

European Social Partners' project on Circular Economy Cluster seminar France - Greece - Italy - Poland

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What is Circular Economy?



• European Commission "Circular Economy Action Plan" of 2015 definition:

An economy "where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised".

 A central component of the EU's efforts to develop a sustainable, low carbon, resource efficient and competitive economy

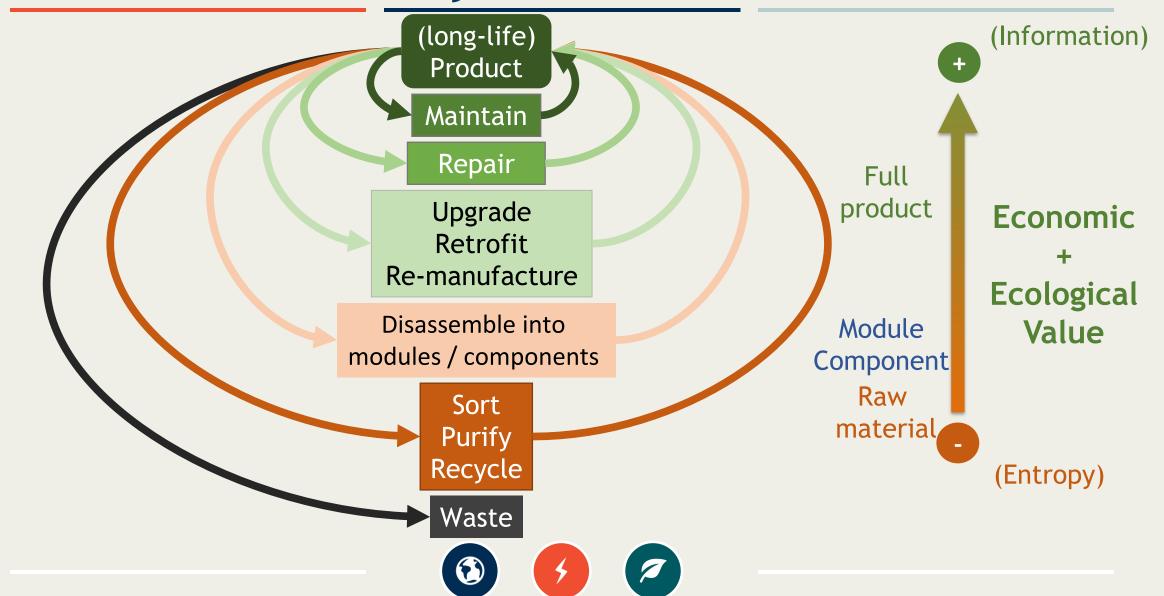






Circular Economy: illustration





Transition to a Circular Economy



- Product design & manufacturing for:
 - Longer lifetimes;
 - More maintenance, repair, upgrade, re-use;
 Less frequent replacement.
- More intense use via:
 - Sharing;
 - Lending or leasing models;
 Fewer units to serve the same market.
- Higher proportion in products of:
 - Recycled materials;
 - Sustainably-sourced renewable materials;
 Less primary, non-renewable raw materials.
- More waste being recycled or prepared for re-use.









"Closing the loop - An EU action plan for the Circular Economy" COM(2015) 614 final

- Requirements on products: durability, repairability, recyclability;
- Extended Producer Responsibility at end of life;
- Guidance on and promotion of industrial symbiosis;
- Research on premature obsolescence;
- Circular Economy criteria in Green Public Procurement;
- More ambitious recycling targets for municipal waste;
- Quality standards for secondary raw materials;
- Reflection on the handling of legacy hazardous substances in products being recycled;
- Plastics: ban of some single-use items;
- Food waste, Critical Raw Materials, construction and demolition waste, biobased materials;
- Research & Innovation.









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Setting the stage









Circular Economy Action Plan - For a cleaner and more competitive Europe

- Sustainable Product Initiative on Eco-design + product passport + support for circular business models;
- Right to repair, Substantiating green claims;
- Mandatory Green Public Procument criteria;
- Circularity criteria in revision of Industrial Emissions Directive;
- Priority application to ICT, batteries, packaging, plastics, textiles, construction, food, water, nutrients;
- Higher targets for recycling of municipal waste;
- Requirements for recycled material content in products;
- Restrictions to extra-EU export of waste.









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Increasing the ambition











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Material flow diagrams 2017 for



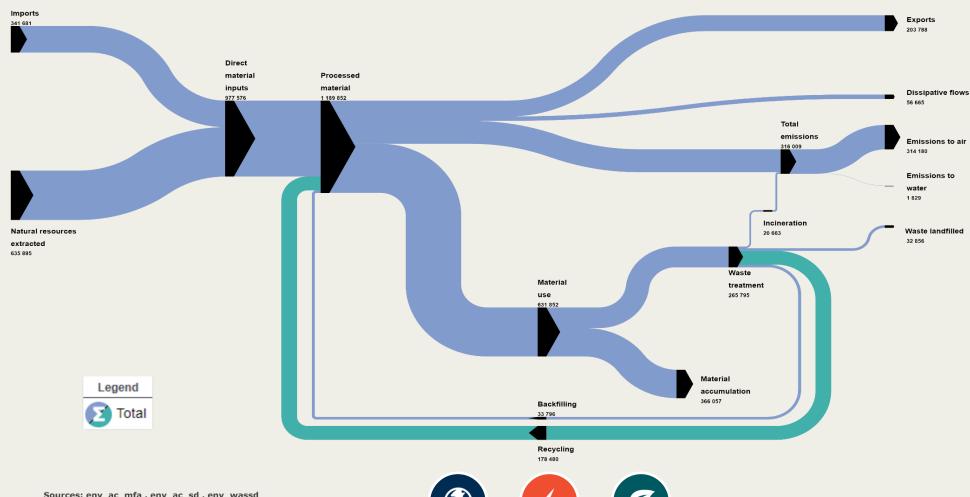
Sources: env_ac_mfa , env_ac_sd , env_wassd

Gigatonnes **Imports** 1.70 **Exports** 0.76 Direct **Processed** material inputs material **Dissipative flows** 7.02 7.98 0.26 Total emissions **Emissions to air** 2.60 **Emissions to** water 0.01 Incineration Waste landfilled 0.11 0.71 **Natural resources** extracted Material use 5.32 Waste 4.46 treatment 1.75 Legend Biomass Metal ores Material accumulation Backfilling Non-metallic mineral Fossil energy materials/carriers Recycling



Material flow diagrams 2018 for

France Thousand tonnes



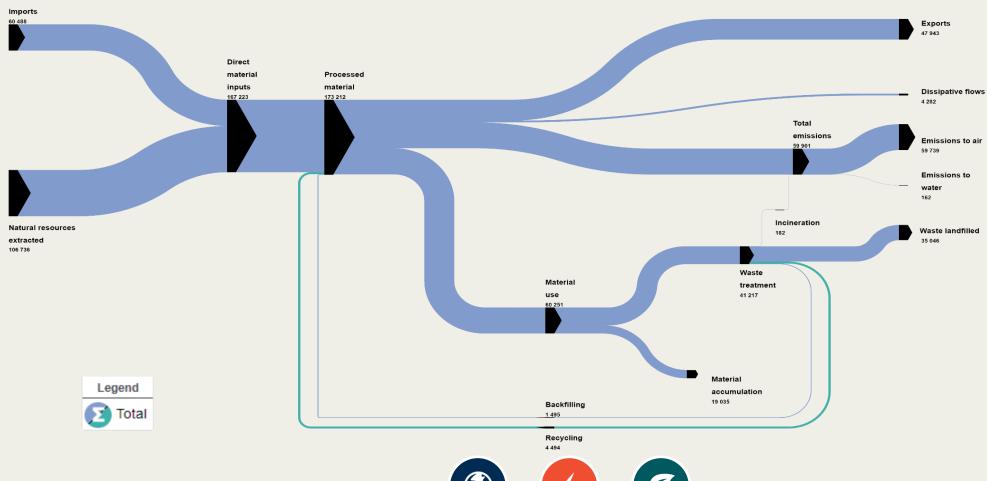






Material flow diagrams 2018 for

Greece Thousand tonnes

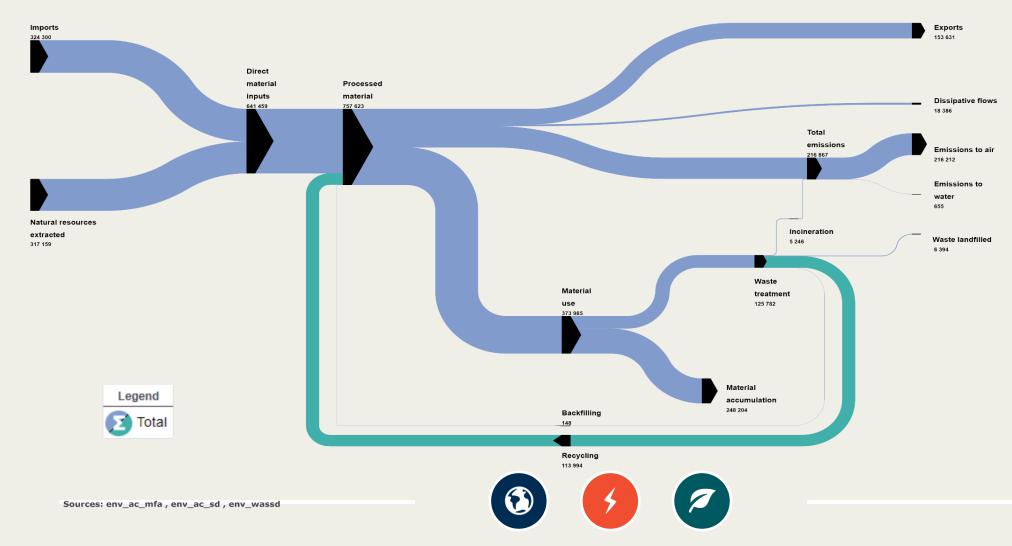




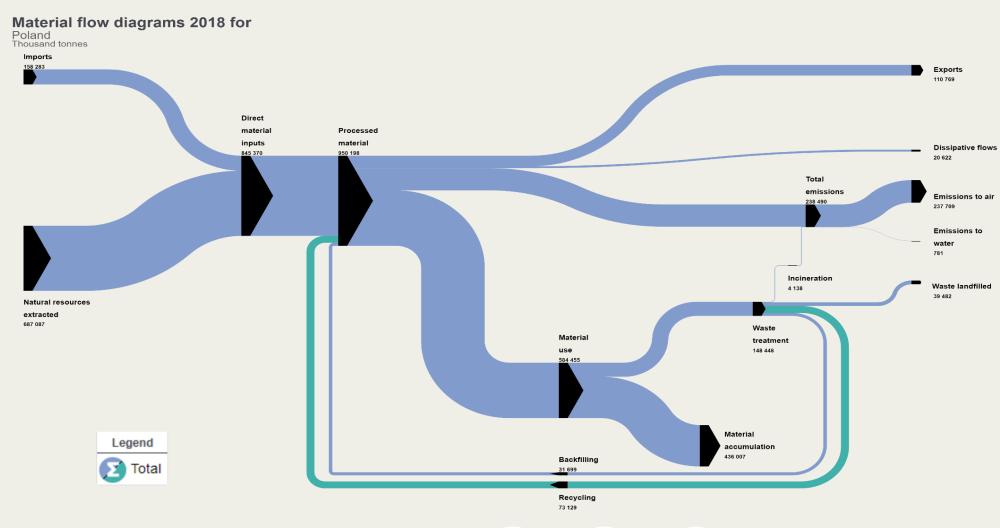
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Material flow diagrams 2018 for

Italy Thousand tonnes









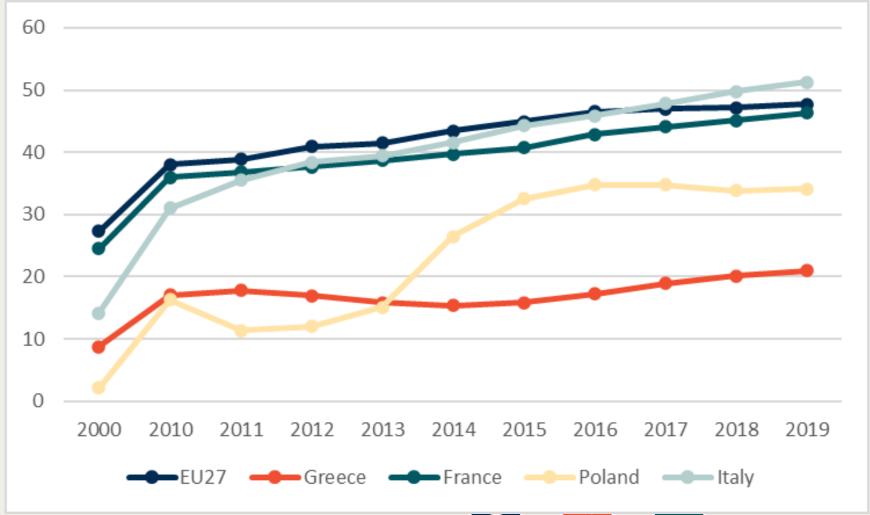




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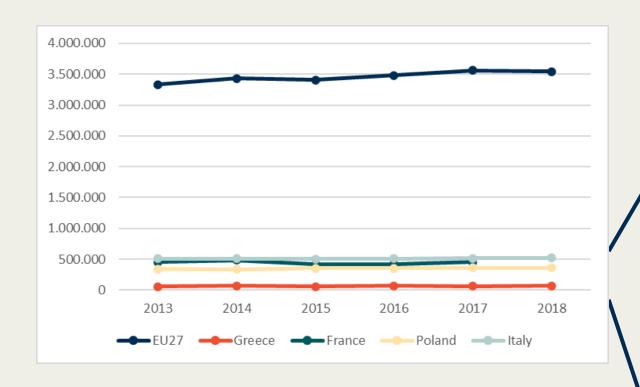
Recycling rate of municipal waste in %







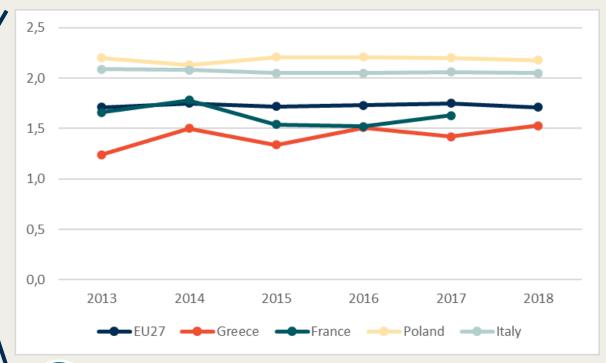




Number of persons employed in circular economy sectors

(absolute values: left; % of

workforce: below)









Impacts on employment volume and competitive position



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Employment volume and competitive position



- Employment volume: Convergent quantitative studies
 - o Limited, but **positive**, overall impact: + 250 to 700 thousand jobs for EU;
 - Sector contrasts:
 - Positive: repair, maintenance, recycyling, re-manufacturing;
 - Negative: extractive, construction, durable goods, [retail].
- Competitive position: Interviews
 - Positive impact at company level
 - Higher attractiveness of sectors for young + qualified workers
 - Circular Economy meets expectations of customers (construction materials, chemicals, basic metals)
 - Circular Economy meets expectations of qualified workers (waste management)
 - Circular Economy requirements can create market opportunities for EU manufacturers (batteries)









Impacts on qualifications & skills, forms & organisation of work, health & safety



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Qualifications & skills, forms & organisation of work, health & safety



- Qualifications & skills: Convergent studies + interviews
 - O Higher requirements:
 - Work on irregular input, adaptability (using recycled materials);
 - Reliability, quality (in design + manufacturing for longer-life products);
 - Complex equipment (automated sorting + recycling);
 - Increase in mid-level qualifications (repair, maintenance)
- Work relationships: concerns expressed by workers
 - Change in economic activity towards circularity => potential change in applicable collective agreement
 - Request by workers: to be discussed in Social Dialogue







Qualifications & skills, forms & organisation of work, health & safety



- Forms & organisation of work: limited information
 - Concerns for specific cases (sharing economy; informal economy)
 - Start-up model of new businesses
 - o "Advanced" companies for Circular Economy: also on social dimension
- Health & safety: Convergent studies + interviews
 - Handling of legacy hazardous substances;
 - Waste management;
 - Usage of secondary raw materials (e.g. dust from recovered construction materials)









Thank you for your attention, please contact us for more information



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