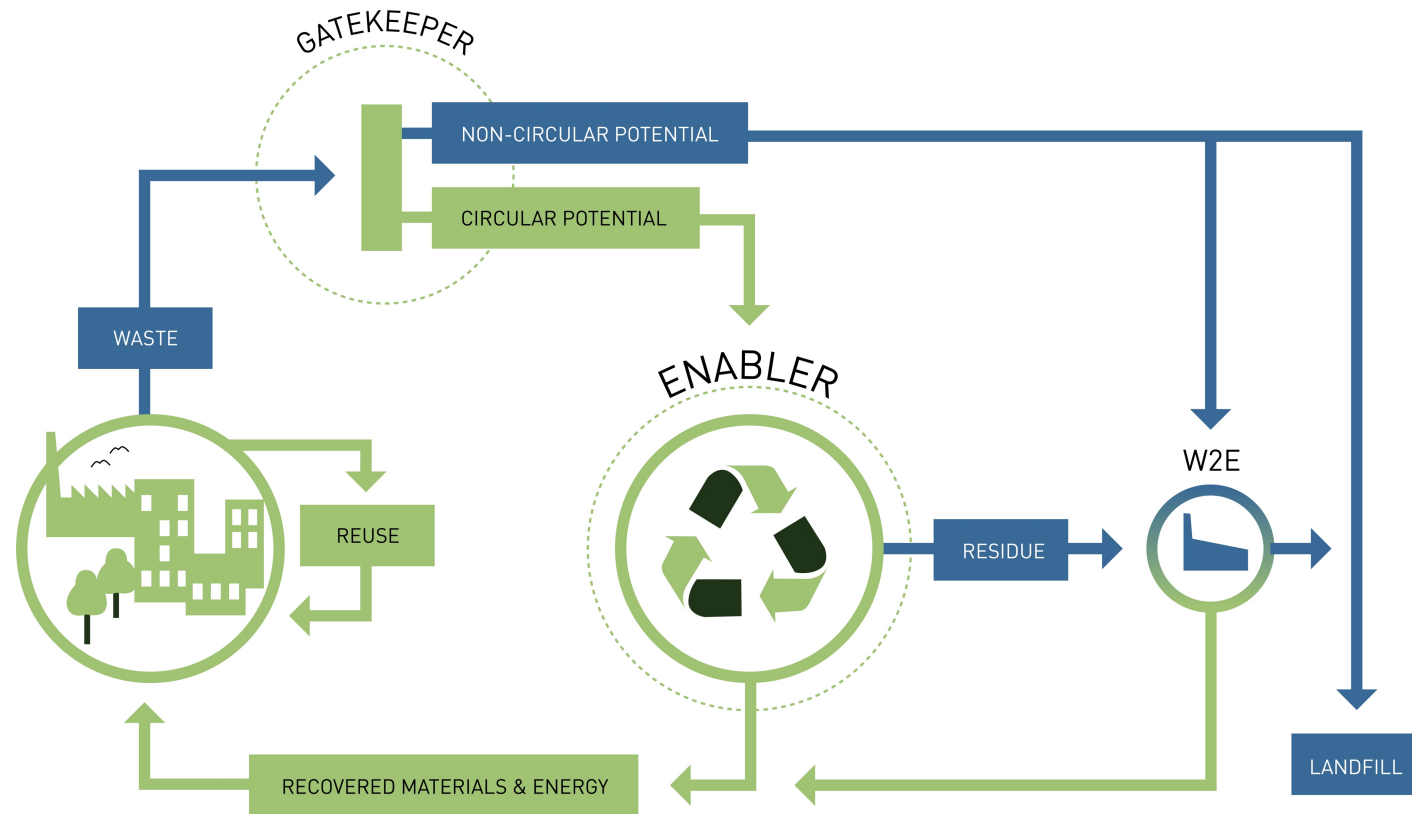


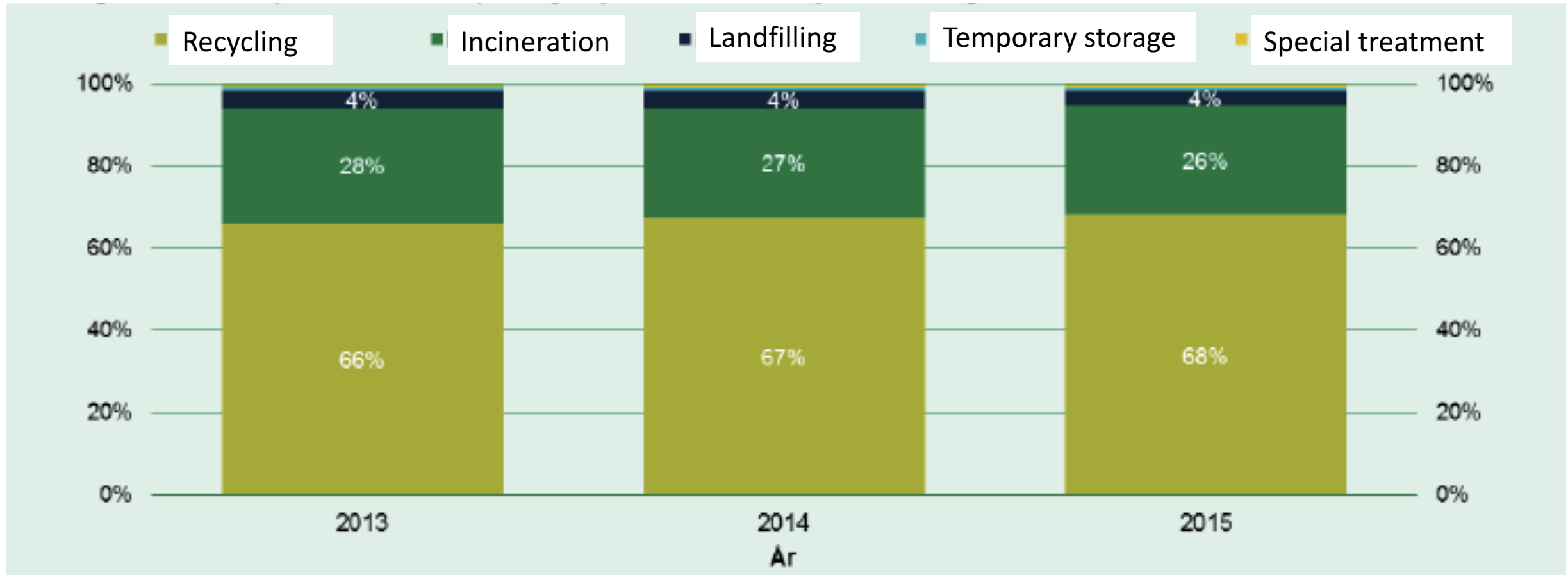
About DAKOFA

- ① DAKOFA - "Waste & Resource Network Denmark"
- ① The Danish National Member of ISWA
- ① 255 member organizations from the public and the private sector
- ① 10 network-groups
- ① 25+ courses, seminars and conferences per year
- ① Countless collaboration meetings, info-services etc.
- ① *The news on waste and resources: www.dakofa.dk*
- ① **Knowledge-based and non-political**

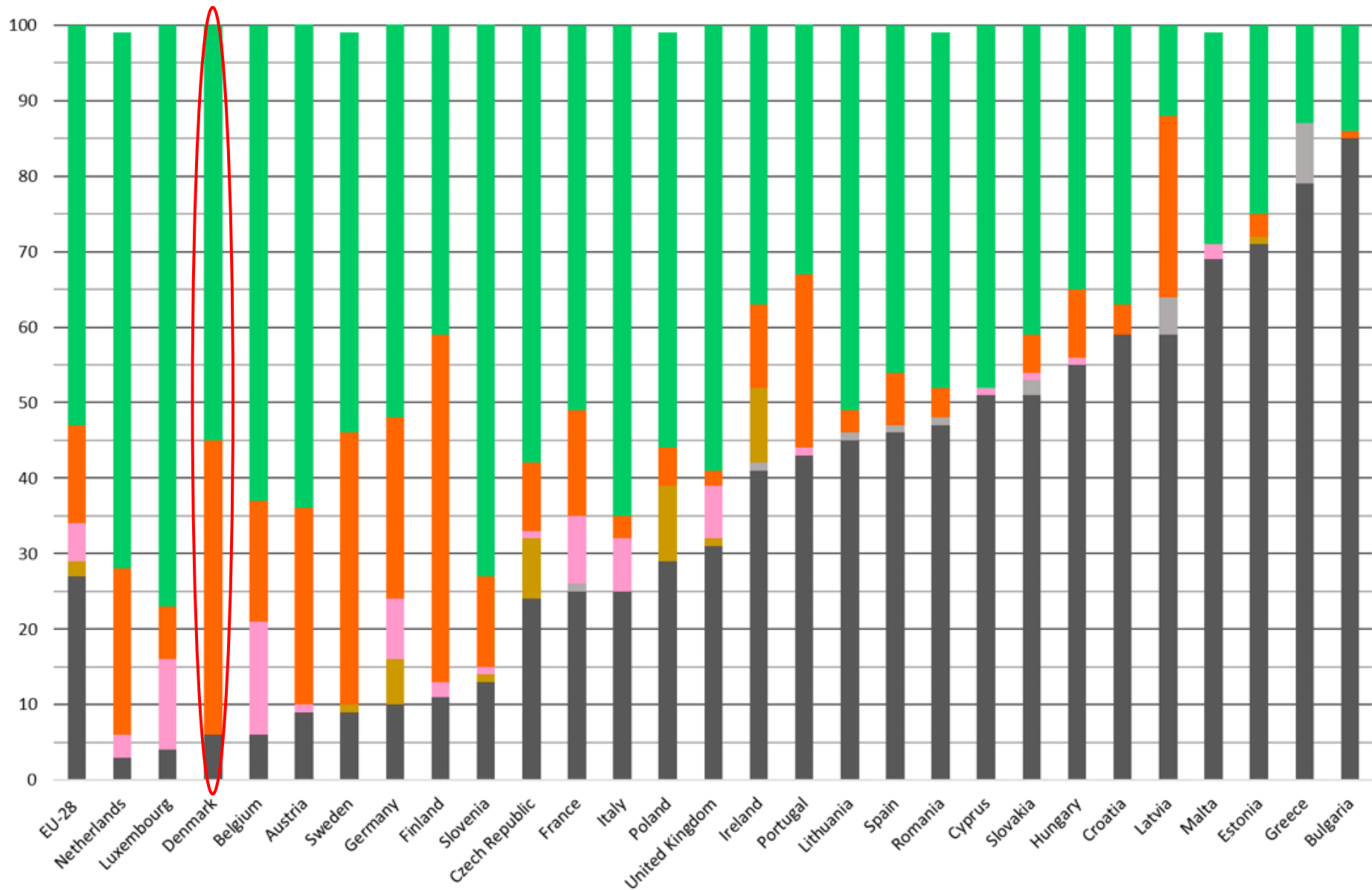
The Danish system in a circular context



Waste treatment in Denmark (all waste, excl. soil)



Source: Danish waste statistics 2015 (2017)



Waste treatment in EU in 2012 (% excl. imported waste)

- Deponering (Deposit onto or into land)
- "Opfyldning" (Recovery other than energy recovery - backfilling)
- Energiudnyttelse ved forbrænding (Incineration / energy recovery, as R1)
- "Udbringning" (Land treatment and release into water bodies)
- Forbrænding som bortskaffelse (Incineration / disposal, as D10)
- Genanvendelse (Recovery other than energy recovery - except backfilling)

Note: Excl. mineral waste eg. C & D and soil.
Reference: Waste Management Indicators (Eurostat, 2016)

National Resource Strategy 2013-2018

④ National targets with freedom of method for the municipalities

Focus areas:

④ More recycling of materials from households and service sector

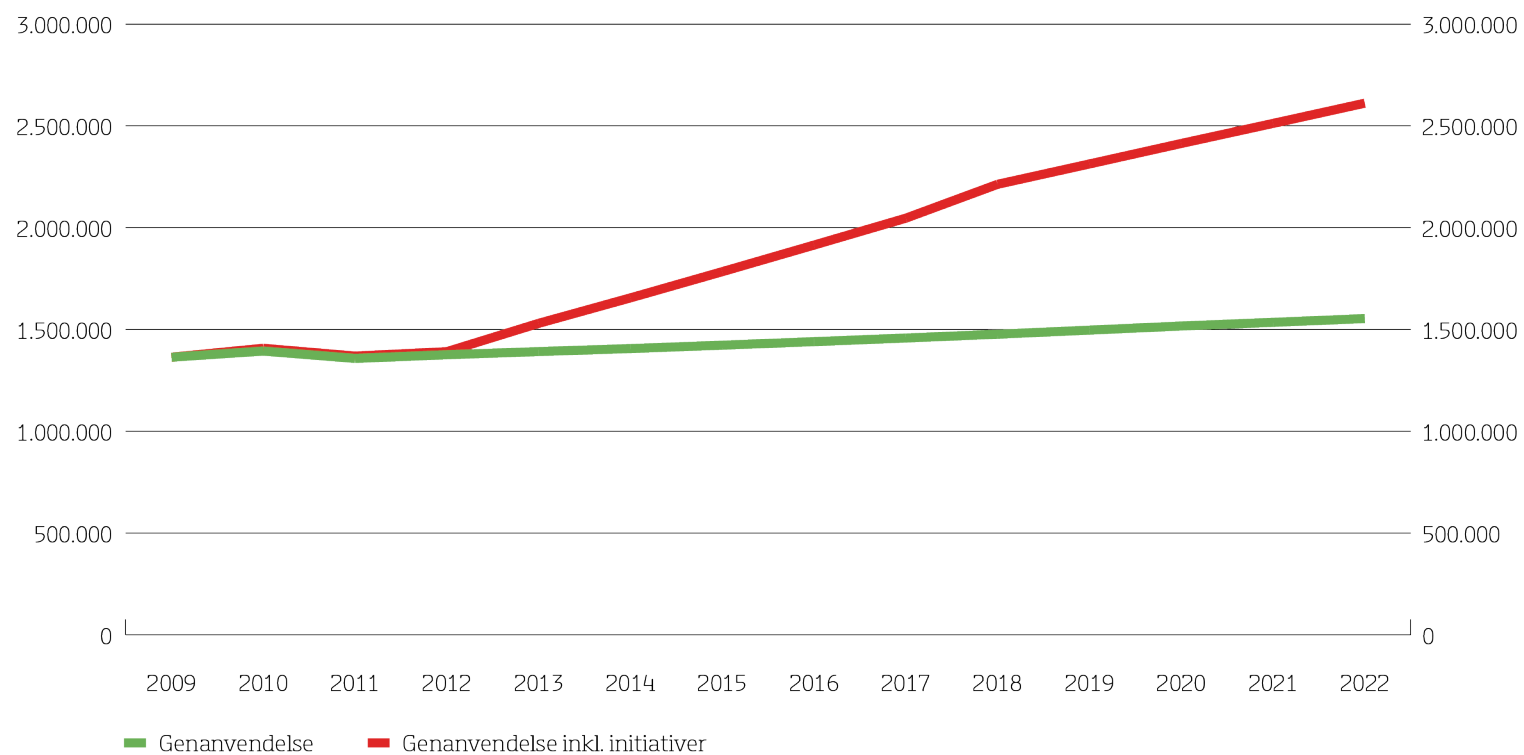
④ More recycling of materials from electronic waste and shredder waste

④ From incineration to biogas production and recycling

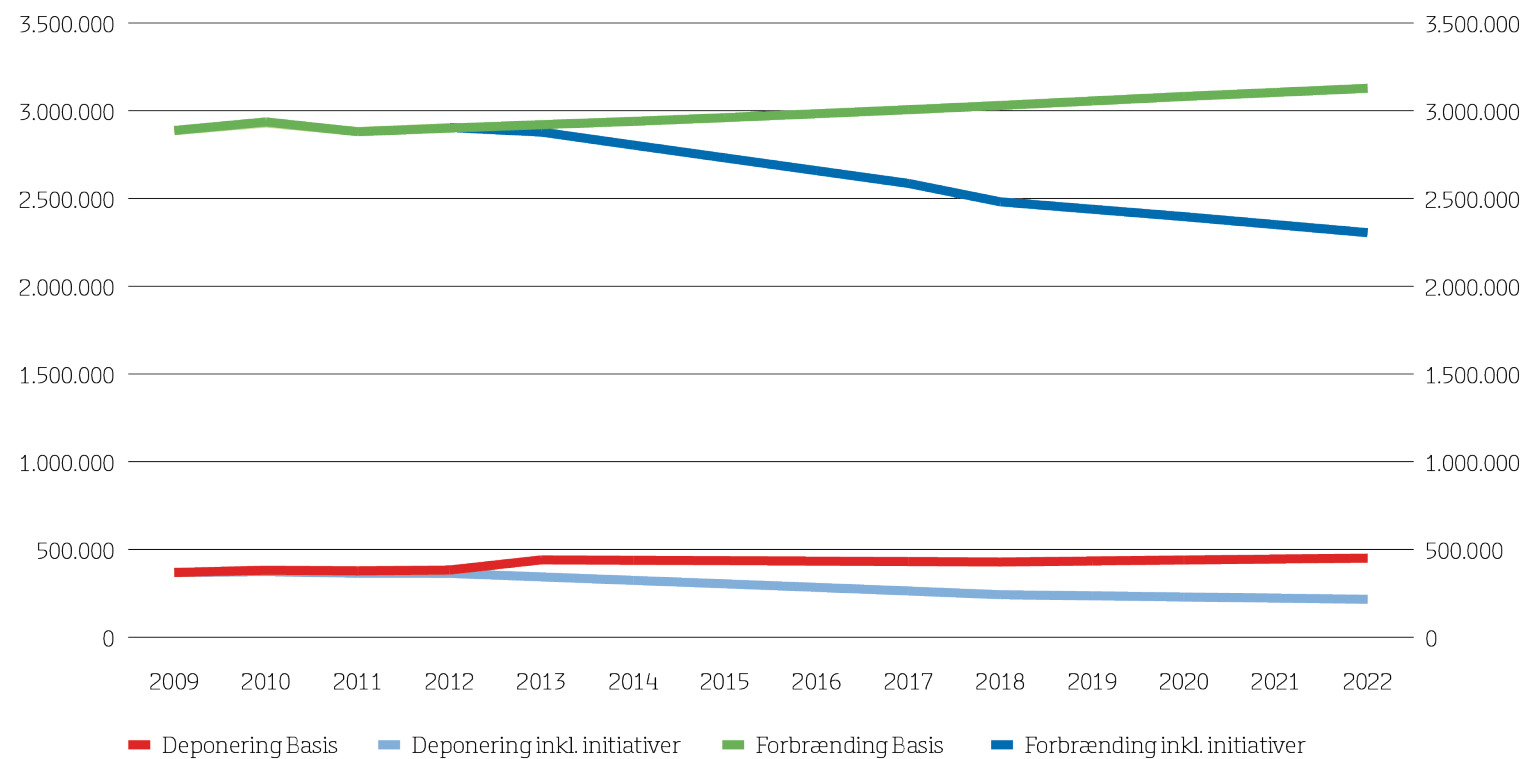
④ Better use of important fertilisers such as phosphor

④ Improve quality in recycling of C&D

Expected effects on recycling



Expected effects on incineration and landfill



Ellen MacArthurs toolkit for policy-makers

- *The impact of Circular Economy in DK*

- 🔄 Based on five sectors covering 25 % of the economy:
 - Food and beverage
 - Construction and real estate
 - Machinery
 - Plastic packaging
 - Hospitals
- 🔄 Increasing GDP by 0.8 – 1.4 %
- 🔄 Reducing consumption of selected resources by up to 50 %
- 🔄 Reducing Danish carbon footprint by 3-7 %
- 🔄 Creating 7 000 – 13 000 jobs by 2035

What's next?

2030-targets by the Danish governmental Advisory Board for CE:

- 🔄 Danish businesses will be a global leader in developing, implementing and exporting circular solutions in 2030
- 🔄 Increase resource productivity by 40%
- 🔄 Increase recycling to 80%
- 🔄 Reduce waste amounts by 15%
- 🔄 50% of the Danish population is active in the sharing-economy
- 🔄 The national 2019-2024 waste management plan is being drafted in 2018 – will it be circular?

Waste management in EU

– *the Circular Economy Package*

”Closing the loop” of product lifecycles by promoting waste prevention, increasing recycling and reducing landfilling by implementing:

- 🔄 A common EU target for recycling 65% of municipal waste by 2030;
- 🔄 A common EU target for recycling 75% of packaging waste by 2030;
- 🔄 A binding landfill target to reduce landfill to maximum of 10% of municipal waste by 2030;
- 🔄 A ban on landfilling of separately collected waste;

And also to:

- 🔄 Promote **re-use** and stimulate **industrial symbiosis**
- 🔄 Simplify and improve **definitions** and harmonise **calculation methods** for recycling rates throughout the EU; (in- or output targets?)
- 🔄 Introduce economic incentives for **greener products**
- 🔄 Support **recovery** and **recycling schemes**

Expected gains

- 🌱 Net savings of € 600 billion, or 8 % of annual turnover, for businesses in the EU
- 🌱 reducing total annual greenhouse gas emissions by 2-4 %
- 🌱 Creating 580.000 new jobs



Conclusion

Denmark:

- 🔄 Prevention, sharing-economy
- 🔄 Momentum for export of circular technologies and knowledge
- 🔄 More recycling of MSW (organic, WEEE, C&D)
- 🔄 Ensure high quality in recycling
- 🔄 Exploit BAT in W-t-E facilities to help neighbours
- 🔄 Circular Waste Management Plan?

EU:

- 🔄 Ambitious targets for prevention
- 🔄 Ambitious targets for recycling
- 🔄 Minimization of waste for landfills

Denmark and EU:

- 🔄 The overall target is to counteract the lack of primary resources in the future
- 🔄 The goal is environmental protection, prosperity and welfare

