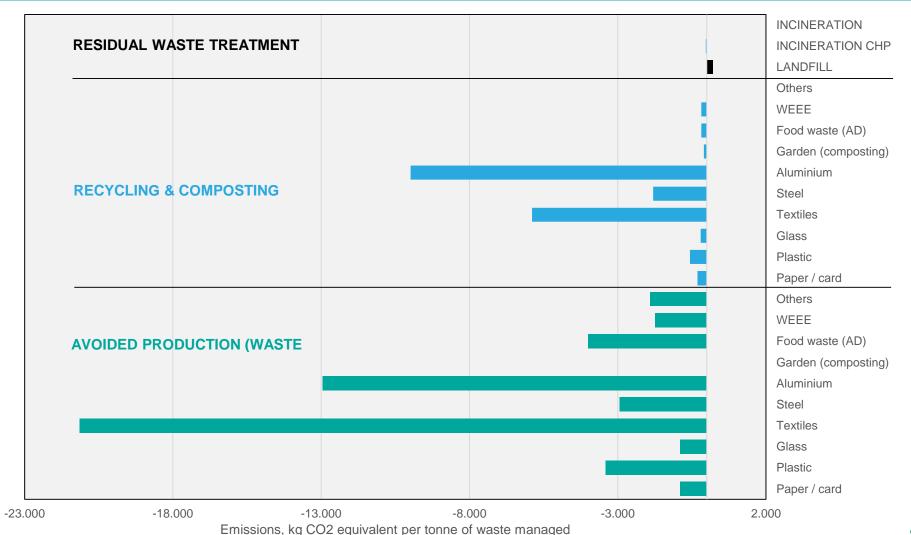


Dr Dominic Hogg Chairman Eunomia Research & Consulting Ltd

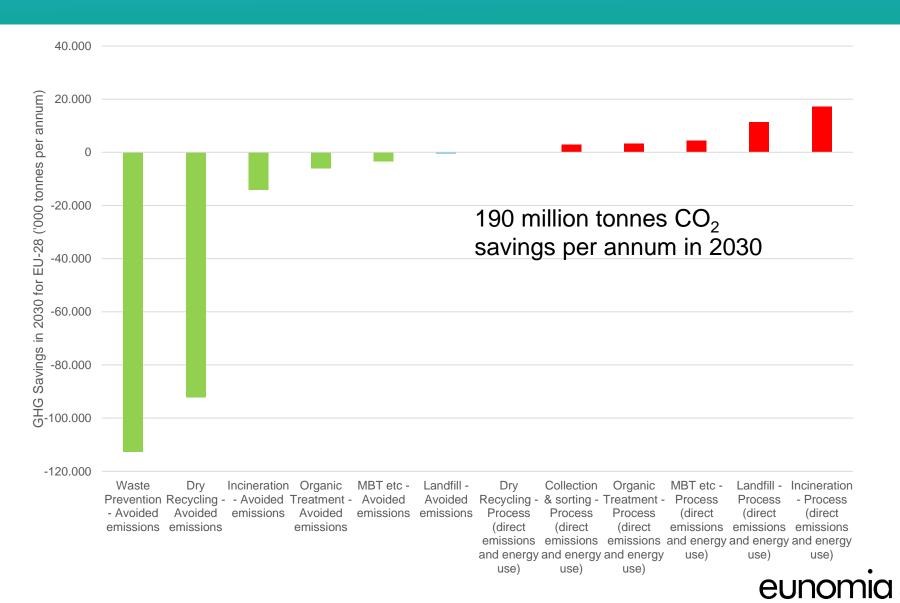


## GHG Impacts (negative = GHG reductions)

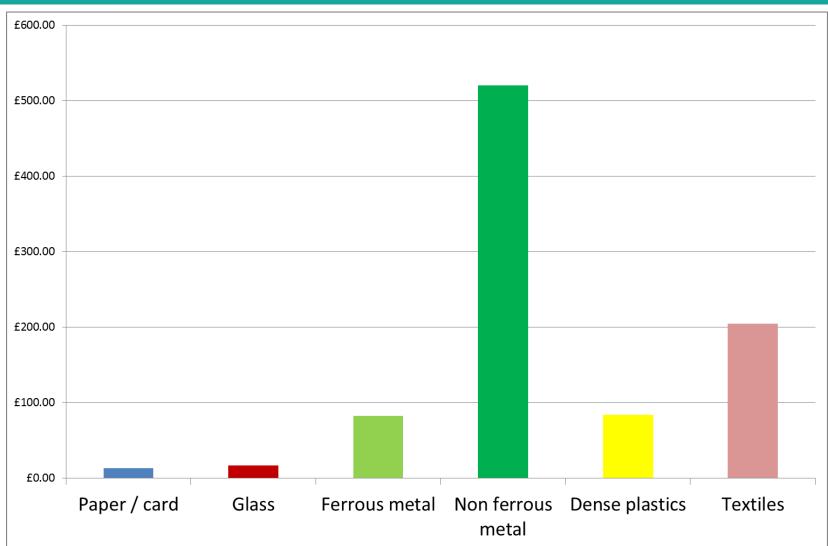




## EU-28 – Previous CE Package



## **External Benefits of Recycling**



Source: Eunomia



## Renewables Policy

- Reconsider support mechanisms for renewable energy
  - Discontinue support for all forms of energy from residual waste
- Withdrawal of support for the utilisation, directly, of harvested biomass for renewable energy generation / renewable fuels



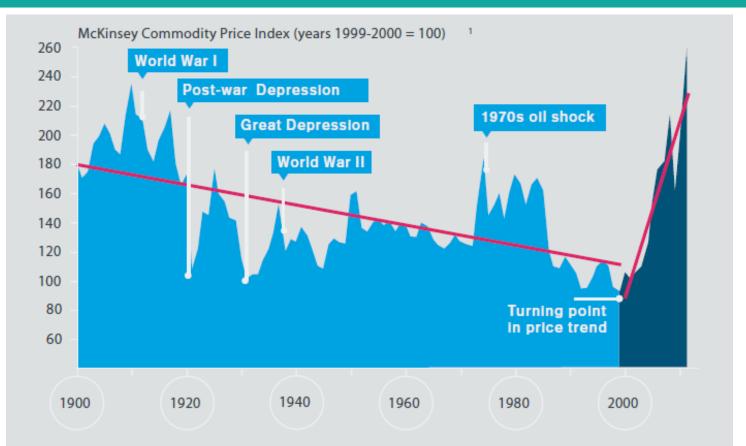
## **Climate Change Policy**

- Revise inventories for GHGs:
  - In the 'waste' section of the inventory, the estimated GHG benefits of recycling activity (including where materials collected for recycling are exported), and
  - In the Industry chapter, the extent to which industries make use of recycled materials (and the implied level of emissions saving).
- Integrate 'waste' within the framework of European policies to tackle climate change. Either:
  - ☐ Integration within the EU-ETS; or
  - ☐ Through the Effort Sharing Decision.

Ensure benefits of recycling and preparation for reuse were adequately recognised



## **Commodity Prices as a Driver?**

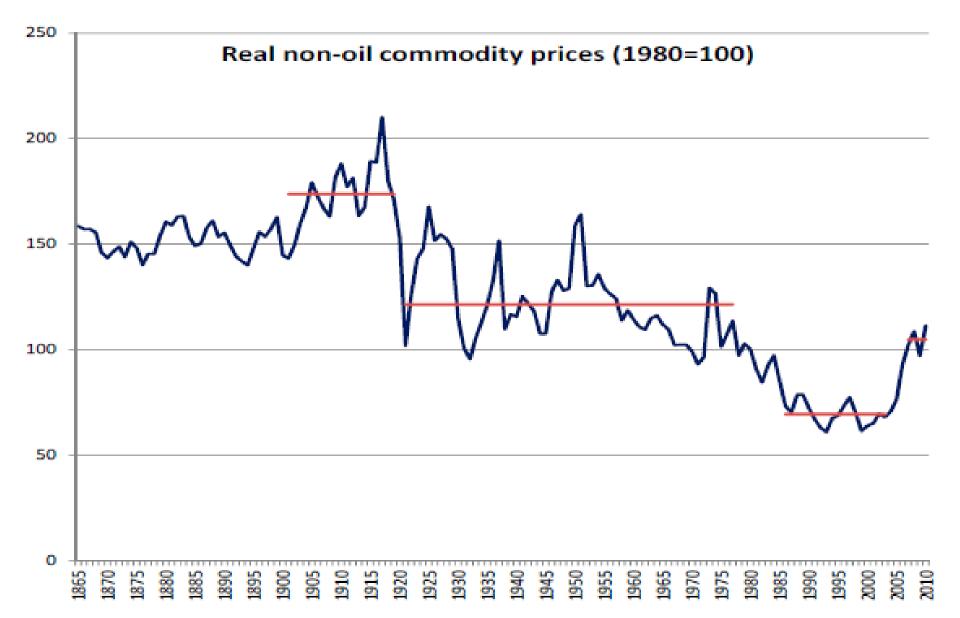


1 Based on arithmetic average of 4 commodity sub-indices: food, non-food agricultural items, metals, and energy; 2011 prices based on average of first eight months of 2011.

SOURCE: Grilli and Yang; Pfaffenzeller; World Bank; International Monetary Fund; Organisation for Economic Co-operation and Development statistics; UN Food and Agriculture Organization; UN Comtrade; Ellen MacArthur Foundation circular economy team.

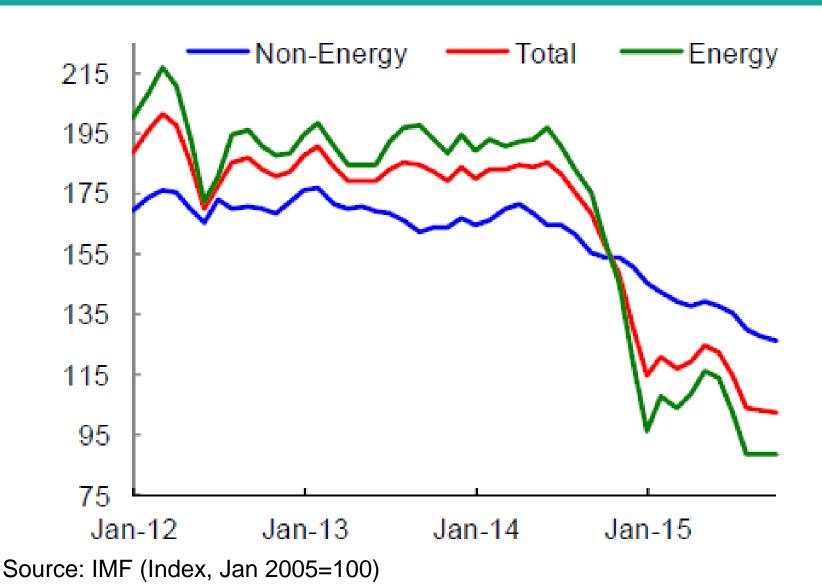
Source: Mckinsey



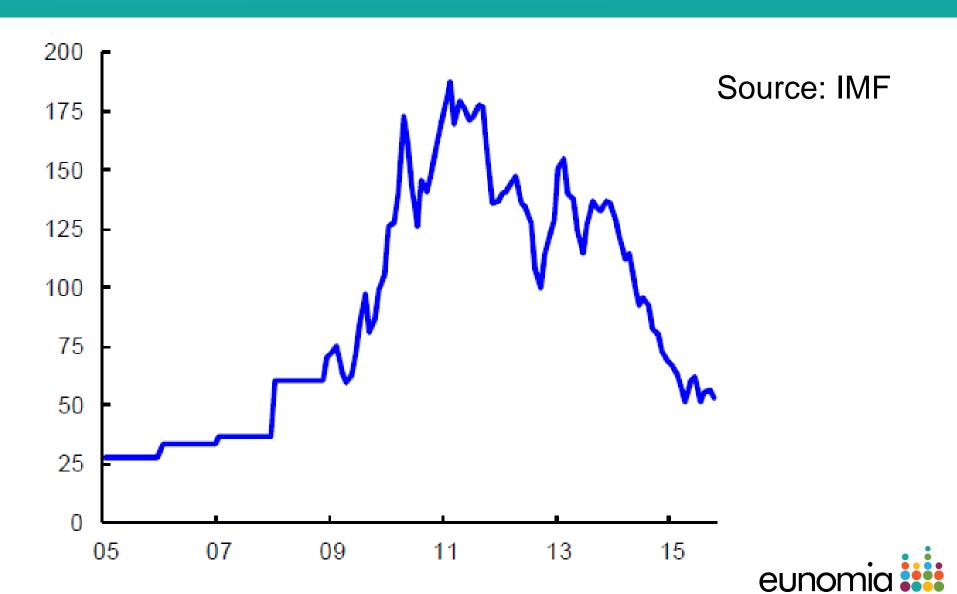


José Antonio Ocampo (2013) Super-cycles of Commodity Cycles of Commodity Prices Since the Mid-nineteenth Century, Presentation at the IMF, March 20 2013.

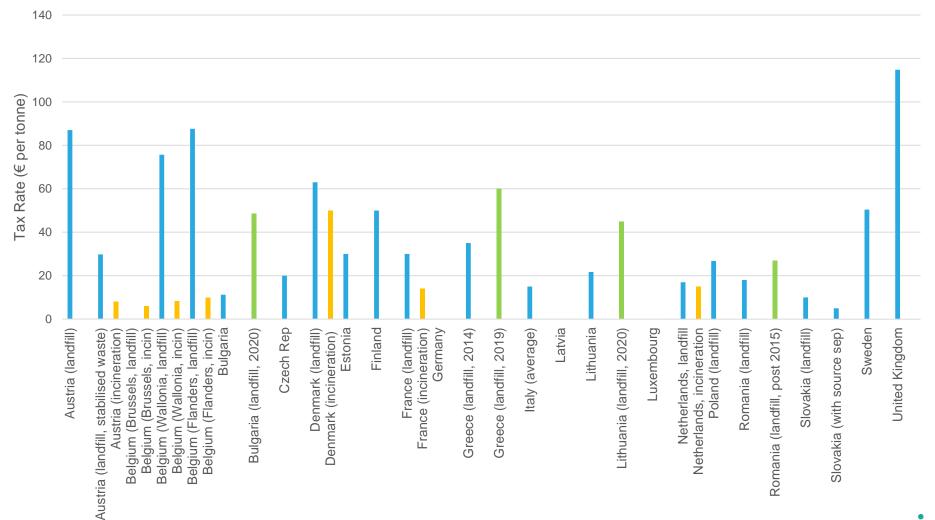
### Since Jan 2012



## Iron Ore Prices Since Jan 2005 (\$/ton)



# Supply Side - Landfill and Incineration Taxes





#### **Demand Side**

- > Green Public Procurement
  - >Services, not products?
- **EPR** 
  - > Producers take risk on material values)
- > Stabilisation funds
- Resource taxation



#### Resource Taxation

- 'Only things of relatively low value that aren't widely traded'
- Aggregates
  - UK
  - Austria (regional)
  - Denmark
  - Sweden
  - Belgium (Flanders)
  - Italy (regional)
  - France (part of TGAP)
  - Latvia
  - Lithuania
  - Estonia
  - Slovenia
  - Czech Rep ('fees')
  - Hungary (royalties)



#### **Resource Taxation**

#### Others

- Peat (Austria (regional), Estonia, Latvia, Lithuania)
- Amber (Lithuania)
- Portland cement (Malta)
- Oil shale (Estonia)
- Phosphate rock (Estonia)
- Crude oil, superior quality coal, low quality coal, uranium, thorium and other extractive activities (Romania)
- Medicinal mud (Latvia)
- Disposable cutlery (Belgium)
- Plastic bags (many)
- ODCs / CFCs (Czech Rep, Denmark, Latvia, Slovenia, Spain)
- Land use change (Czech Rep)
- PVC (Denmark)
- Pesticides (Denmark)
- N-Fertilisers (Denmark)



#### **Resource Taxation**

- Others (cont/)
  - Phosphate in feed (Denmark)
  - Batteries (Denmark)
  - Edible park snails (Latvia)
  - Tyres (many)
  - Mattresses / bedding (Malta)
  - Packaging (not always widely applied as taxes)
  - Packaging prevention levy (Belgium)
  - Chewing gum (Malta)
  - Soil pollution taxes (Aragon, Spain)
  - Transmission lines / mobile masts (Asturias, Canary Islands, La Rioja (Spain))
  - Water (not just 'charges')
  - Snow guns (water use) (Austria (regional)



#### An EU Wide Resource Tax

- Differentiates:
  - By material type
- Targets:
  - Everything
    - Ores
    - Raw materials
    - Packaging
    - Products
- Paid by all those purchasing the above, or the first importer

## **Dealing with Competitiveness**

- Border tax adjustment
  - Main reason for EU-wide application
  - WTO compatible if:
    - Equal treatment (not trade distorting)
    - Fair
    - Mechanisms for producers to demonstrate superior performance....
    - .... verification mechanism required
- Overcomes one of the main drawbacks of ETS
  - No argument for exemptions related to 'leakage'
  - Energy intensive industries covered



#### What's the Prize?

- Reduced resource consumption
- Increased use of secondary materials relative to primary
- Enhanced commercial logic of CE business models
- Potential source of revenue for funding natural capital
- Stimulates system-wide change
- Greater certainty in driving change (taxes are not so volatile as prices!)





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