

# Making you economy circular is logical, also from a financial perspective

Business model and finance are important enablers



# This presentation in one slide...

- A linear economy is not sustainable and is increasingly inefficient and expensive
- If you are dependant of resources, you need to rethink your business
- Becoming circular is a significant change in doing business
- Especially look outside the boundaries of your company and collaborate:
  - Within your value chain
  - With your enablers, like financiers

# The Scottish view...



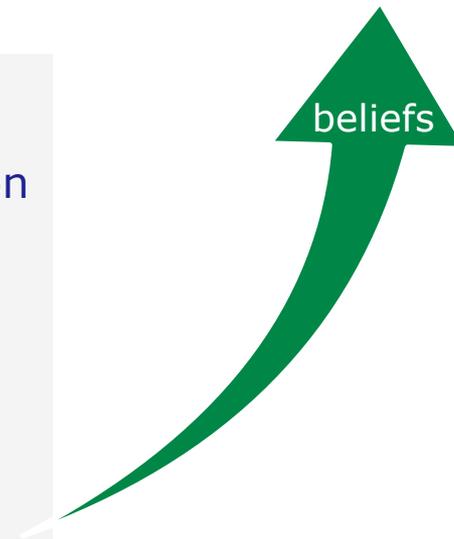


*Voor een waardevolle toekomst*



- Dutch Pension service provider
- 2.7 million participants of 8 pension funds
- €200 bln AuM
- Annual ROI: 8.4% (1970-2015)
- **Mission: Help people to realise a valuable future**

- Tomorrow is as important as today
- Quality of life is a goal, money is a means
- A good pension has more value in a liveable world



# Working Group *FinanCE*



# Goals of the Working Group on *finanCE*

(as announced on Oct14, Barcelona CE100)

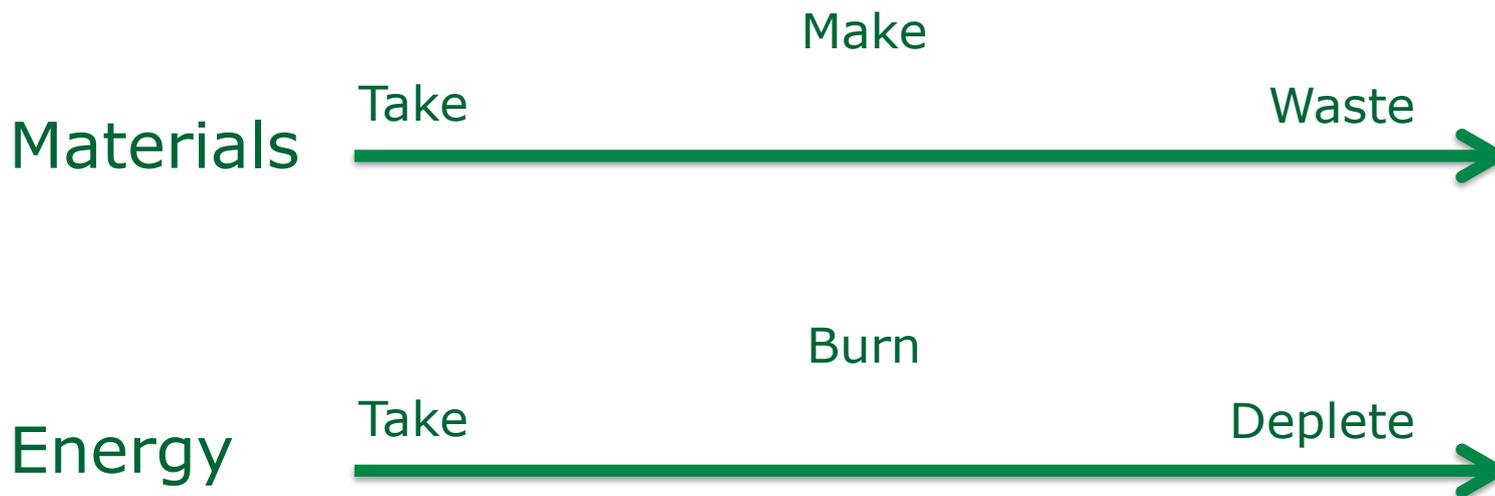
1. To **understand** the implications of the circular economy on the business- and financing models of companies, and macro-economic impact
2. To determine how the transition to the circular **economy can be supported and accelerated by the financial system (banks and investors)**.  
Including identifying potential changes required to the business model and product offerings
3. To co-develop and share communication strategies and tools to make the transition **clear and tangible for our colleagues, clients and academics**.



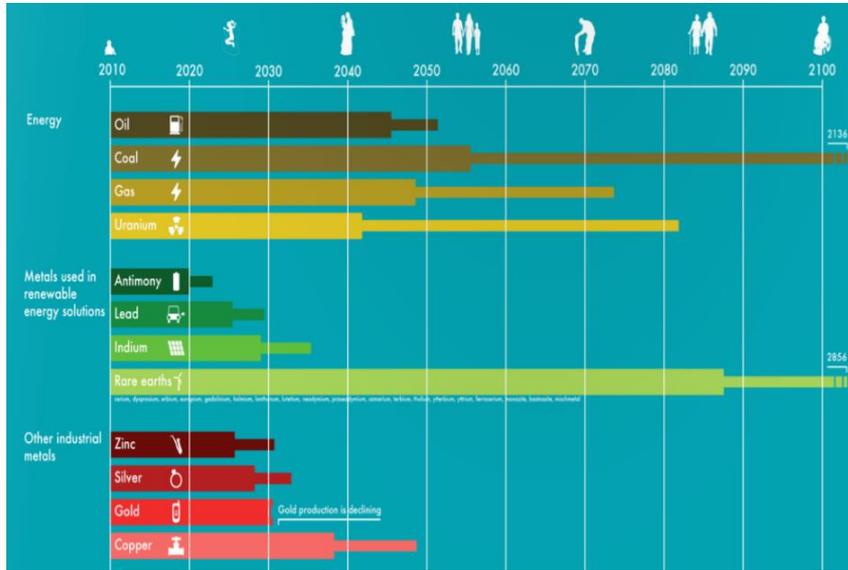
# Our economy is linear by design

A circular economy is one without waste, where  
(1) all resources are reused [preserve the value]; and  
(2) products are produced with renewable energy.

This is contrary with our current linear economy:



# A linear economy is not sustainable...



Important resources run out



1.8 billion more middle class consumers, consuming a lot



Rise of demand and less resources  
→ Leading to price volatility, high price rise for numerous products, inflation and economic instability

# ... and increases societal challenges

For example:



Incinerated  
7,6 mln tons (70%)



Collected:  
3,3 mln tons (30%)



Necessity of **virgin** feedstock



1 kg cotton  
needs  
10.000 liters  
of water



84% is downcycling



Metals (aluminum, steel), glass, plastics and (rare) metals like gold, cobalt, lead, silver and indium. The wiring consists of copper and plastics.



- Resources run out
- Health problems

## Microwaves and dishwashers dominate e-waste mountain

19 April 2015 | Technology



Only 7% of the global e-waste mountain is made up of phones, computers and printers

Old kitchen, bathroom and laundry equipment made up 60% of the 41.8 million tonnes of electronic waste thrown away in 2014, suggests a report.

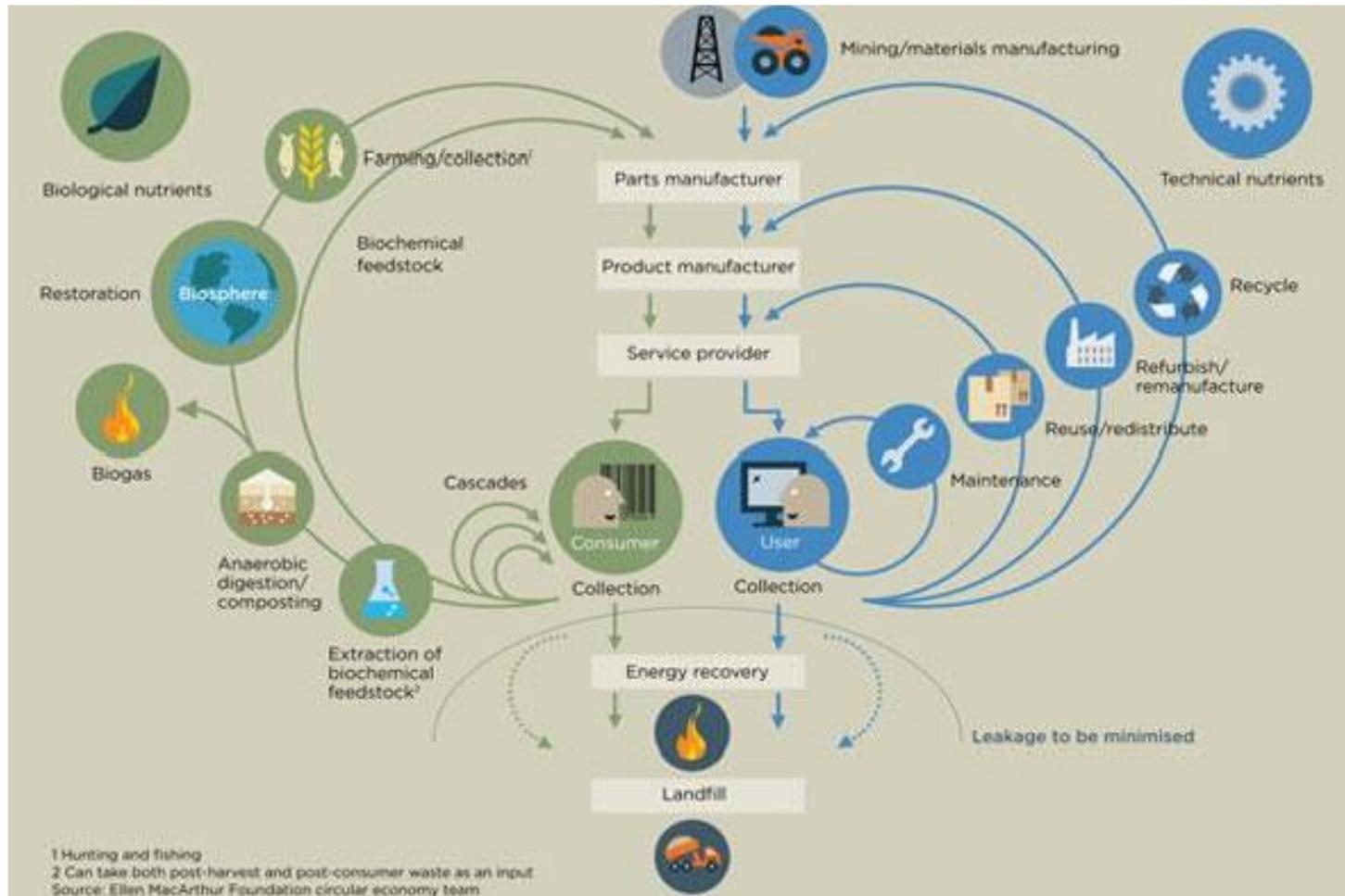
"Worldwide, e-waste constitutes a valuable 'urban mine' - a large potential reservoir of recyclable materials," he said.

Buried within the 41.8 million tonnes of waste was more than 16,000 kilotonnes of iron, 1,900 kilotonnes of copper and 300 tonnes of gold as well as other precious metals such as palladium.

The combined value of all these valuable resources was about \$52bn (£35bn) estimated the report.

Source:  
[WWW.BBC.CO.UK](http://WWW.BBC.CO.UK)

# Circular economy as an important sustainability path



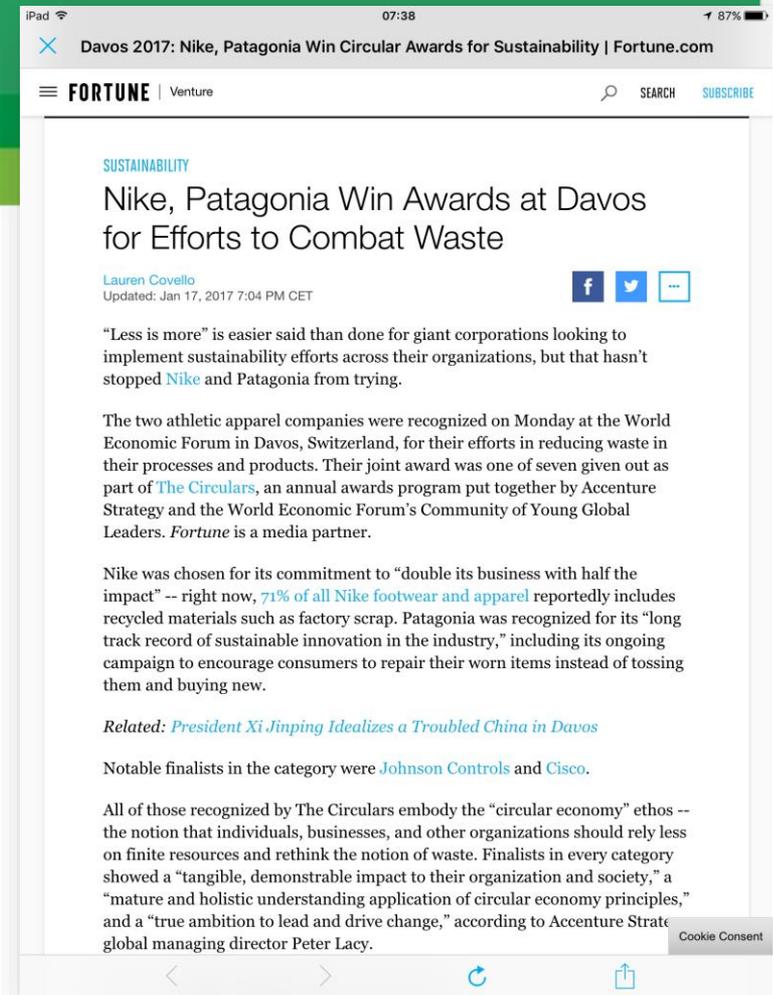
# .... and economical opportunity

- **For businesses**

- New business
- Customer relation
- Corporate social responsibility

- **For societies**

- Waste handling
- Innovation incentive
- Economic stability
- Energy efficiency
- Externalities have to be paid somehow, sometime
- Improves the resilience of our economies
  - Helps modernising the economies
  - On the labour market (job creation, mainly lower skilled labour)
  - On lowering resource dependency



# Is sustainability/transition to a CE expensive?

No, it is a positive business case:

- Lower resource costs (*and more controlled cost developments*)
- Less energy for production
- More collaboration in value chain leads to less errors
  
- Less dependent of other countries
- Higher incentive for innovation
- More jobs (100.000 in EU)
- Less costs of waste handling (100 mln tonnes in EU)
- Higher economic growth

**BUT A LOT OF WORK NEEDS TO BE DONE!!**

# A circular economy can help Portuguese economy

- Resource efficiency (oecd, 2012):
  - Imports of goods: 72 billion euro
  - Export of goods: 58 billion euro
  - Trade balance of goods: -14 billion euro

→ A circular economy reuses resources

- Employment (oecd, 2012):
  - Unemployment rate: 15.9%
  - Long term unemployment: 49%

→ A circular economy is labour intense

# It requires a important change in business strategy and business organisation

## A business model 'describes the rationale of how an organisation creates, delivers and captures value'

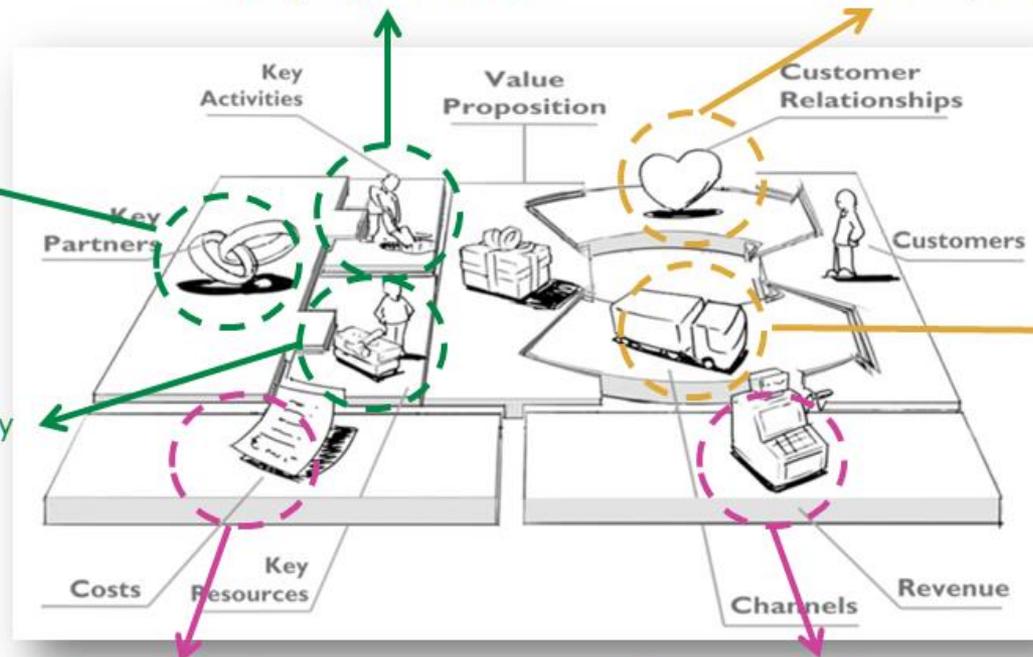
A. Osterwalder and Y. Pigneur

More dismantling existing products than using virgin feedstock

Long term relation, perhaps different owners than customer (intermediate)

Collaborative models, long term partnerships, cooperate in the value chain

Asset management becomes increasingly important



Different cost drivers and cost structure

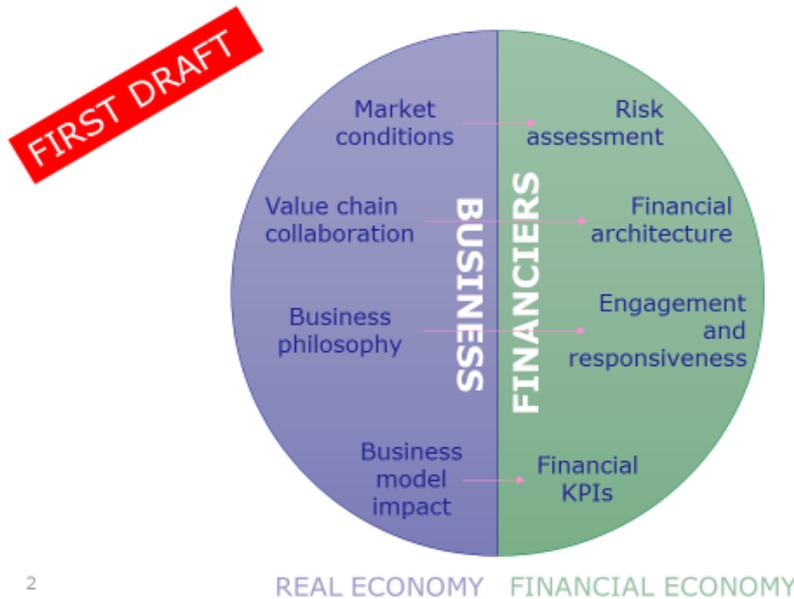
If pay per use / lease, stable cash flow, but no full payment at transaction

- **New business models:**
  - Keep control over the resources (new inputs)
  - Service concepts to keep product in use
  - Pay for use in stead of paying for ownership
- **Different revenue streams cause different view on 'financial success'**
  - Indicators like solvency, working capital, consumer retention
  - Companies need different competences (like product design, value chain collaboration, customer relationship, logistics)
- **But also linear risks need to be priced!**

# Importance of financiers to adapt

**The dominant economic paradigm is still linear:** financial perspectives like risk assessment, financial indicators, education, etc

## FINANCIAL IMPACT OF GOING CIRCULAR; Framework for identifying dissimilarities between Linear and Circular



## Following and adapt to CE is relevant for financiers

1. Increasingly “non-eco business” implies **risk**, and that is where our exposure is
2. Sustainable business models **adapt better** to a dynamic environment
3. To understand the ‘**new economy**’ better
4. Non-financial value is increasingly important for **stakeholders** (and stakeholders are increasingly important for business)
5. Corporate responsibility: **where you can have impact, you have a responsibility**. Awareness that money (financiers) steers business decisions (management)
6. We experience the **macro-economic impact** of non-eco behaviour...

# Is it an automatic transition?

No, it is a complex transition

## **Linear (and fossil) are the default:**

- **Governments think linear:** there is no real level playing field (tax, waste handling, subsidies, externalities unpriced)
- **Consumers think linear:** throwing away is still the easiest and cheapest way
- **Supply chains think linear:** Collaboration within the chain is not custom

**All enablers and businesses should collaborate to make it a managed transition**



For questions, hints,  
remarks (or complaints):

[kraf@pggm.nl](mailto:kraf@pggm.nl)