



*farnet*  
fisheries areas network



# Introducing the **CIRCULAR ECONOMY**

in fisheries & aquaculture areas



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Saint-Jean-de-Luz, 21 Novembre 2018

# Why?



➤ We are using **>1.5 planet's** worth of resources **every year!**

➤ ***TWO planet's worth by 2050***

**NOT**  
***SUSTAINABLE***

# Why?



- Over 30% of food produced goes to waste => **INEFFICIENT** *use of resources*



# Why?



**1.3 billion tonnes of solid waste  
worldwide every year =>  
2.2 billion tonnes by 2025**



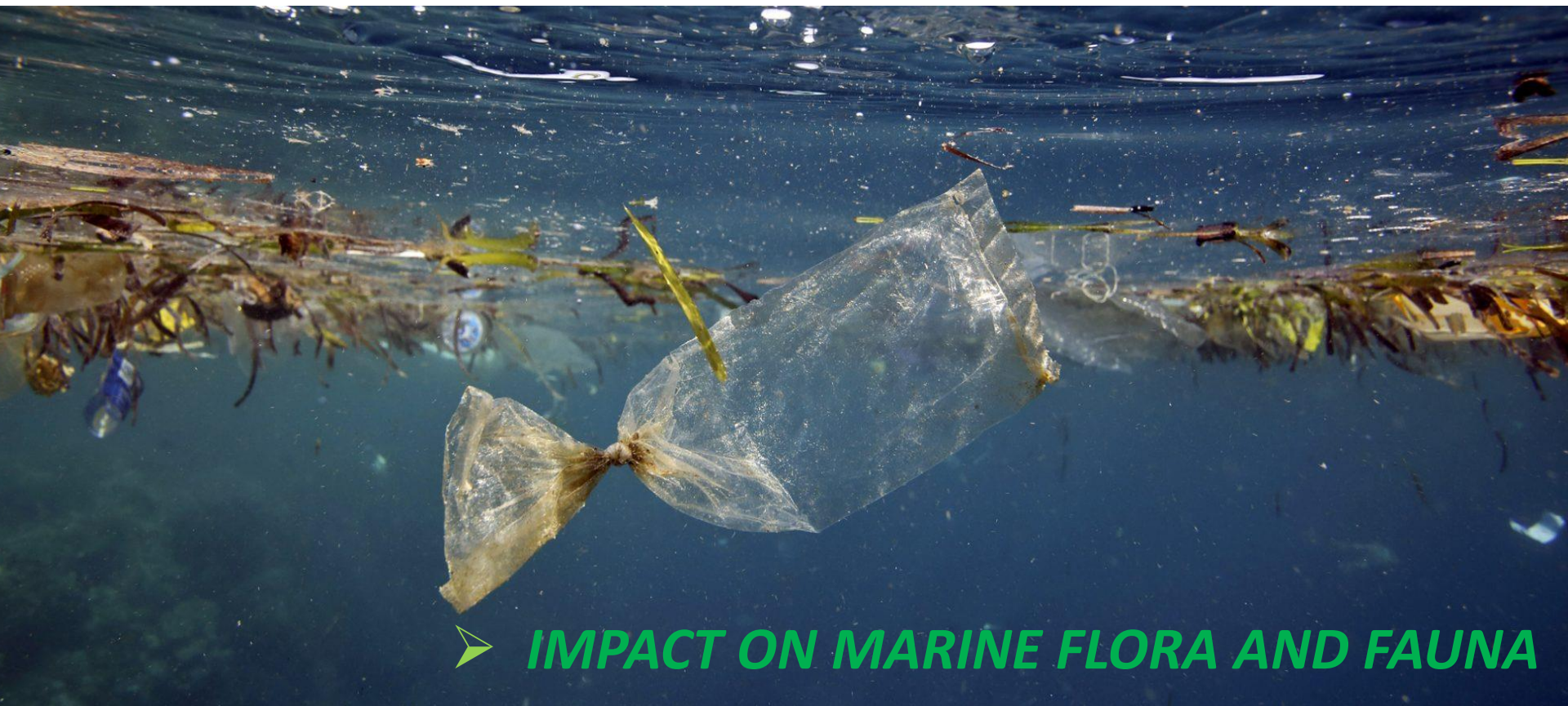
DEAN IRVINE / CNN

- Landfill
- Incineration
- Toxins
- Green house gases...

# Why?



- **5-13 million tonnes of plastic => oceans**
- **500 000 tonnes of plastic => the sea every year – just in the EU**



➤ **IMPACT ON MARINE FLORA AND FAUNA**



## ➤ Costs & vulnerability

➤ Europe **imports 62%** of the materials it uses for production processes

➤ **OPPORTUNITIES** for **increased value**, new **jobs** and a more **healthy environment**

[The Ellen MacArthur Foundation's introduction to the circular economy](#)



# What?

3 RS



Reduce



Reuse



Recycle



## 3 main elements

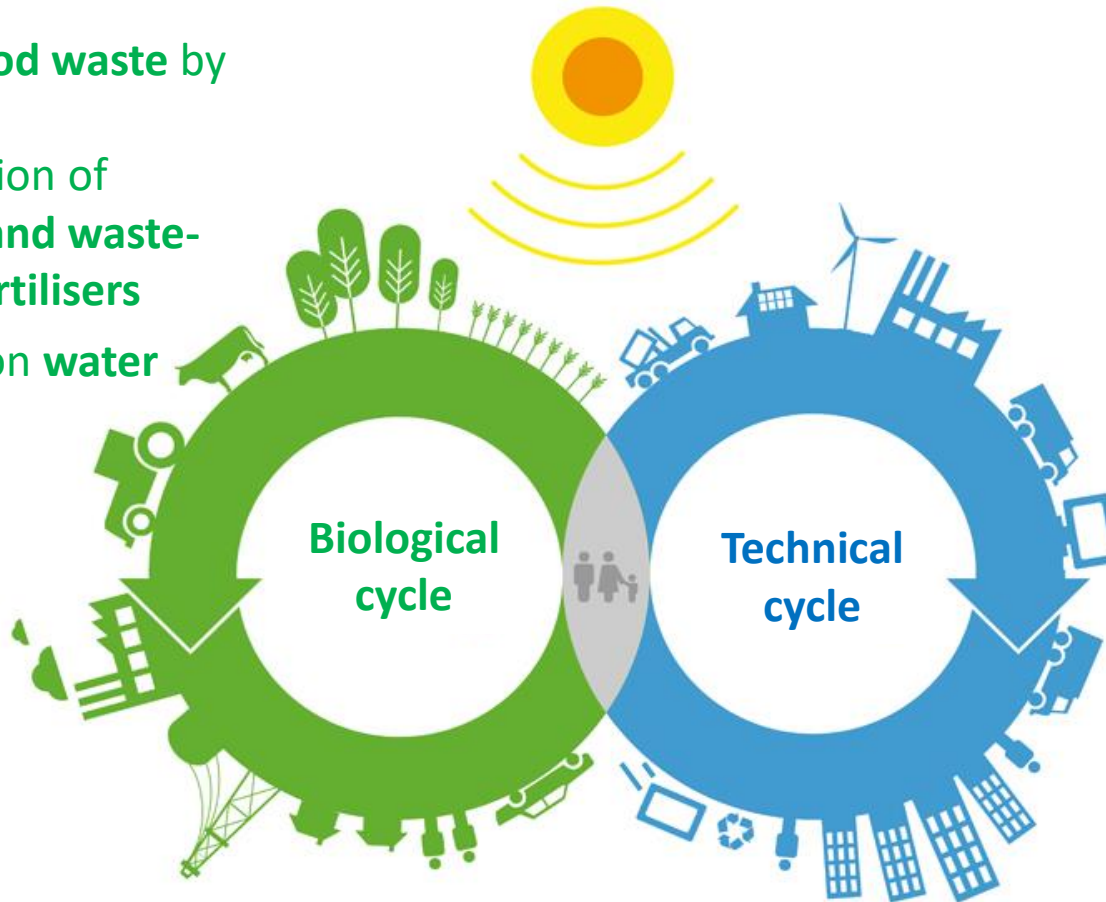
- Designing products that use fewer raw materials and minimise waste and pollution
- Keeping products and materials in use as long as possible
- Regenerating natural systems

-  **Growth is decoupled from consumption** of finite resources
-  **Underpinned by a transition to renewable energy sources**

# EU context: a circular economy action plan



- ✓ Halve food waste by 2030
- ✓ Recognition of organic and waste-based fertilisers
- ✓ Actions on water reuse



- ✓ **Eco-design** working plan for
  - reparability
  - durability
  - recyclability
  - energy efficiency
- ✓ **European plastics strategy**
- ✓ Targets for **recycling packaging**
- ✓ **Reduction of landfill to a max 10% of municipal waste**
- ✓ **greener products on the market**

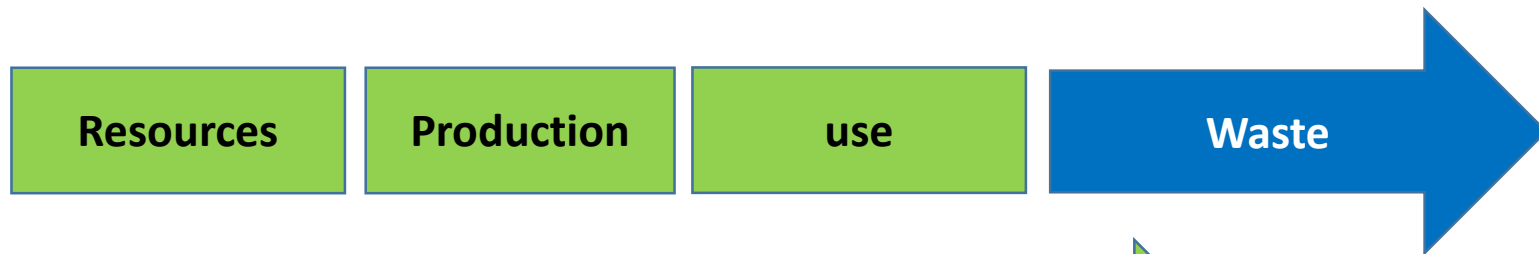
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*Promote material re-use and industrial symbiosis*

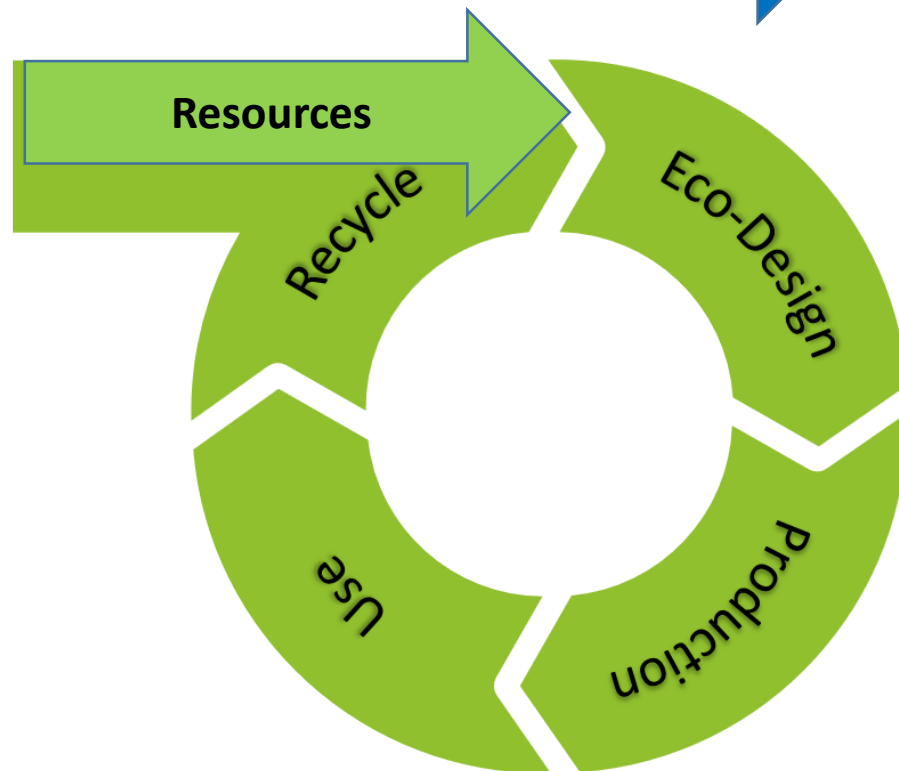


# A role for FLAGs?

*Re-thinking the future from the bottom up!*



- 95% of you said **FLAGs can play a role**
- 67% have **allocated funds** for circular economy actions

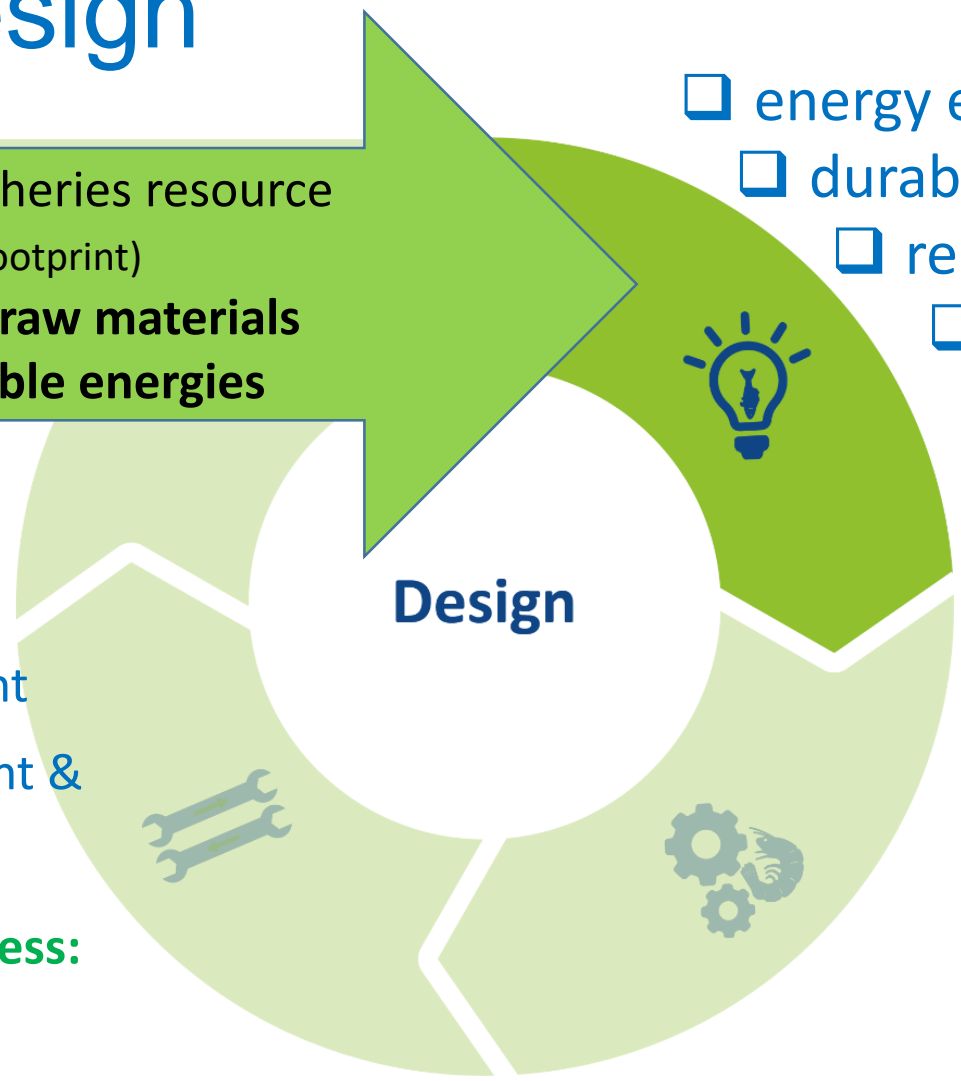


# Sustainable sourcing and eco-design



- **Sustainable use** the fisheries resource
- **Local** fish (lower carbon footprint)
- Better choice of **other raw materials**
- Move towards **renewable energies**

- energy efficiency
- durability
- reparability
- recyclability



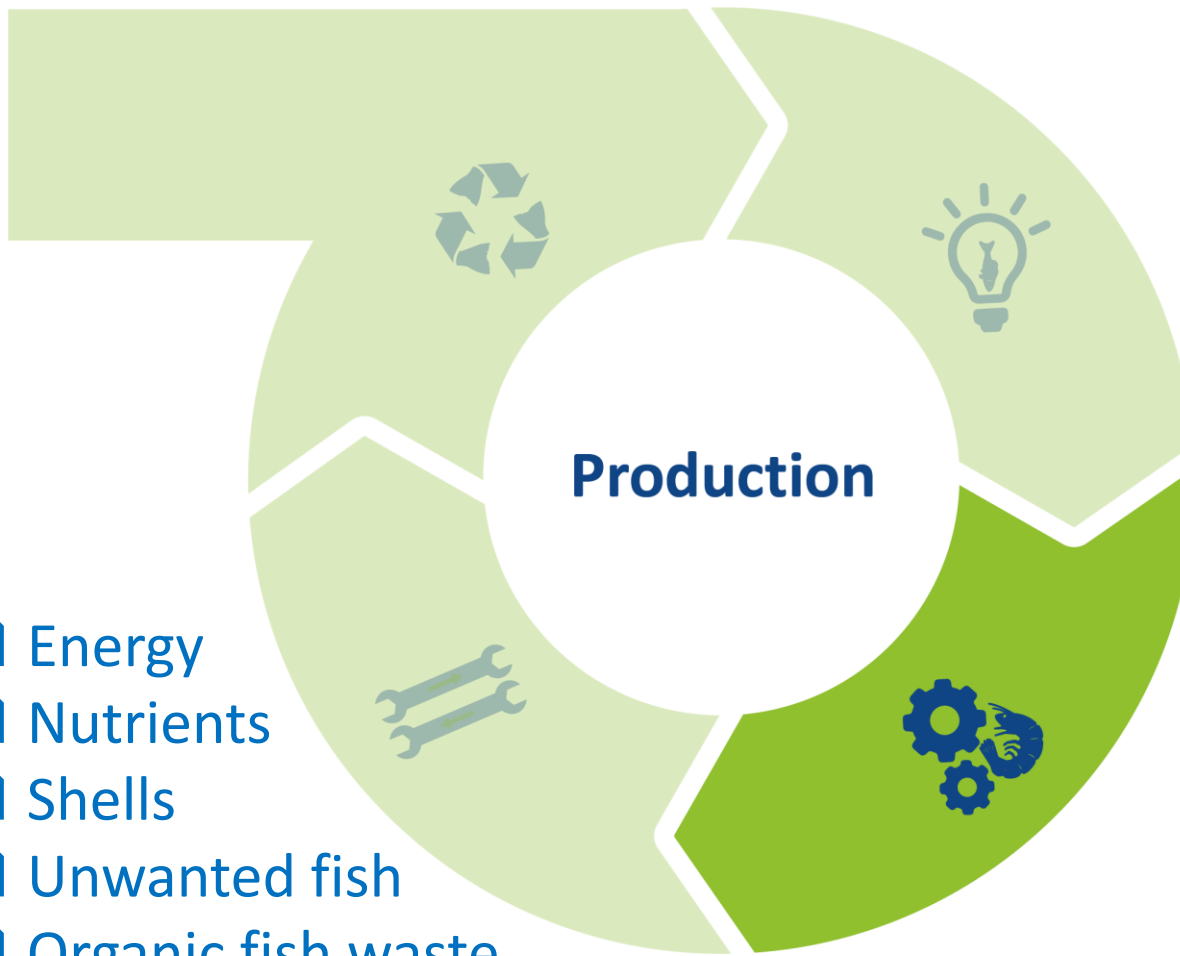
## More eco-friendly:

- ✓ Fishing gear
- ✓ Aquaculture equipment
- ✓ Supply chain equipment & machines
- ✓ Packaging

## Use of less:

- ✓ Fuel
- ✓ Ice
- ✓ Plastic

# New uses for by-products & waste



- Energy
- Nutrients
- Shells
- Unwanted fish
- Organic fish waste

- ✓ Use of **heat from production**
- ✓ Nutrients from aquaculture for **growing vegetables** (aquaponics)
- ✓ **Fertiliser** from unwanted seaweed & organic fish waste
- ✓ **New product lines** from unwanted fish
- ✓ Household **objects** and **construction** materials from crushed shells



# Sharing, repairing & re-using

for product life extension



- Sharing
- Leasing
- Reconditioning
- Maintenance & Repair
- Re-distribution/ second hand use
- Pooling distribution

- ✓ Sharing **equipment & space**
- ✓ Cleaning **fish crates & oyster pouches** for re-use
- ✓ Repairing **fishing nets, floats, drums...**



# Recycling (or composting)

of end of life materials



- Plastics
- Polystyrene
- Ropes
- Metals
- Wood
- Engine oil
- Composting of organic matter

Fishing nets for:

- ✓ **decoration**
- ✓ **3D printing**
- ✓ **Clothes**

Polystyrene fish boxes:

- ✓ for **plastic pellets**

Other plastic waste for:

- ✓ **Artificial reefs**
- ✓ **Plant pots**

Ropes for

- ✓ **Baskets**
- ✓ **Tourist souvenirs**



# How?



- Know your area! **RETHINK** your area!
- Identify and **INVEST** in the innovators
- Build **LINKS**, close the **LOOP**

***“one man’s trash is another man’s treasure!”***