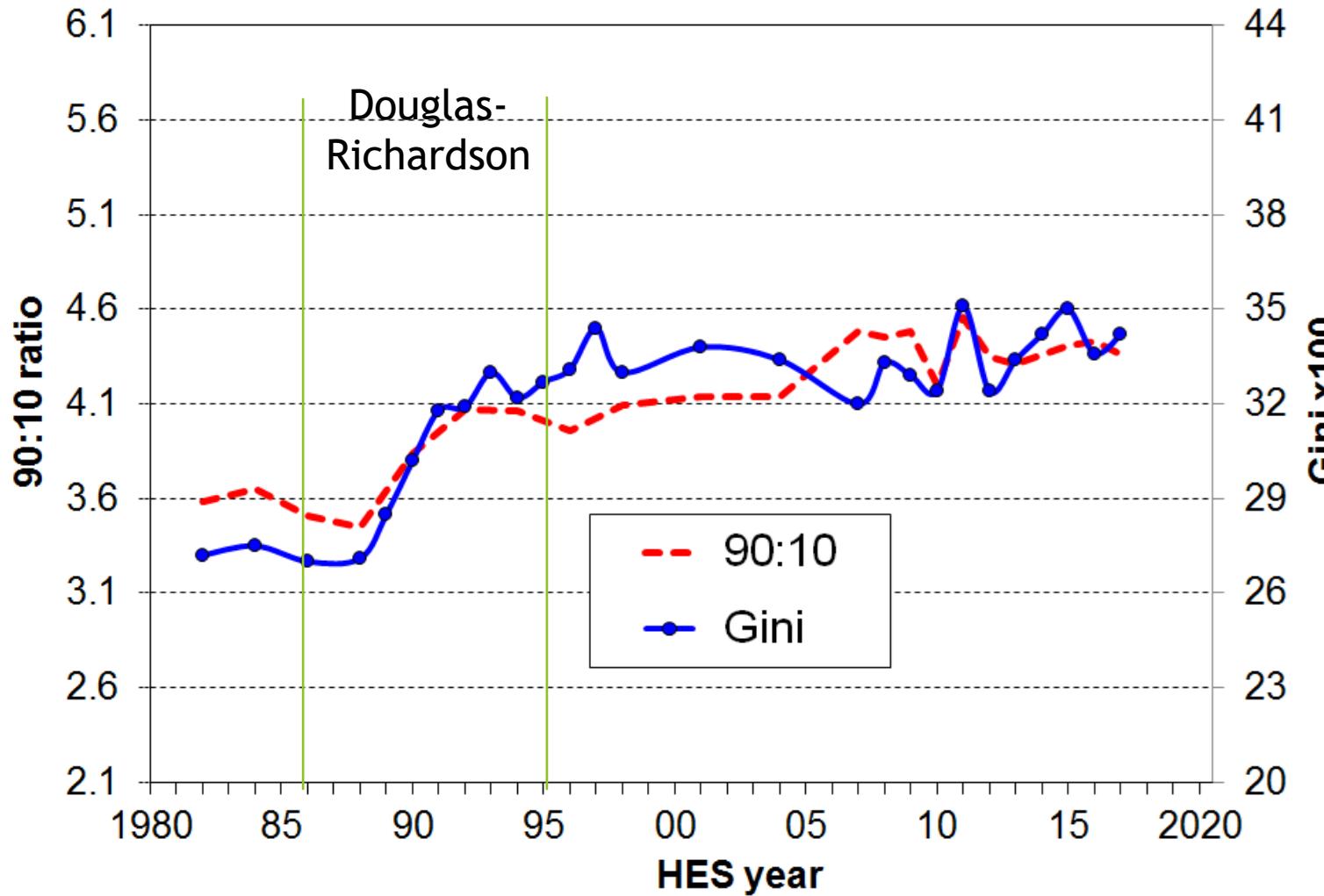
# Power belongs to the powerful: counting the many ways New Zealand's electricity reforms have been misguided

Geoff Bertram  
U3A Lower Hutt  
13 July 2020

Lest we forget, the period 1984-94 has left a permanent mark on New Zealand's economy and society:



## New Zealand inequality indicators

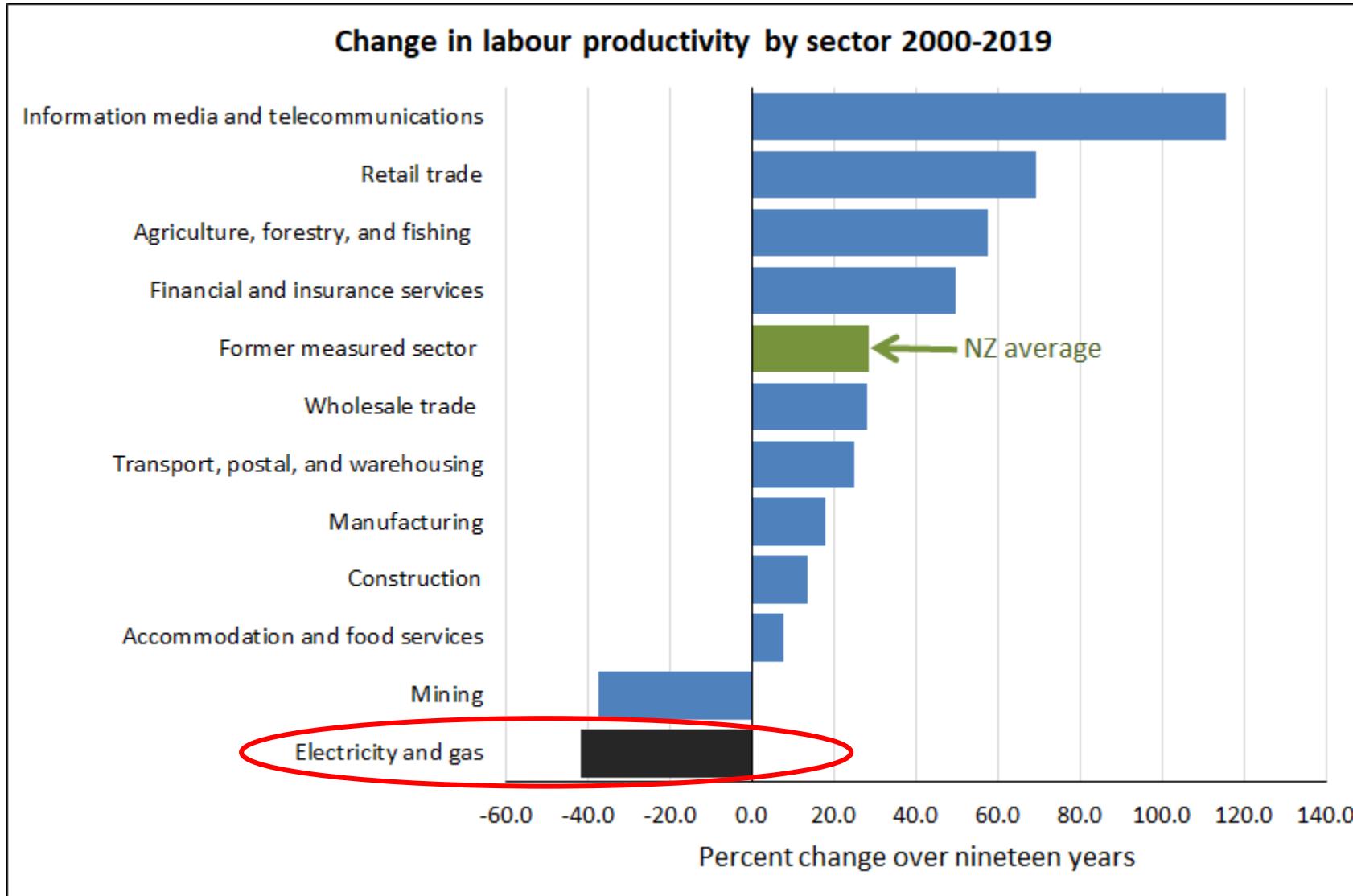


Brian Perry, *Household incomes in New Zealand: Trends in indicators of inequality and hardship, 1982 to 2017*, Wellington: MSD, October 2018, p.90.

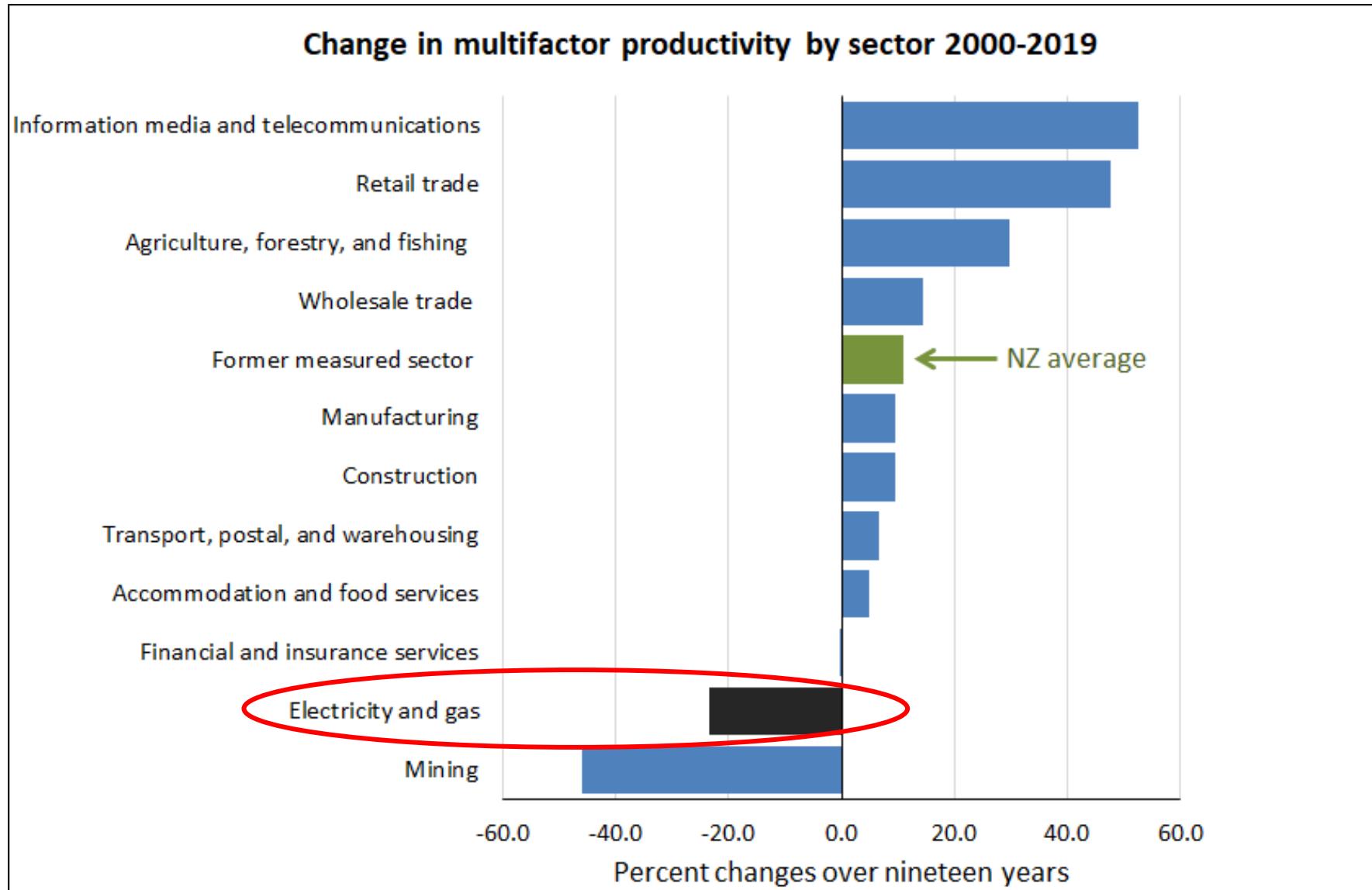
# The big promise of reform

- ▶ Back in the 1980s the proposition was that corporatizing, reorganising, and where possible privatising electricity, would bring gains for consumers because
  - ▶ Commercial, profit-driven management would (1) raise efficiency and (2) cut costs
  - ▶ Competition (or appropriate regulation) would (3) force efficiency and productivity gains to be passed through to prices
  - ▶ Consumers would therefore enjoy better service and lower prices, while profits could rise under an SOE or private model - sharing the gains from more productive use of resources

# Raise efficiency?

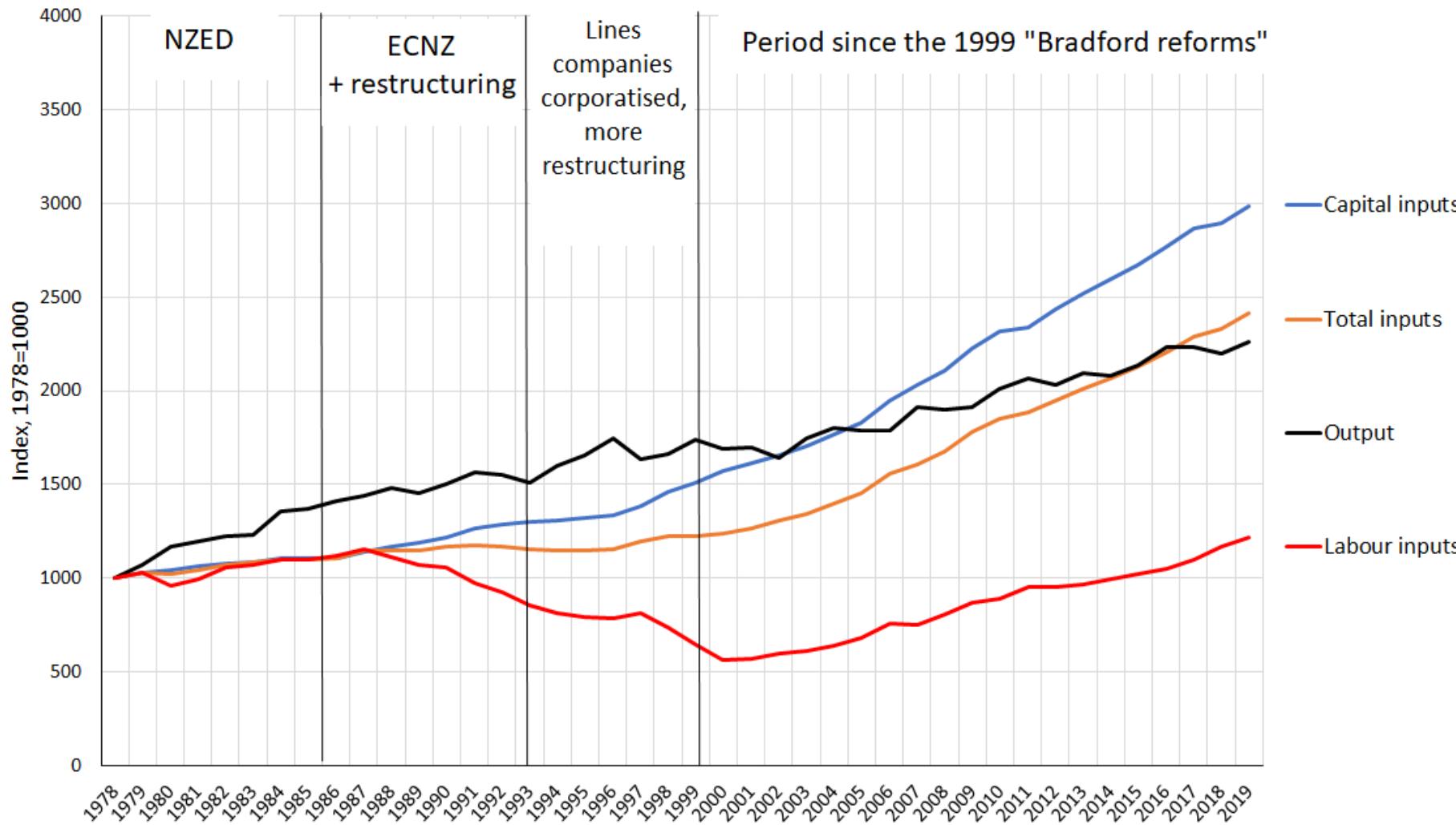


# Raise efficiency?

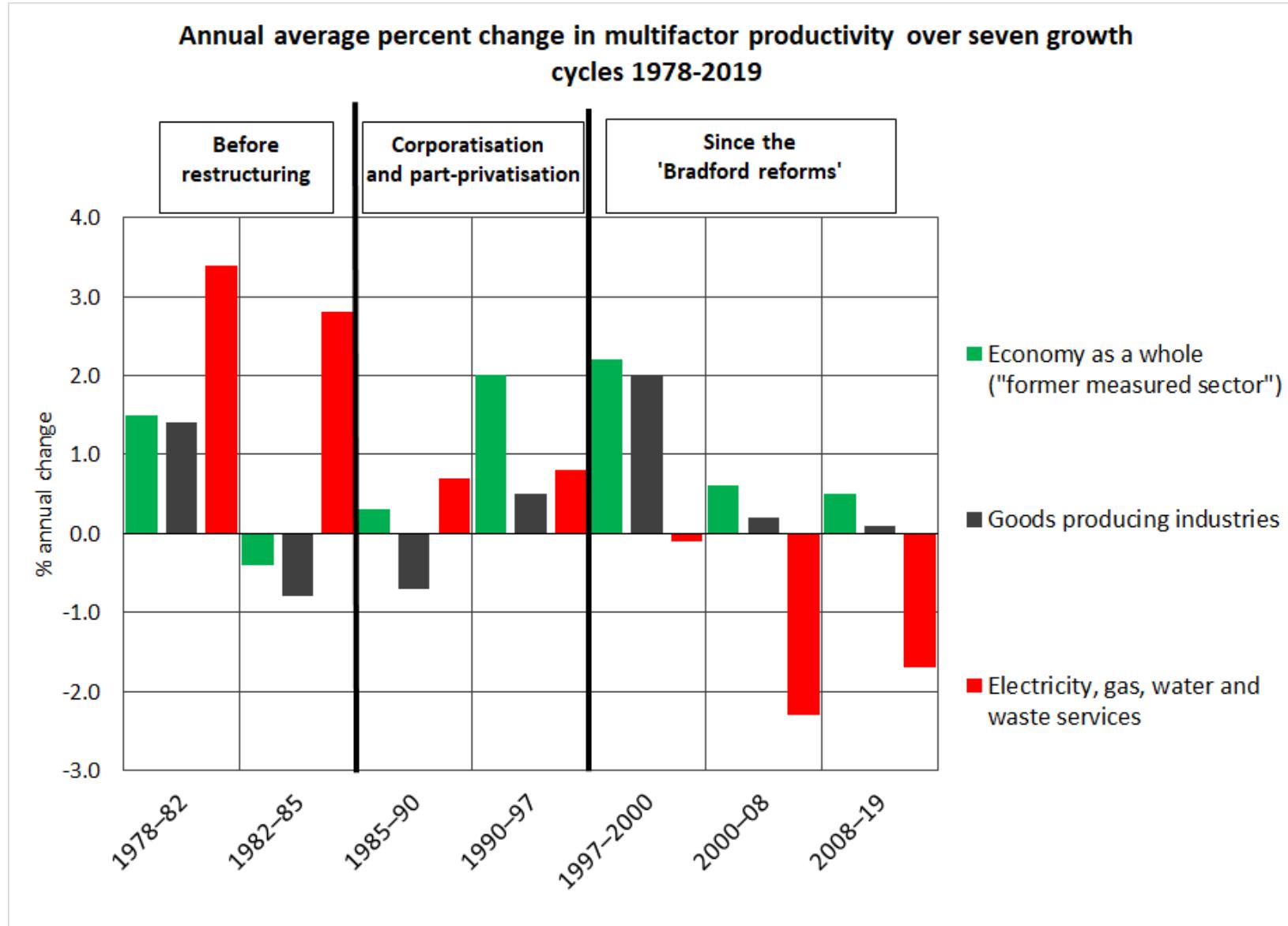


# Raise efficiency?

Input and output indices for "Electricity, Gas and Water" sector 1978=100

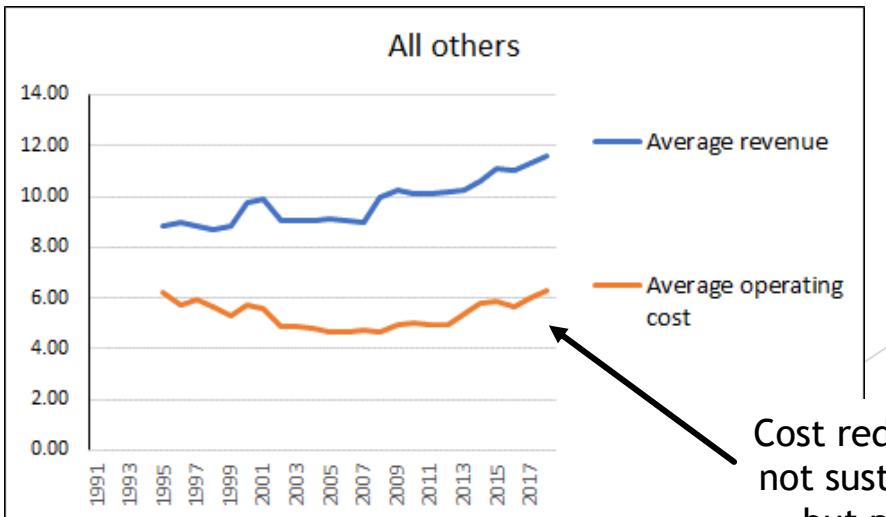
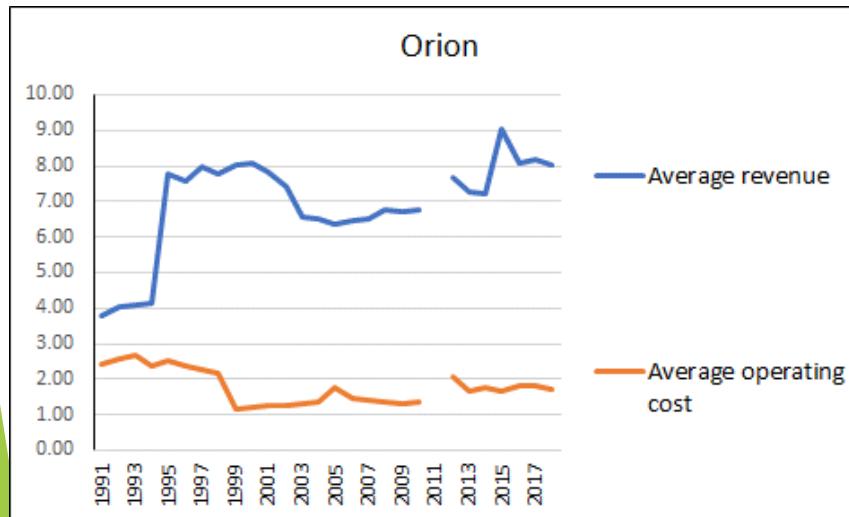
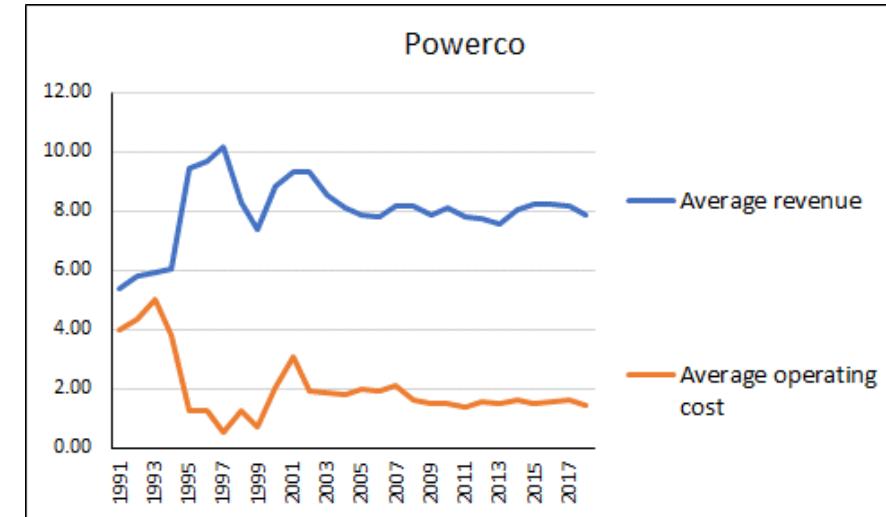
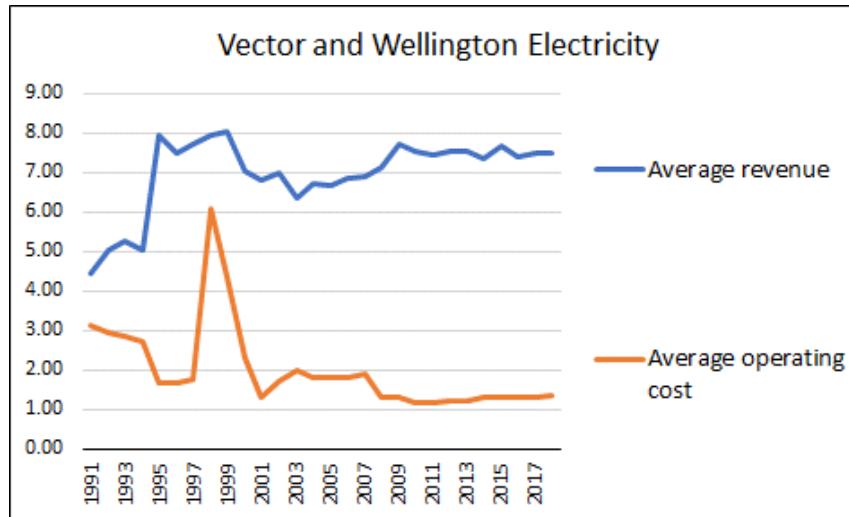


# Raise efficiency?



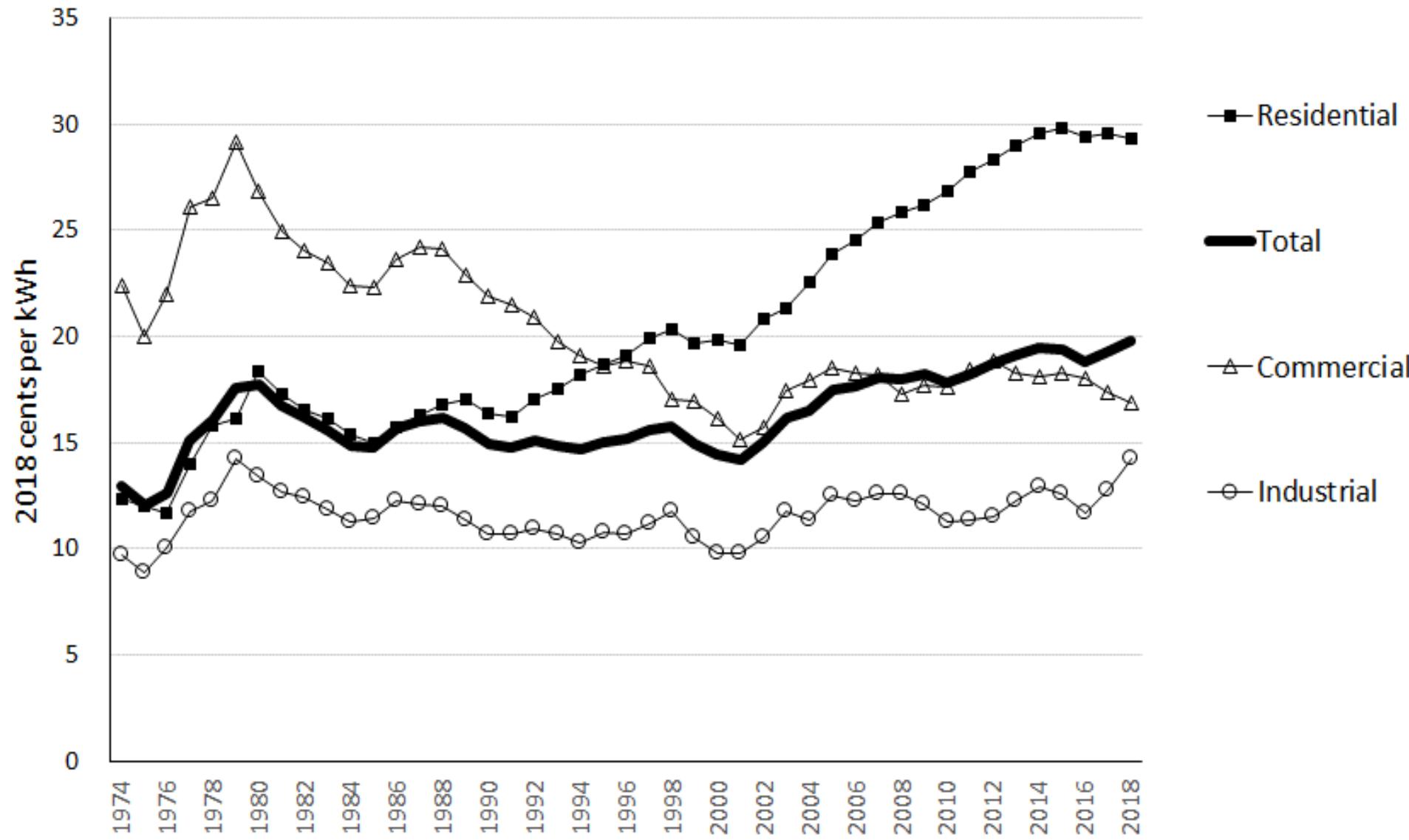
# Cut costs and pass the gains through to prices?

Lines networks, real values in 2018 cents per kWh



Cost reductions  
not sustained -  
but profit  
margins stayed

## Real electricity price by end-use sector 1974-2018



## Household real electricity price trends compared across countries, 1986=100

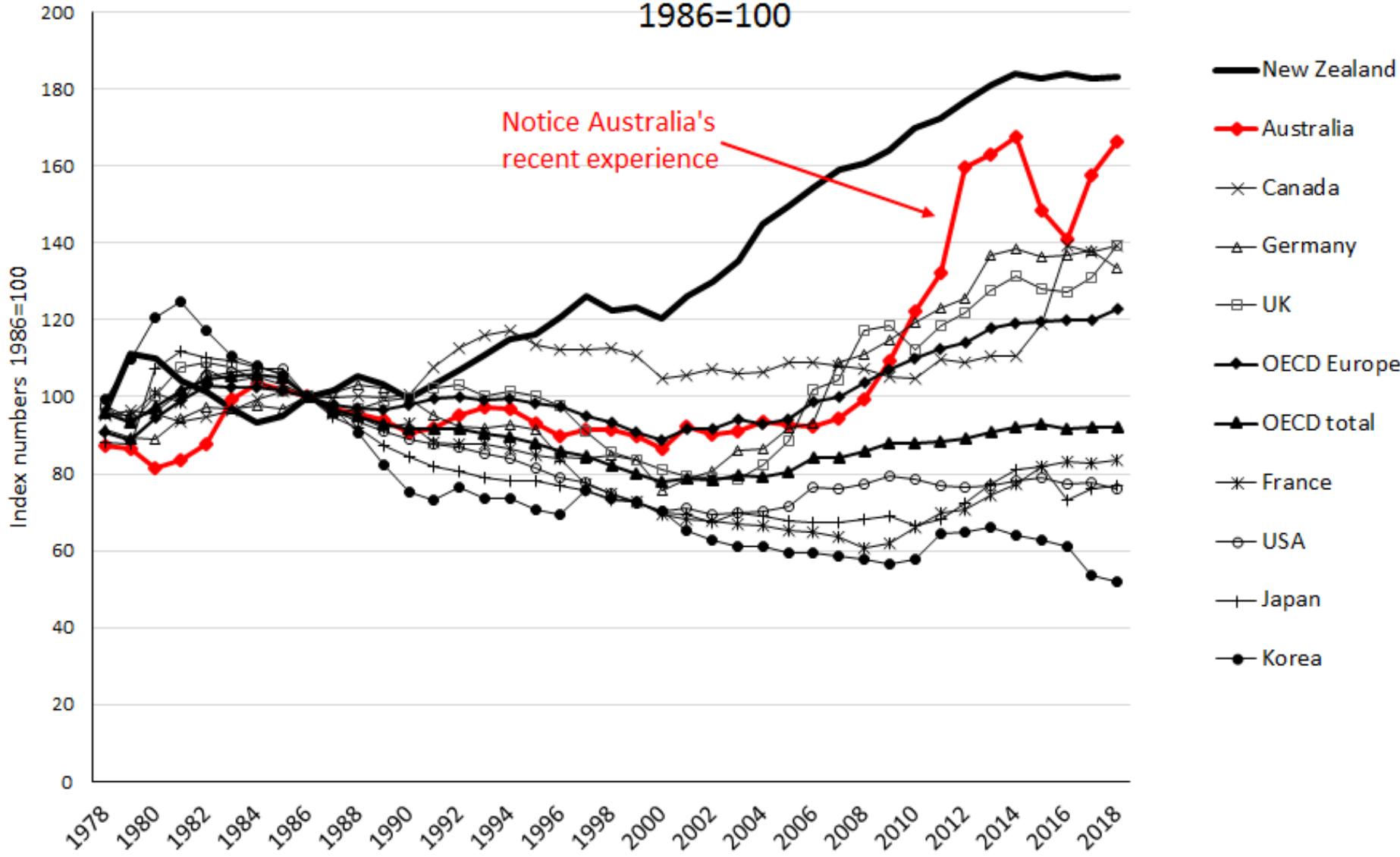
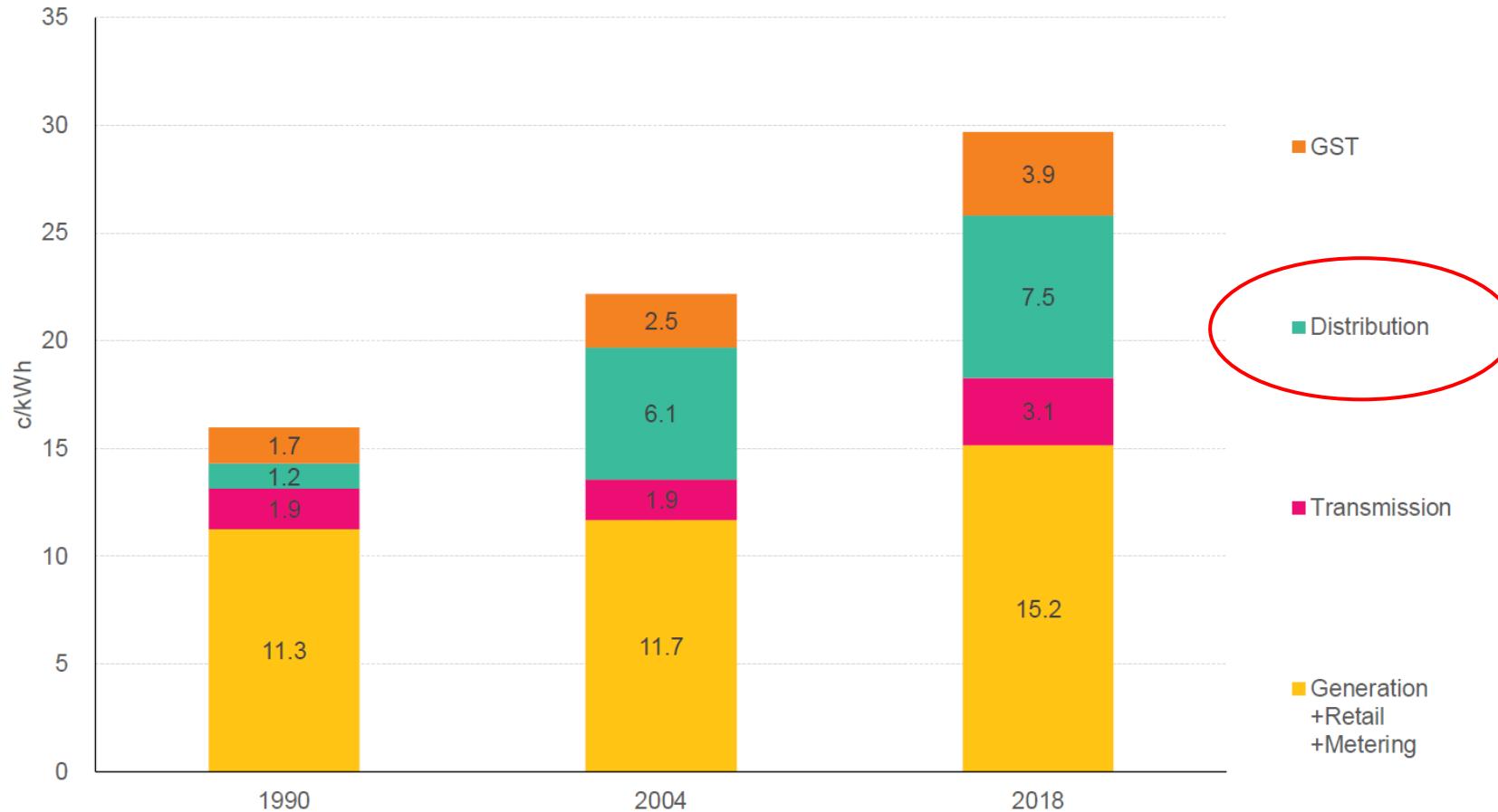


Figure 6: Changes in composition of residential prices

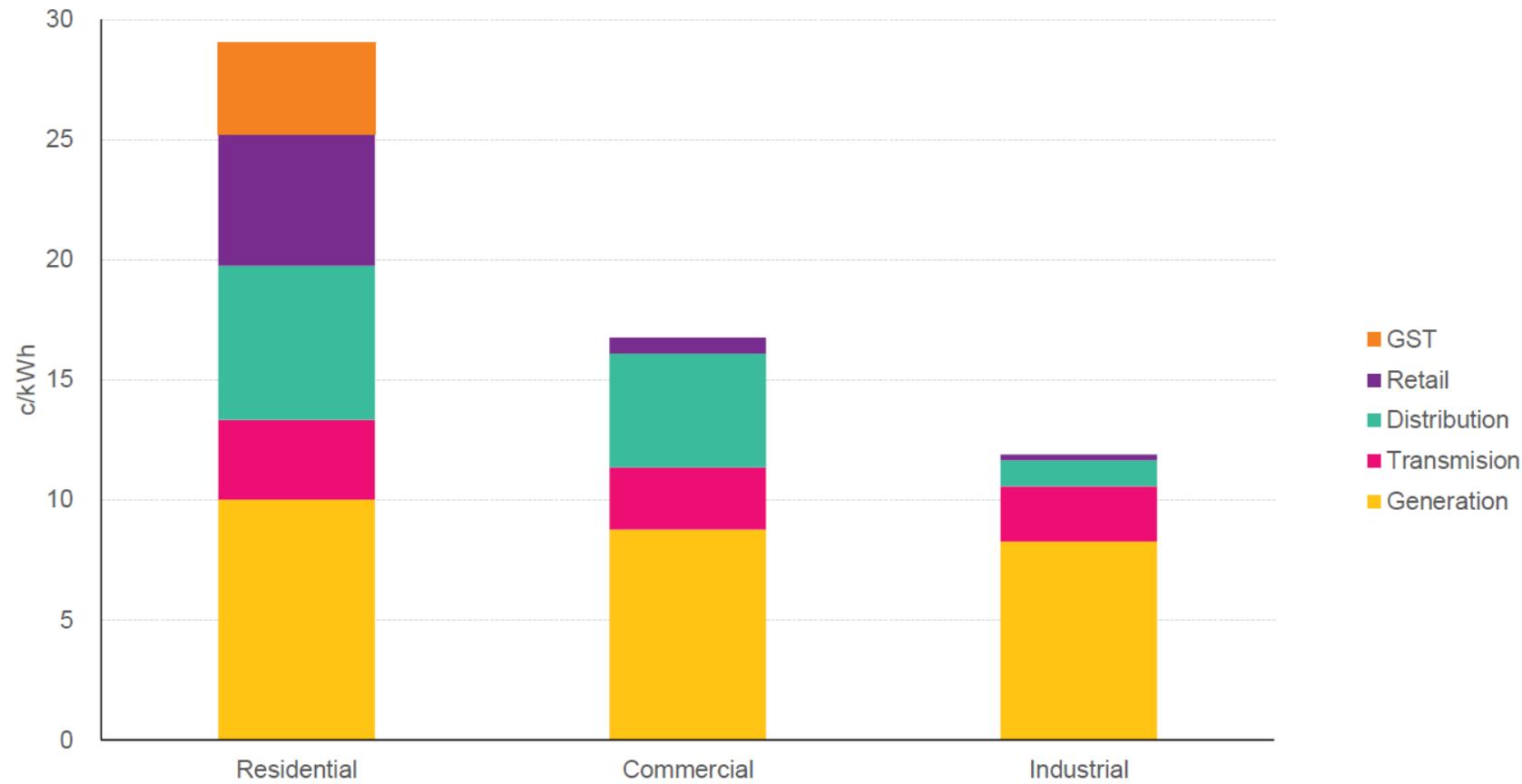


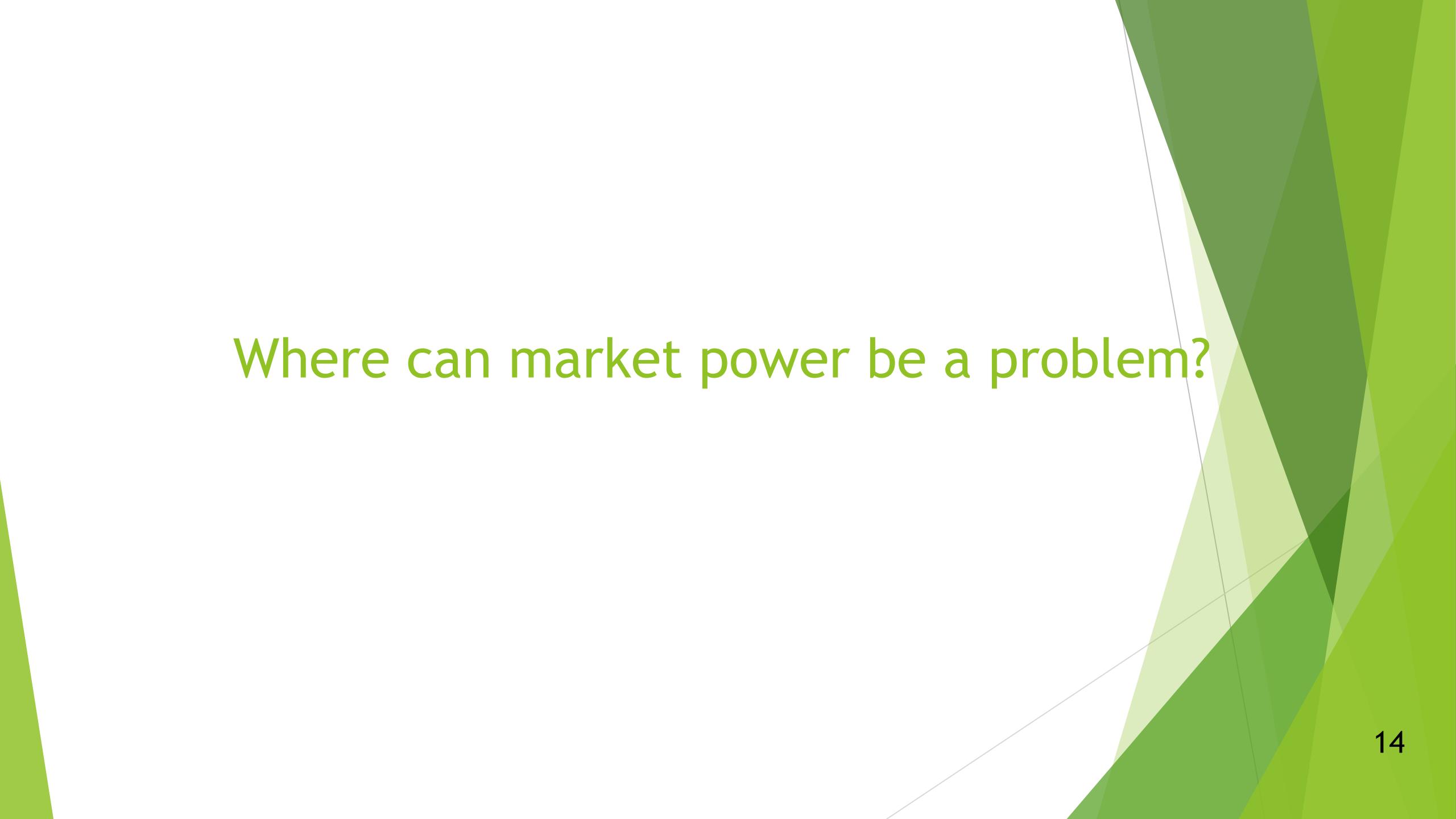
Sources: Trustpower analysis 1990–2004 and Ministry of Business, Innovation and Employment data 1990–2018. Prices are adjusted for inflation and expressed in 2018 dollars. They do not include possible rebates or dividends by distributors or retailers.

Electricity Price Review/Hikohiko te Uira, First Report August 2018 p.20.

(Note I have doubts about Trustpower's 1990 retail cost estimates in this chart)

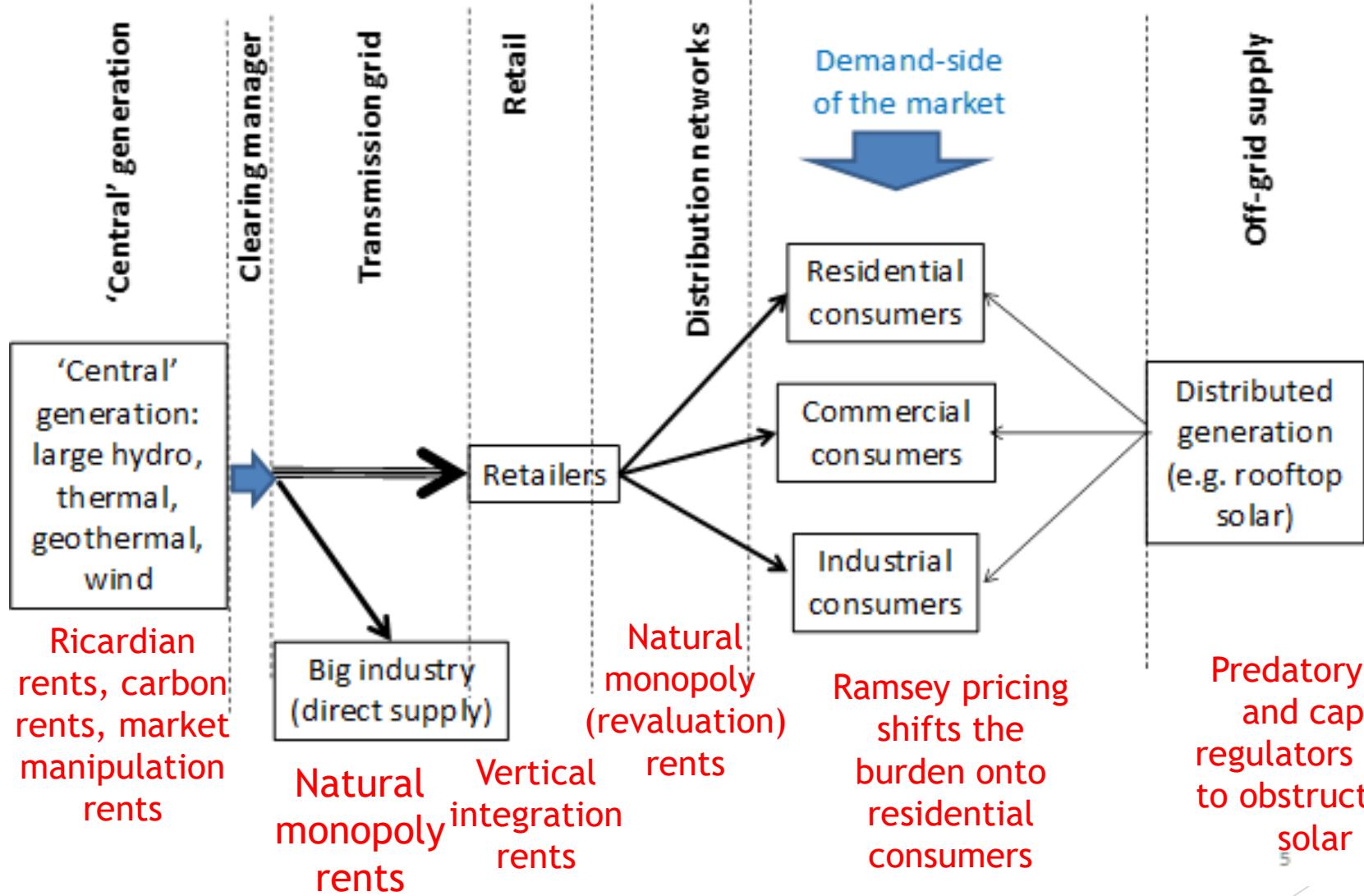
Figure 8: Estimated breakdown of charges by consumer type



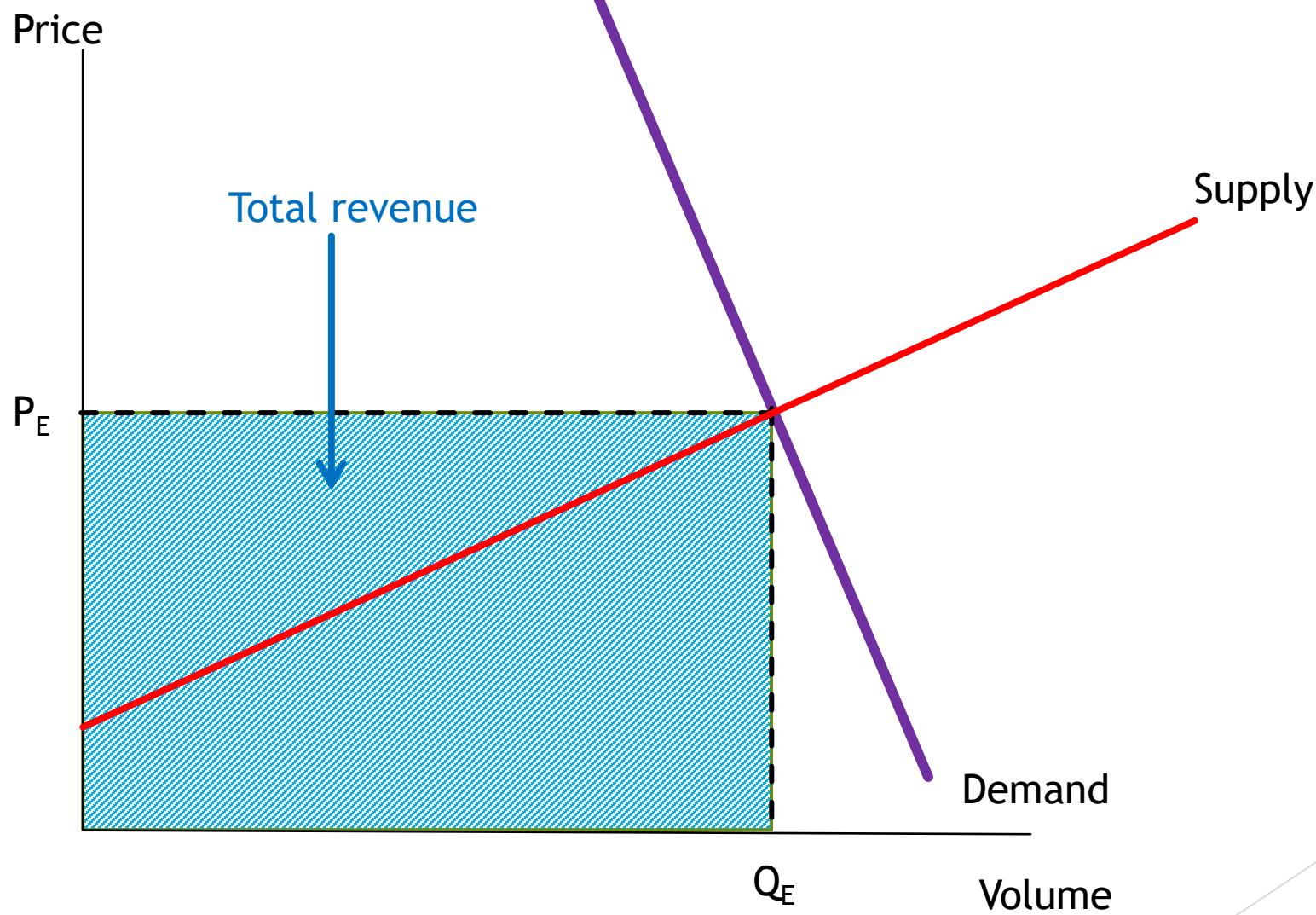
The background of the slide features a large, abstract geometric shape composed of various shades of green. It has a jagged, polygonal outline and is filled with different tones of green, creating a sense of depth and movement.

# Where can market power be a problem?

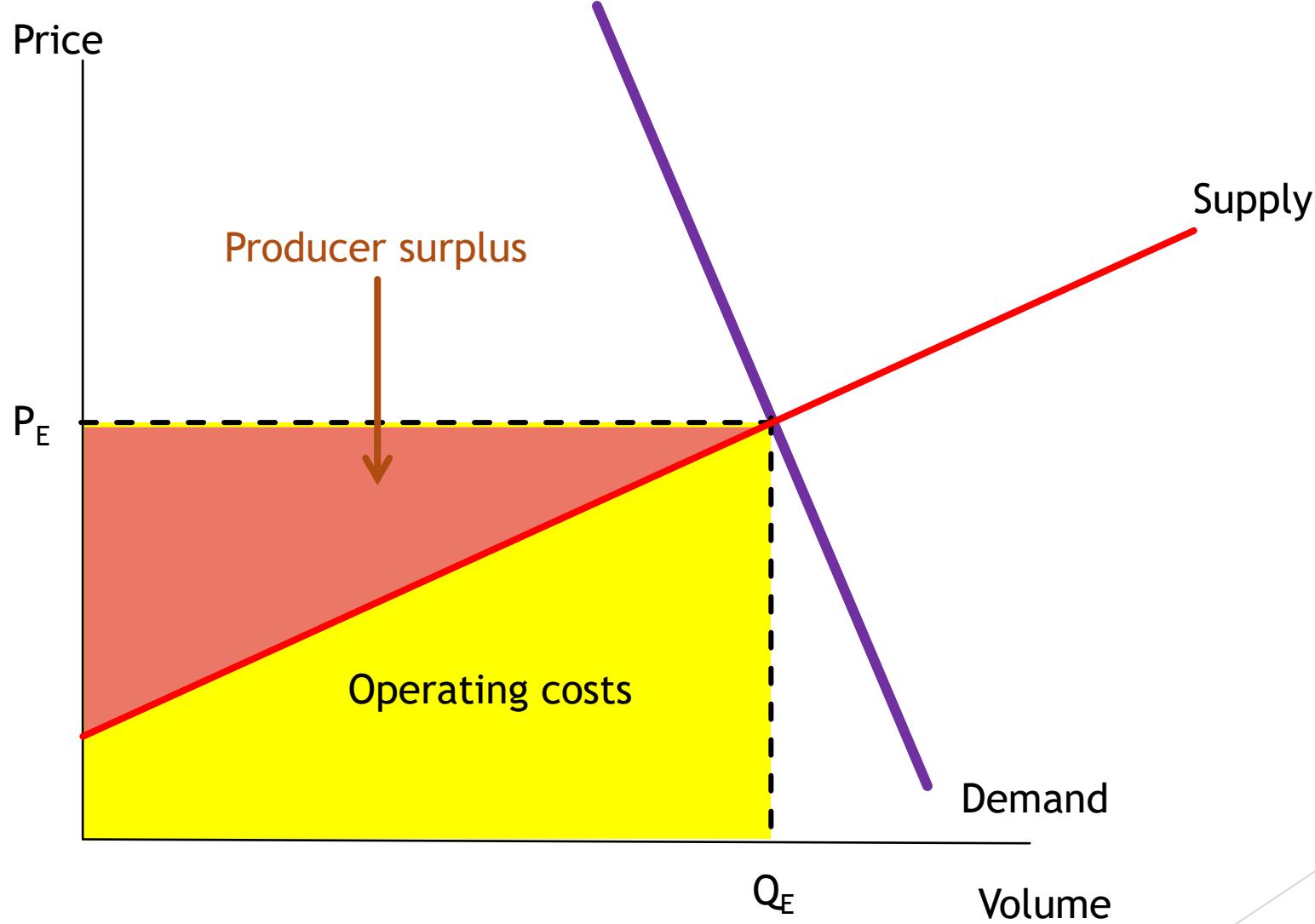
# The electricity supply chain



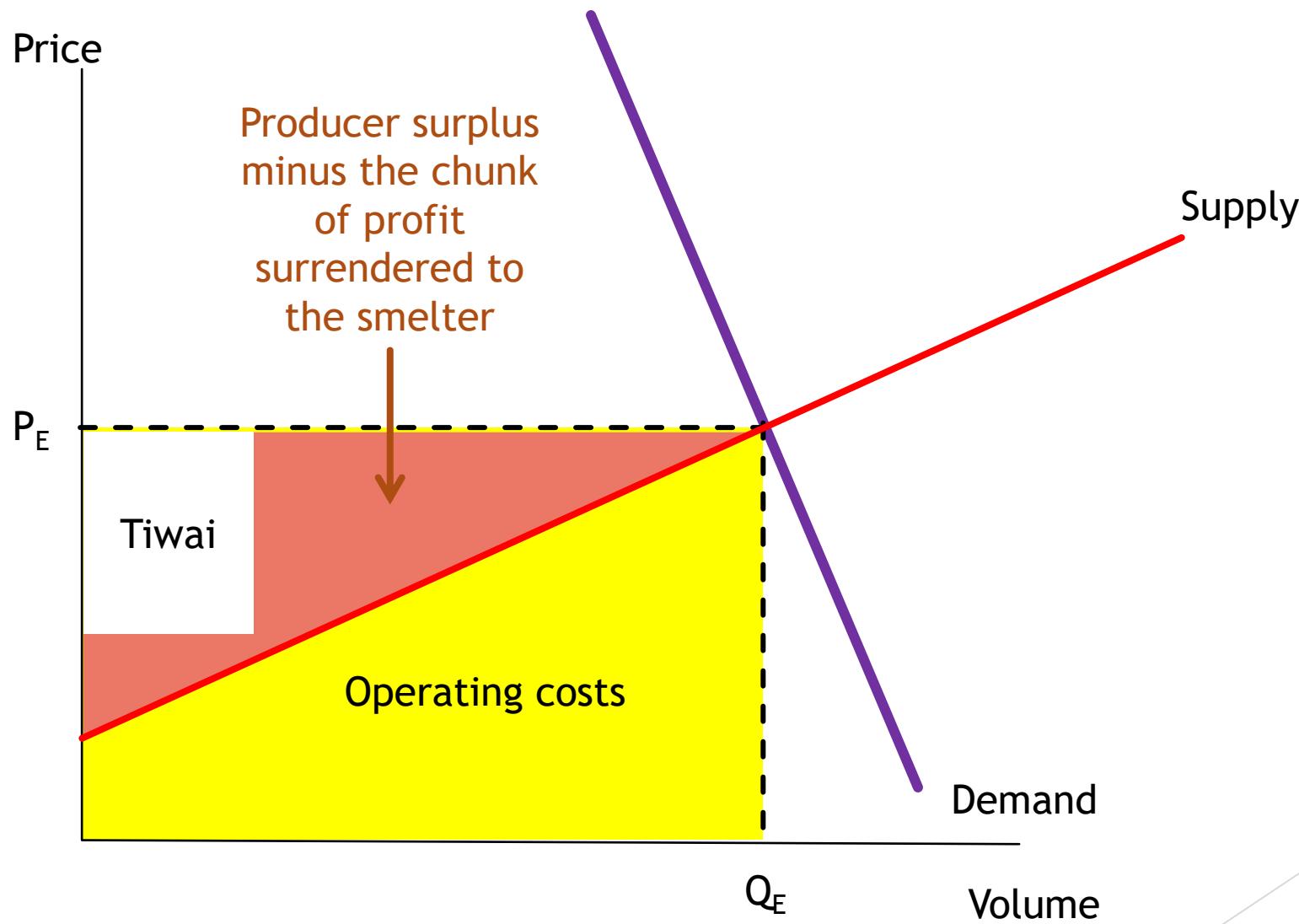
## Supply and demand in an unregulated market



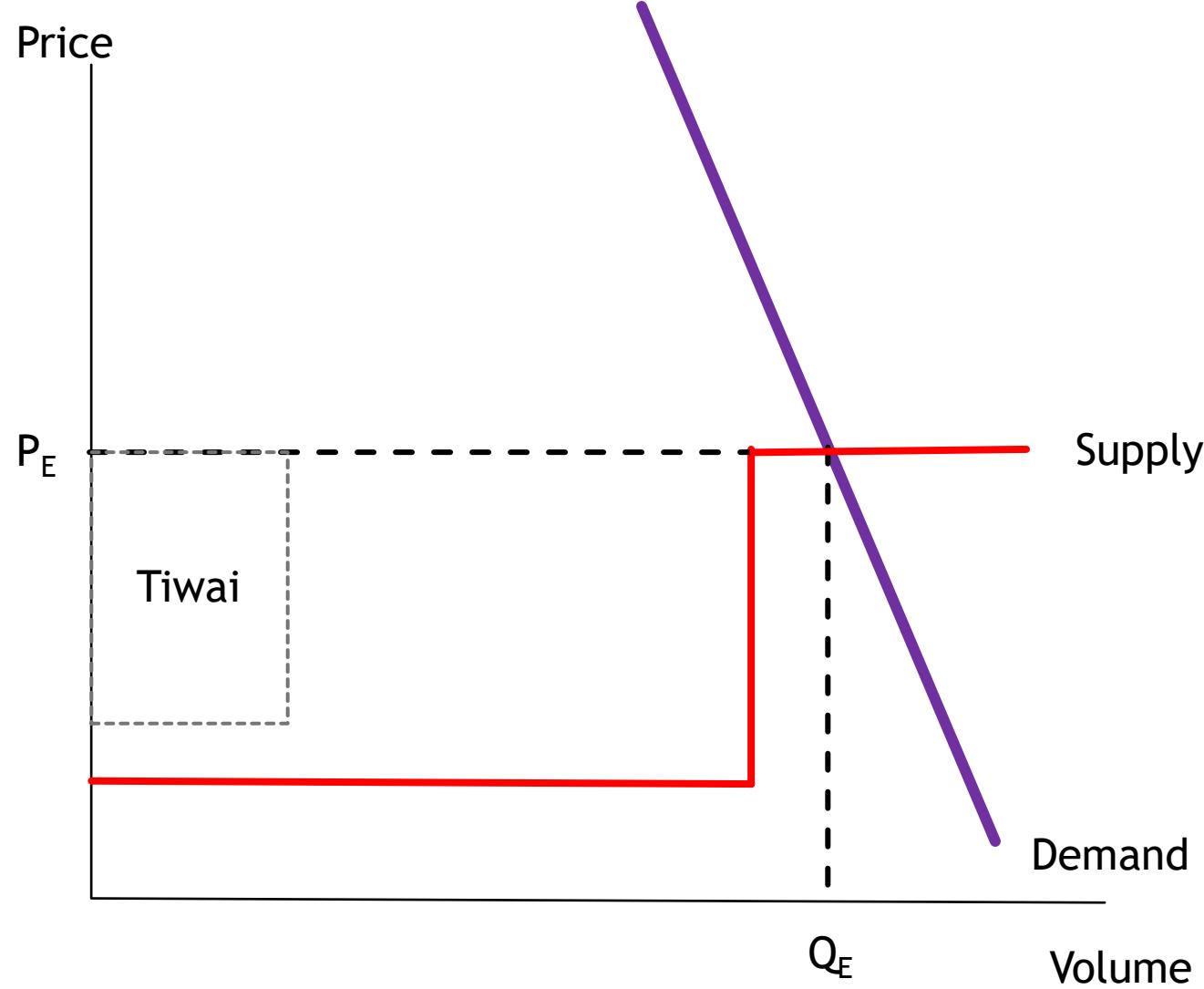
## Revenue has two components



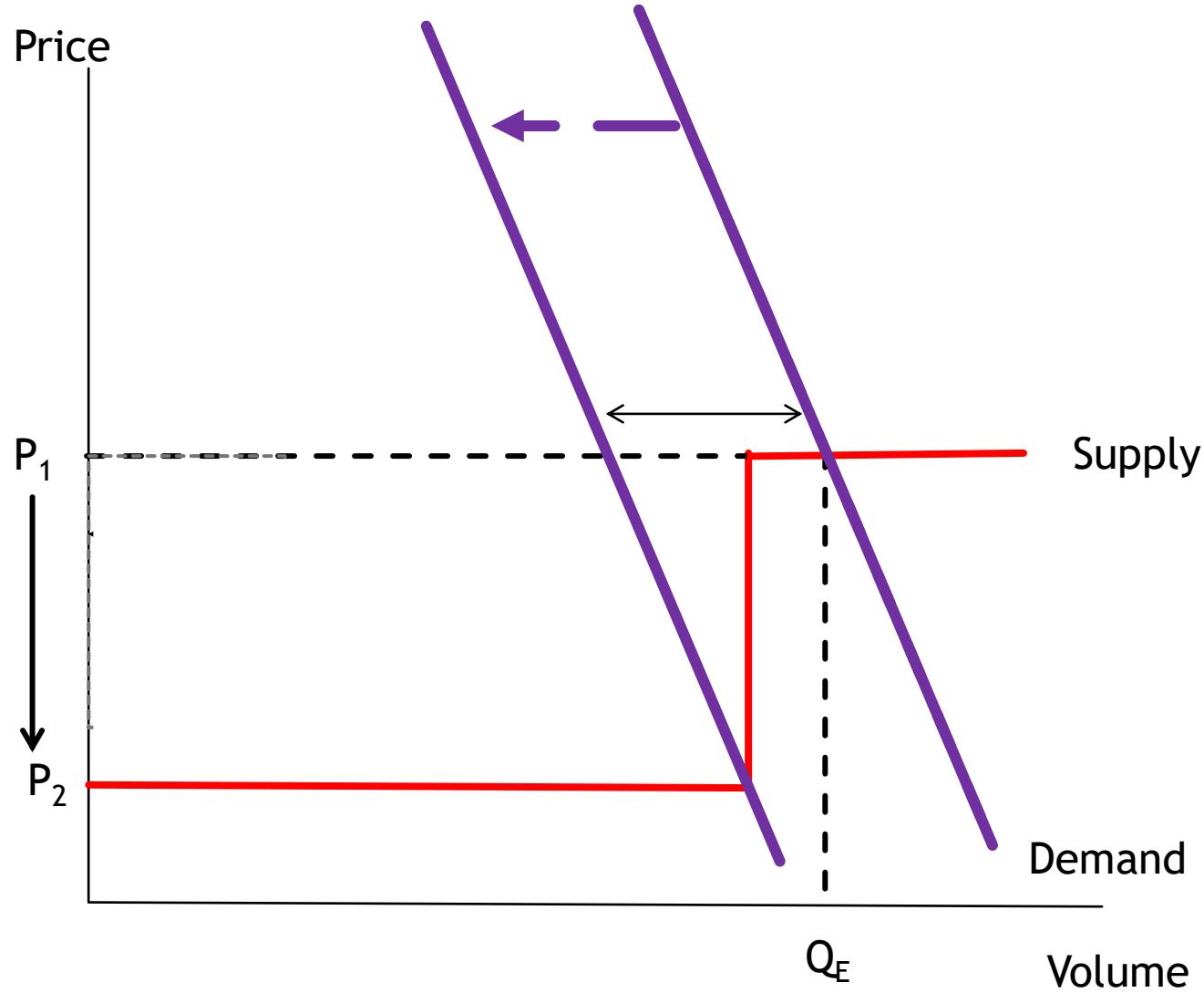
The Tiwai Point smelter can take 14% of the electricity at a cheap contract price while leaving the supply/demand balance unchanged



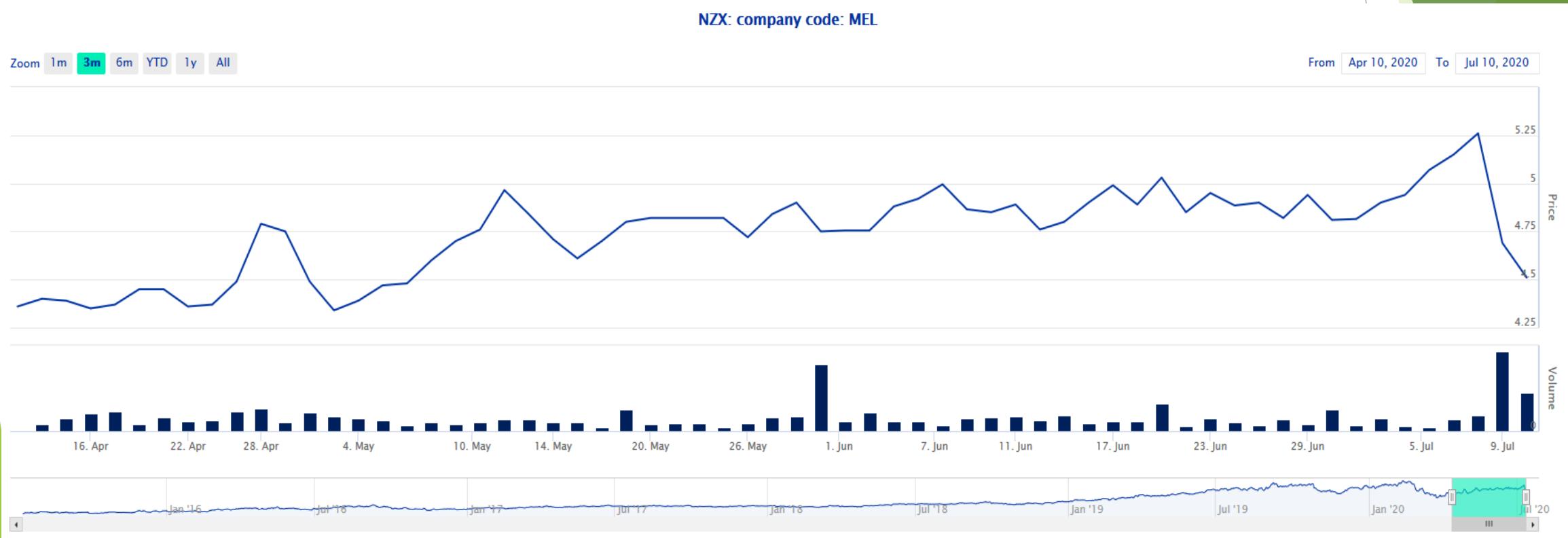
Actually the NZ wholesale electricity market looks more like this



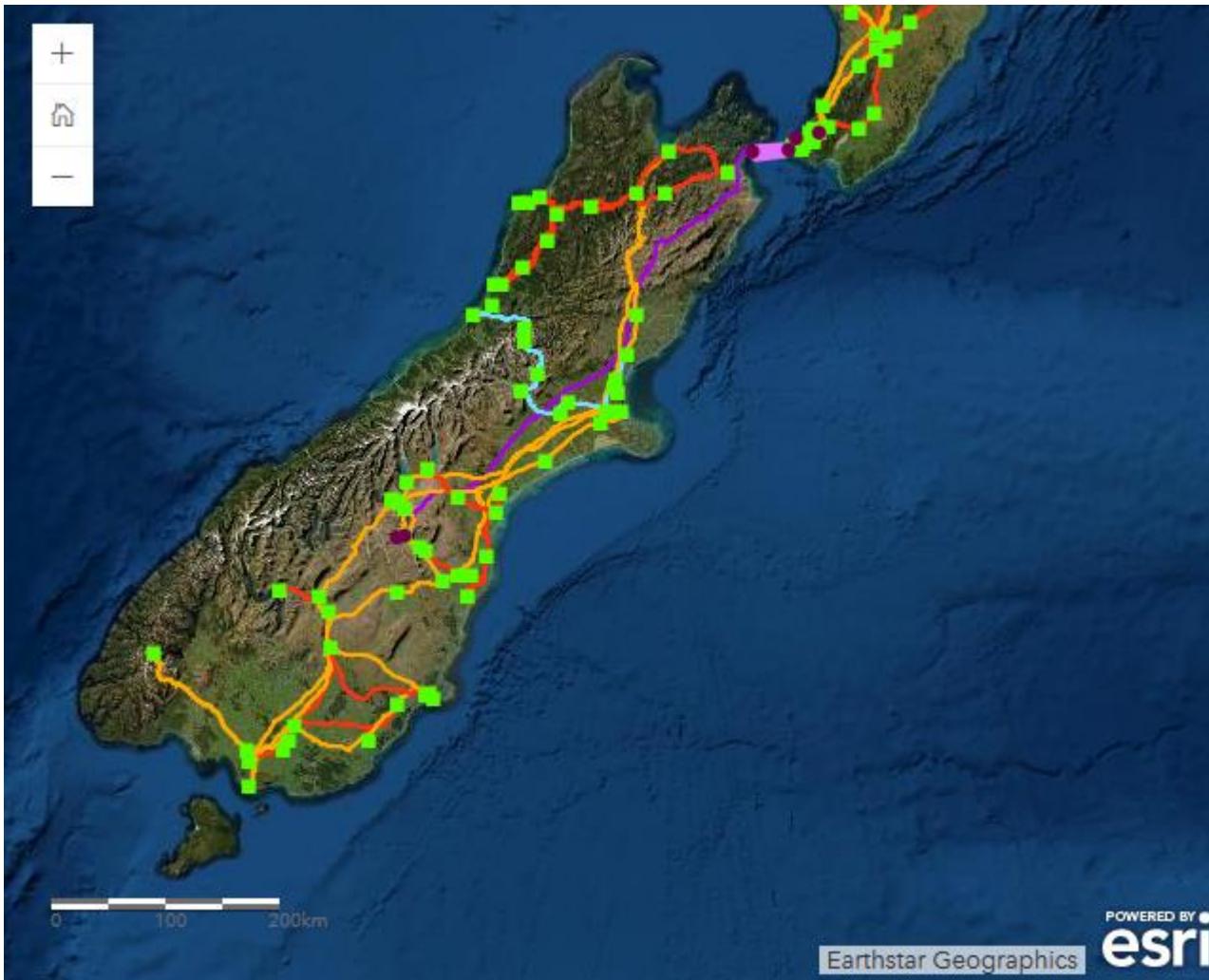
Suppose the smelter closes? If no constraints, the price would drop sharply, eliminating much of the Ricardian rent



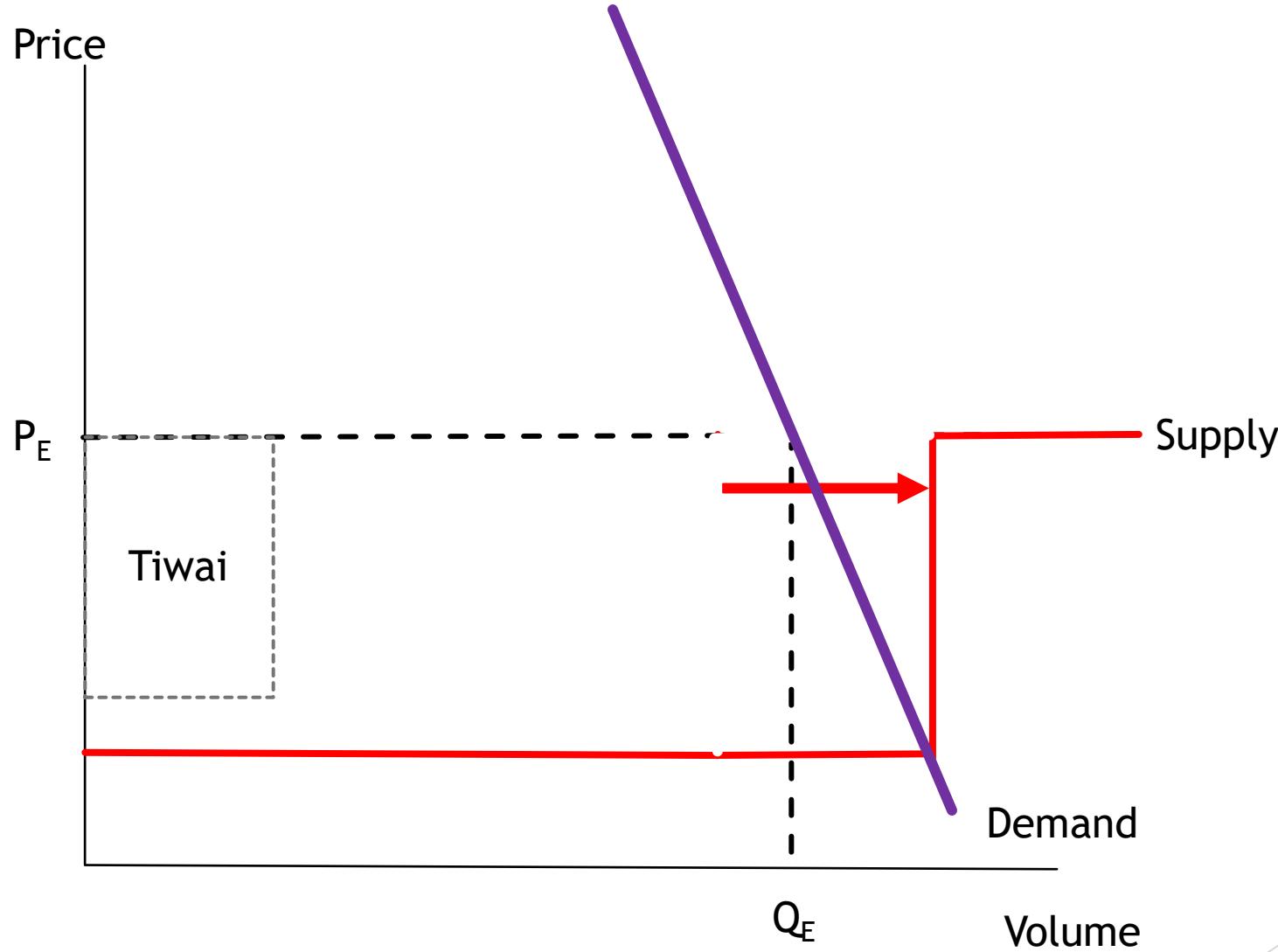
Meridian's share price dropped 14% when smelter closure was announced on 9 July



# But there is a constraint...



What else could hurt the cartel's profits? Rooftop solar and independent distributed renewables...



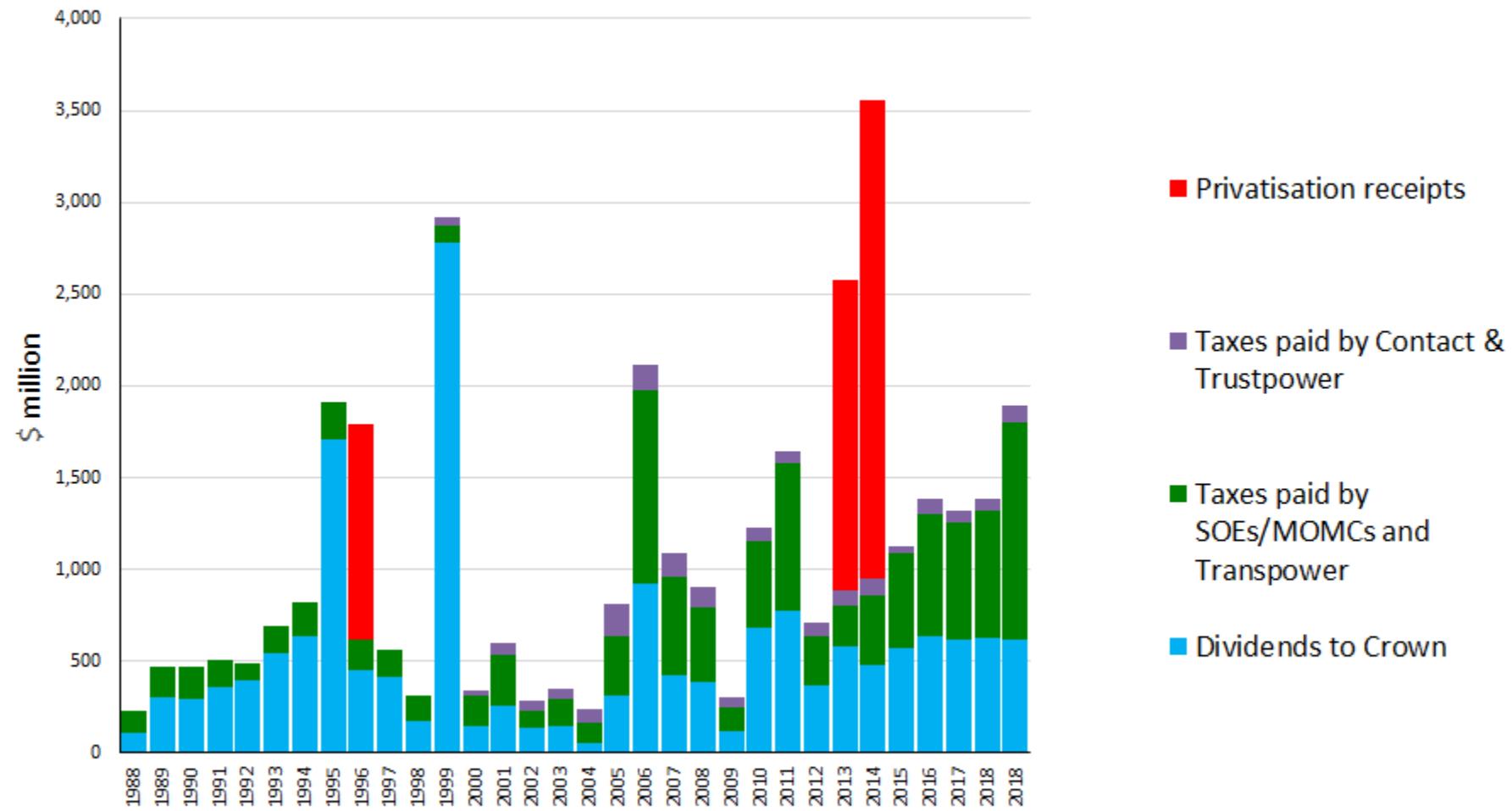
# In summary

- ▶ Multifactor productivity has gone down 30% (and capital productivity down 42%) since 1986
- ▶ Residential prices have gone up 90% since 1986 (while industrial prices hardly changed, and commercial prices fell 25%)
- ▶ Operating surplus has gone up 81% in real dollars since 1986 (compared with a 12% real increase in labour income)
- ▶ Redistribution of wealth from residential consumers to electricity asset owners and commercial users has been massive => increasing inequality and poverty (both child poverty and energy poverty in general)
- ▶ Residential consumers have gone from having no choice in a low-priced market to having lots of so-called “choice” [but no voice] in a high-priced market

# There are two key problems preventing a well-being-focused policy response

1. The industry structure is firmly entrenched by legislation passed by our Parliament over the three decades:
  - ▶ Commerce Act 1986
  - ▶ SOE Act 1986
  - ▶ Energy Companies Act 1992
  - ▶ Energy Industry Reform Act 1998
  - ▶ Commerce Amendment Act 2008
  - ▶ Electricity Act 2010
2. The Government's fiscal surplus depends heavily on a continued flow of profits and taxes from the industry

### Crown cash receipts from gentailers and Transpower



# Subgame perfection

