



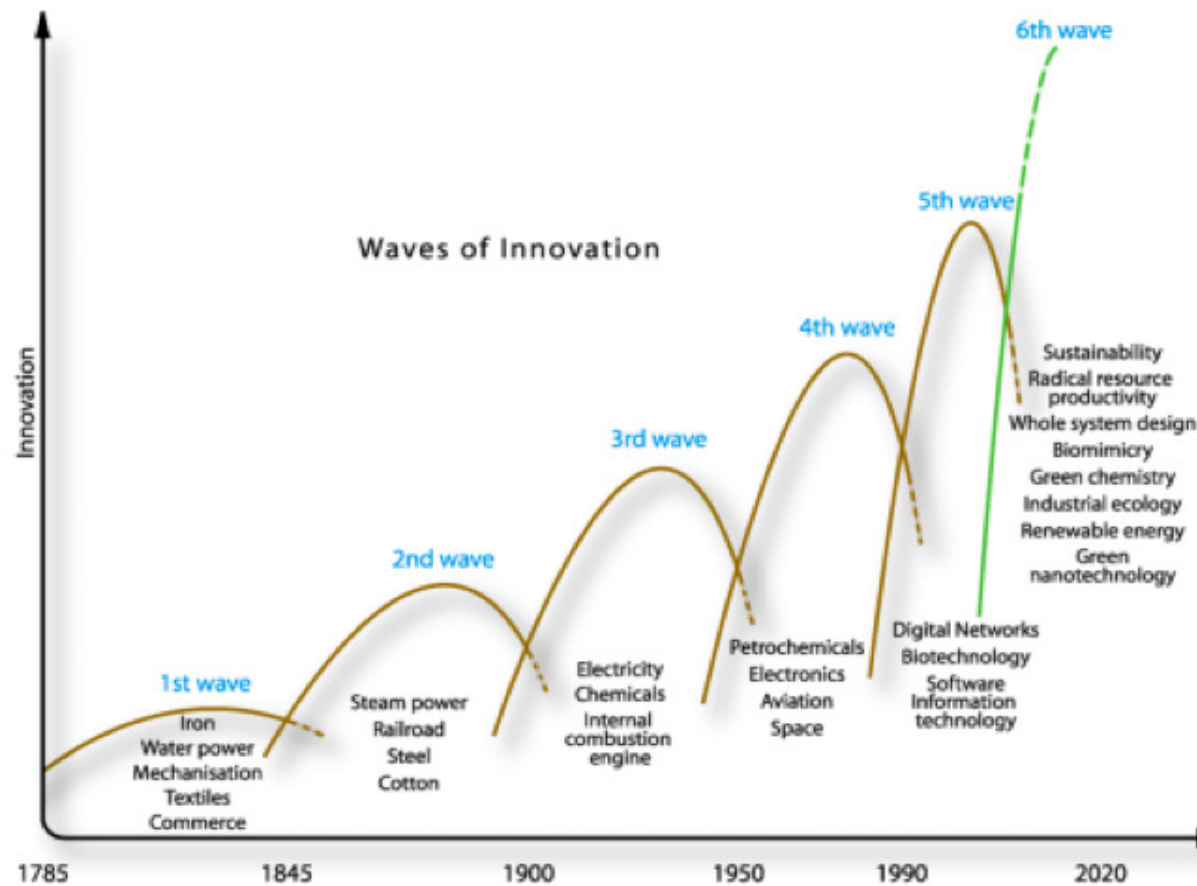
National Plumbing  
Regulators Forum

# RESOURCE EFFICIENCY: THE SIXTH WAVE OF INNOVATION

SHAPING OUR FUTURE HOMES AND  
COMMUNITIES –  
TO DO MORE WITH LESS



# Kondratiev waves





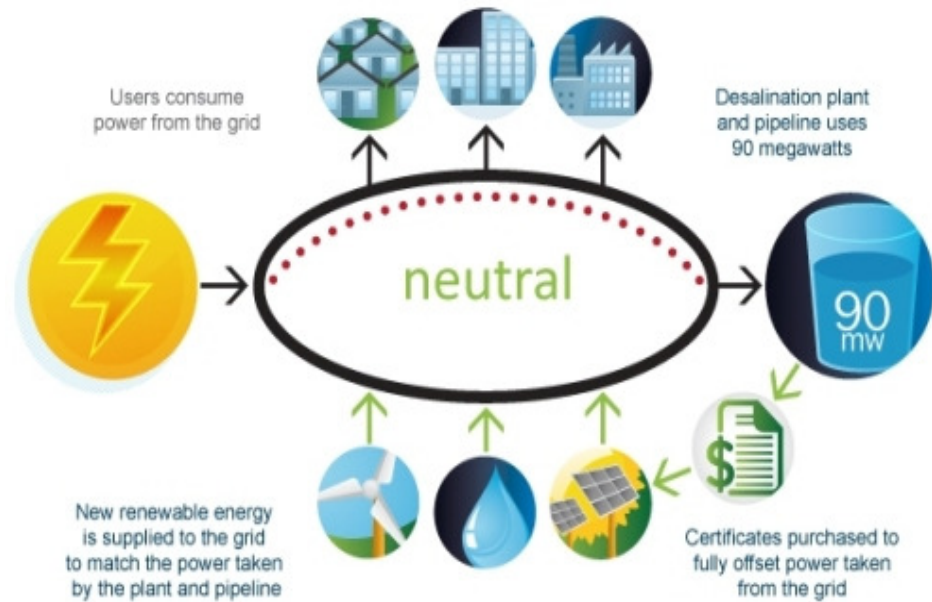
## Resource Constraints >> Rising Prices >> Innovation

- Land
  - Water
  - Electricity
  - Food
  - Oil
  - Emissions
- 
- Carbon tax /Emissions Trading Scheme

Do you remember ?



# Resource Use Connectivity

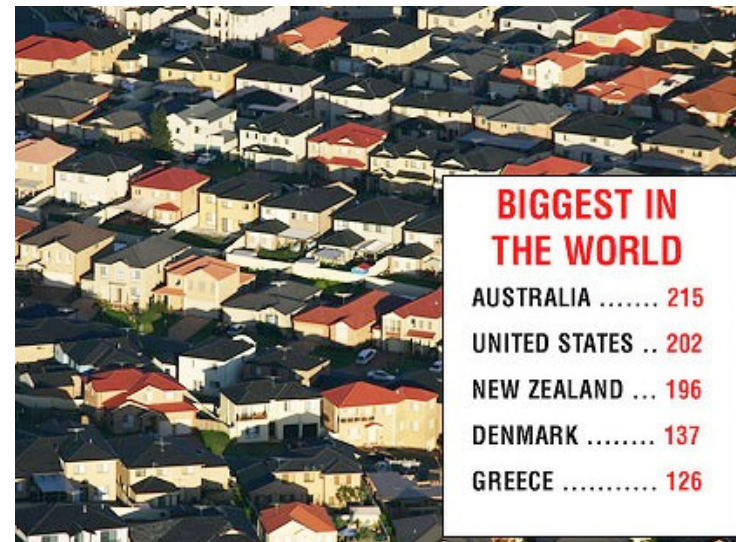


## Whole system design



## The Problem

- Unsustainable Consumption
- Externalised Costs
- Efficiency
- Durability
- Complexity





## Future Directions

- Communities vs Dwellings
- Embodied Energy / Embodied Water
- Return to Passive Design Principles
- Increasing use of local production
- Increasing focus on durability and quality
- Increasing focus on informed decision making and knowledge



We have many of the solutions, right now





- We have many of the solutions, one starting point:





- We have many of the solutions, now

## DOCKSIDE GREEN

potable water use at build out in residential and commercial/office buildings will be approximately 60% to 65% lower than traditional developments



The community is going to treat 100% of its waste water on site and use 45-55% less energy than the Canadian Model National Energy Code.

