

The definition of waste

*To discard or not to discard
is that still the question ?*

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AMC Environmental Ltd

amc



MATERIAL

DISCARD

WASTE

MATERIAL



WASTE





Is the Definition of waste a noun or a verb

- ▶ it can be both
- ▶ as a verb it is the role of governments to prevent the waste of raw materials and energy and to ensure human health and the environment are not harmed by waste
- ▶ definition in the legal framework is a noun
- ▶ Determining a material is waste makes it the subject of the Waste Framework Directive and all that flows from that
 - ▶ Collection permitting
 - ▶ Facility authorisation
 - ▶ Hazardous waste movement
 - ▶ Record keeping, reporting
 - ▶ Export/Import restrictions
 - ▶ Environmental Protection measures

Other non EU ideas on waste

Australian definitions

- ▶ (a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- ▶ (b) any discarded, rejected, unwanted, surplus or abandoned substance, or
- ▶ (c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, processing, recovery or purification by a separate operation from that which produced the substance, or
- ▶ (d) any processed, recycled, re-used or recovered substance produced wholly or partly from waste that is applied to land, or used as fuel, but only in the circumstances prescribed by the regulations, or
- ▶ (e) any substance prescribed by the regulations to be waste

USA definition of waste

- ▶ **Waste (or wastes)** are unwanted or unusable materials. Waste is any substance which is discarded after primary use, or is worthless, defective and of no use.

United Nations definition of waste

- ▶ Materials that are not prime products (that is, products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation or consumption, and of which he/she wants to dispose.

EU Definition

22.11.2008

EN

Official Journal of the European Union

L 312/3

DIRECTIVES

DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 19 November 2008

on waste and repealing certain Directives

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

draw up waste management plans. It also establishes major principles such as an obligation to handle waste in a way that does not have a negative impact on the environment or human health, an encouragement to apply the waste hierarchy and, in accordance with the polluter-pays principle, a requirement that the costs of disposing of waste must be borne by the holder of waste, by previous holders or by the producers of the product from which the waste came.

Having regard to the opinion of the European Economic and

(2) Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the

Article 3 (1)

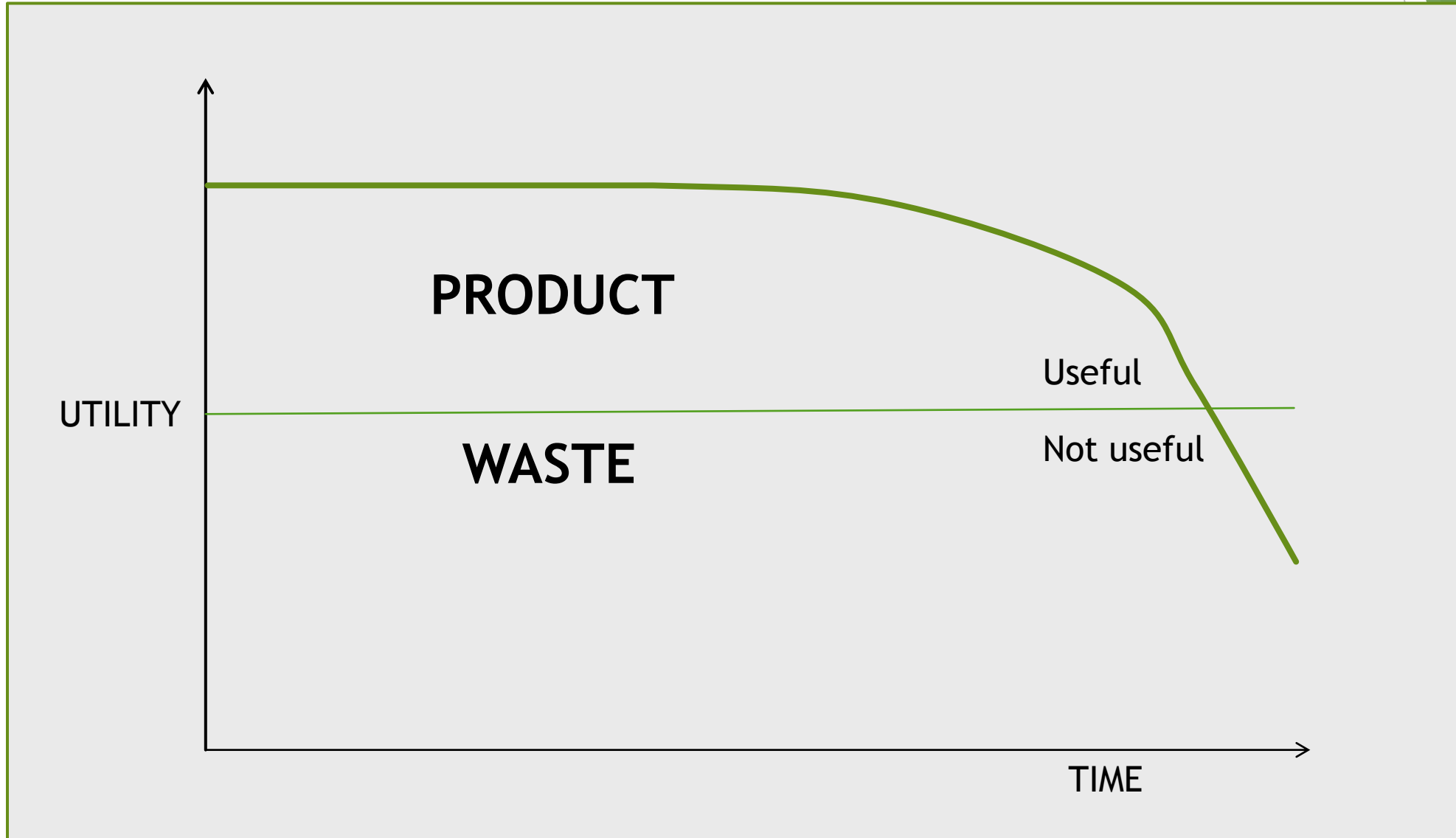
3 (1) Waste means any substance or object which the holder discards or intends or is required to discard

What the definition is not about

- ▶ Value - either positive or negative
- ▶ Usefulness - it can be used again by someone else
- ▶ Quality of material
- ▶ It is left over
- ▶ There is another purpose for it

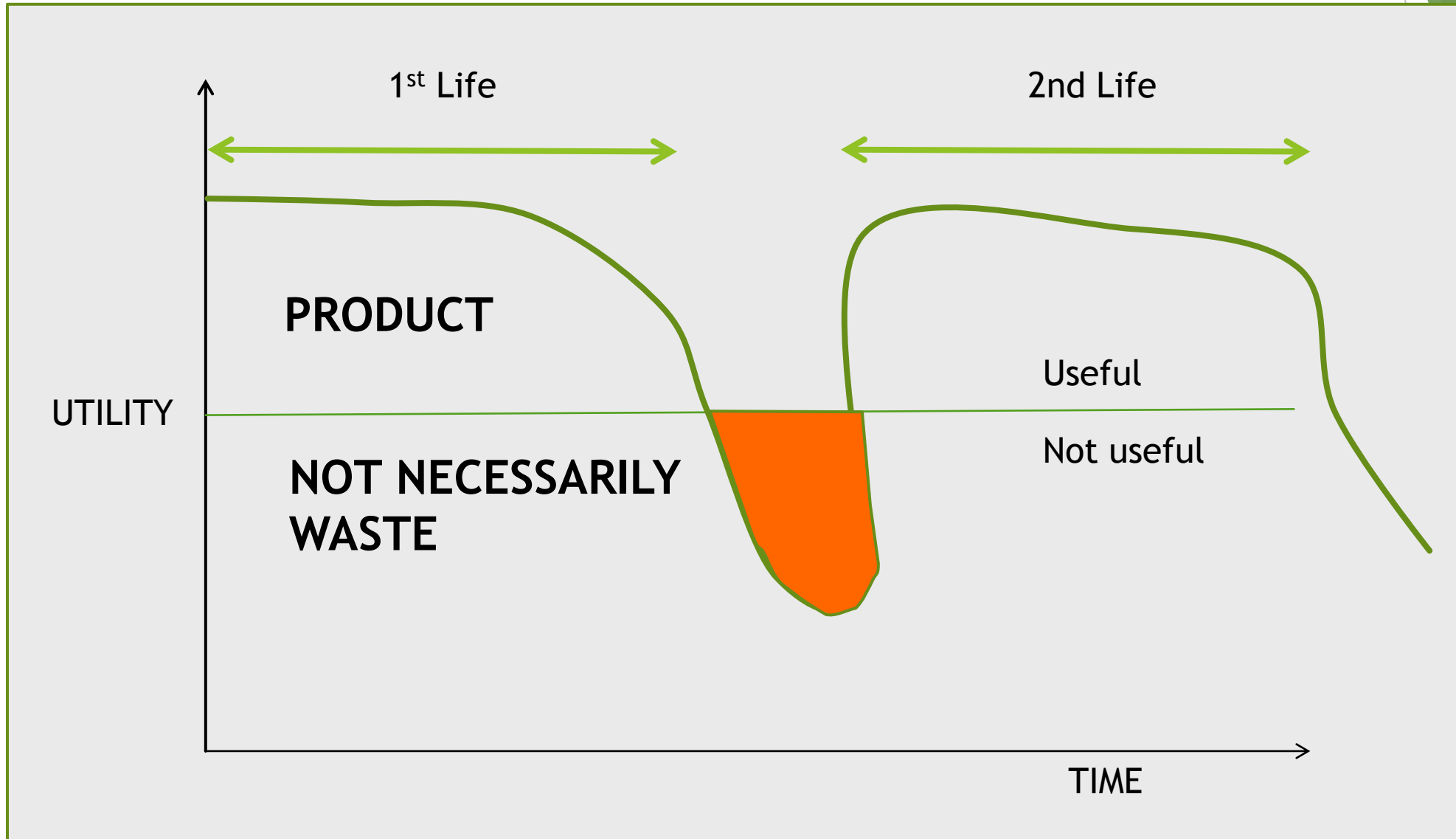
These can apply to product, non waste, co products, by products and waste.

The Traditional Model





An alternative Model







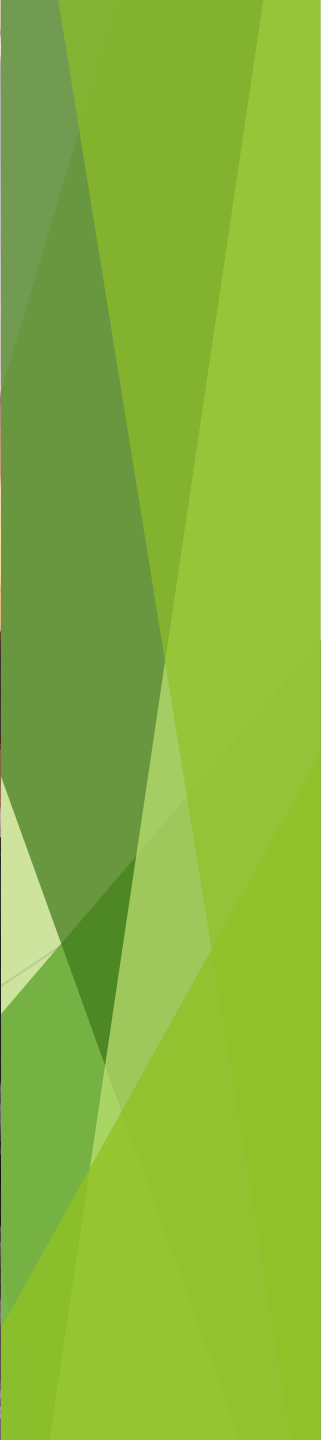




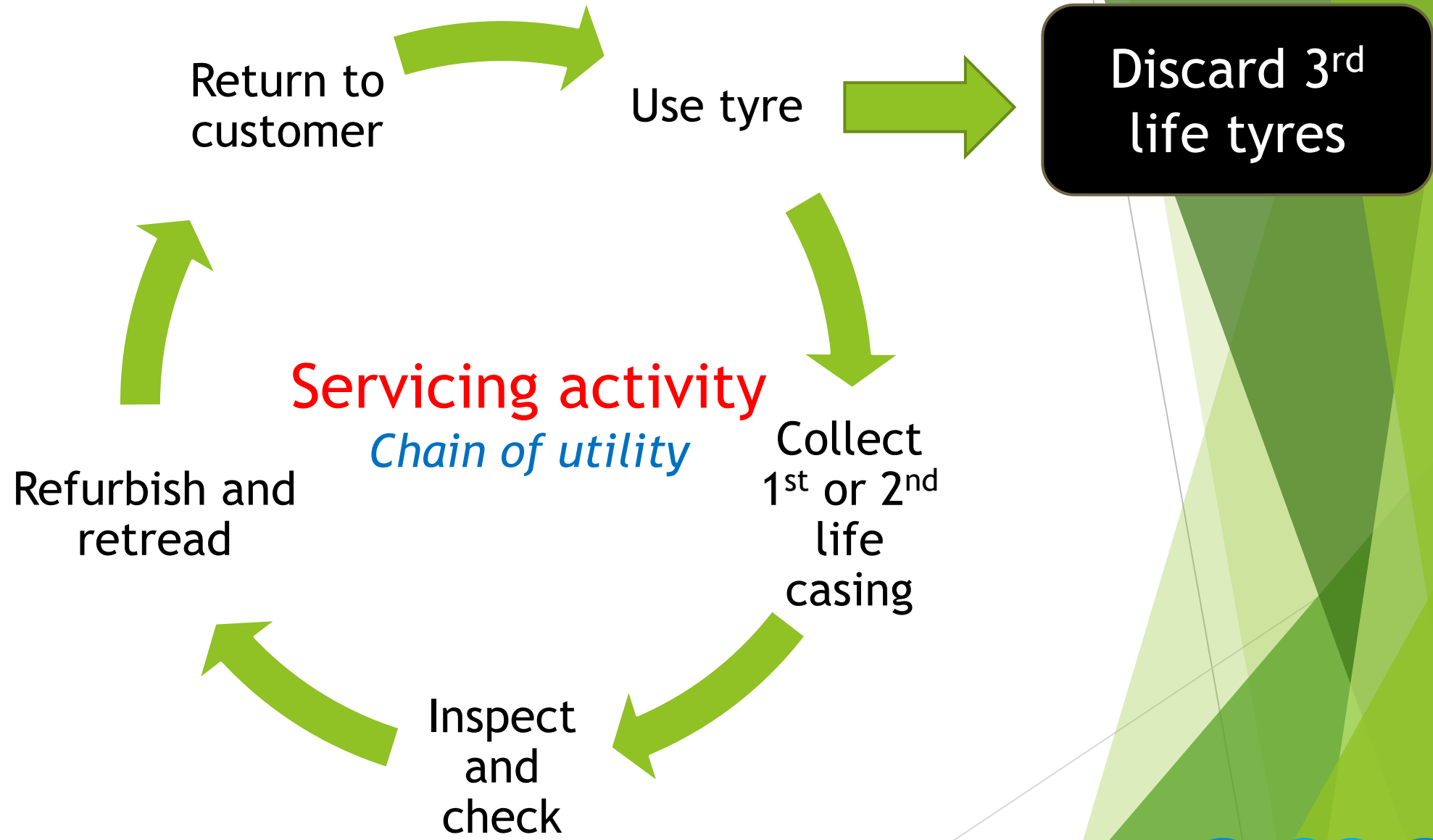












Chain of utility

- ▶ Cars and other vehicles requiring servicing
- ▶ Leased items that don't belong to the user, software, IT equipment
- ▶ A cycle of service and repair over a defined life
- ▶ Control over end of life refurbishment of suitable component parts of the whole

What matters most the use or the ownership

Origins

- ▶ 1975 Waste Framework directive
- ▶ 2008 Waste Framework directive

Any substance or object the holder intends to discard, discards or is required to discard

Subject of the sentence

Any substance or object the **holder** intends to **discard**,
discards or is required to discard

Its all about people and what they do not just the material

Definitions - Holders

The subject of the sentence is the holder

Original producer

An authorised
facility operator-
holder

waste collector -
holder

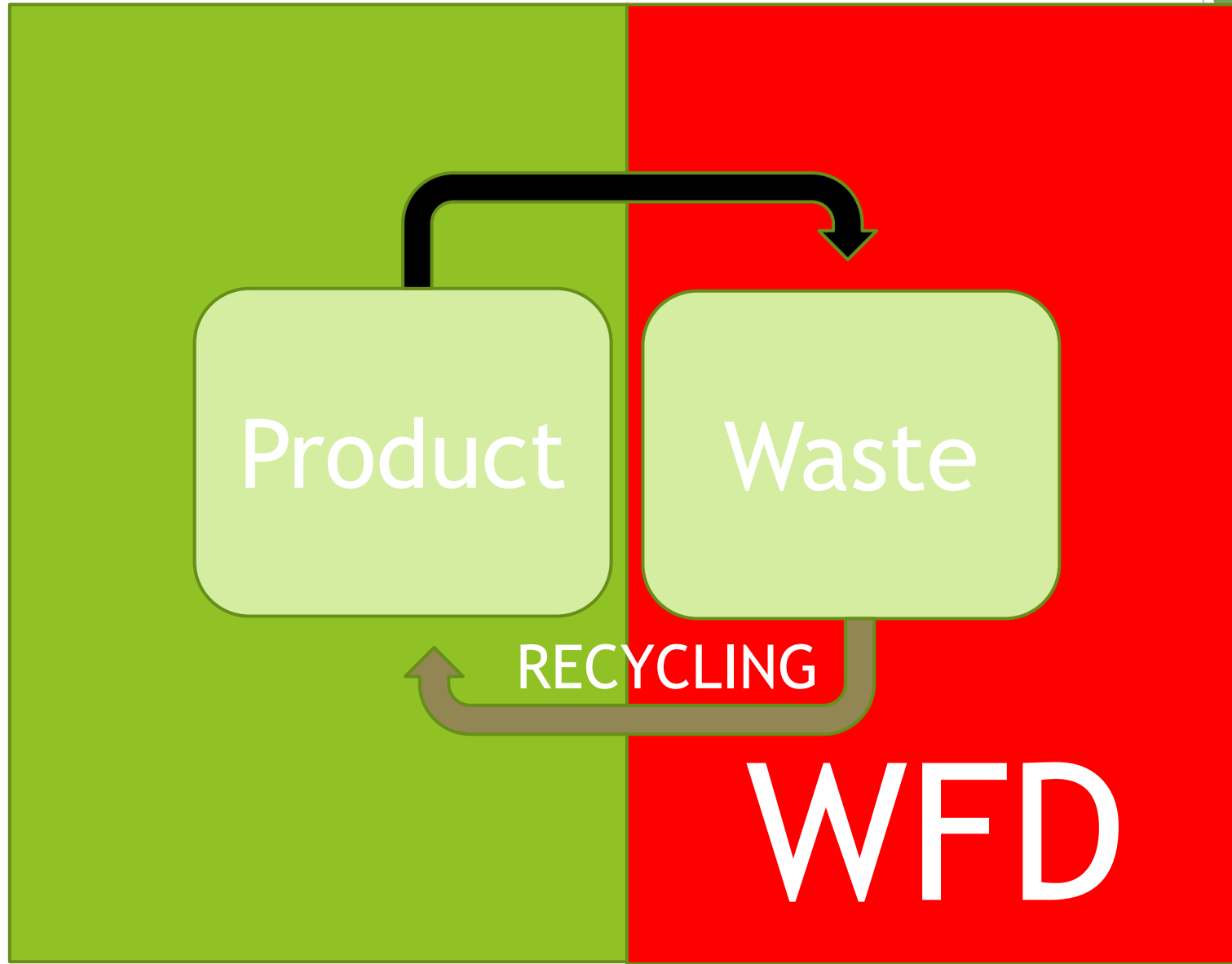
Anyone that takes
control of the waste
- holder

waste contractor -
holder

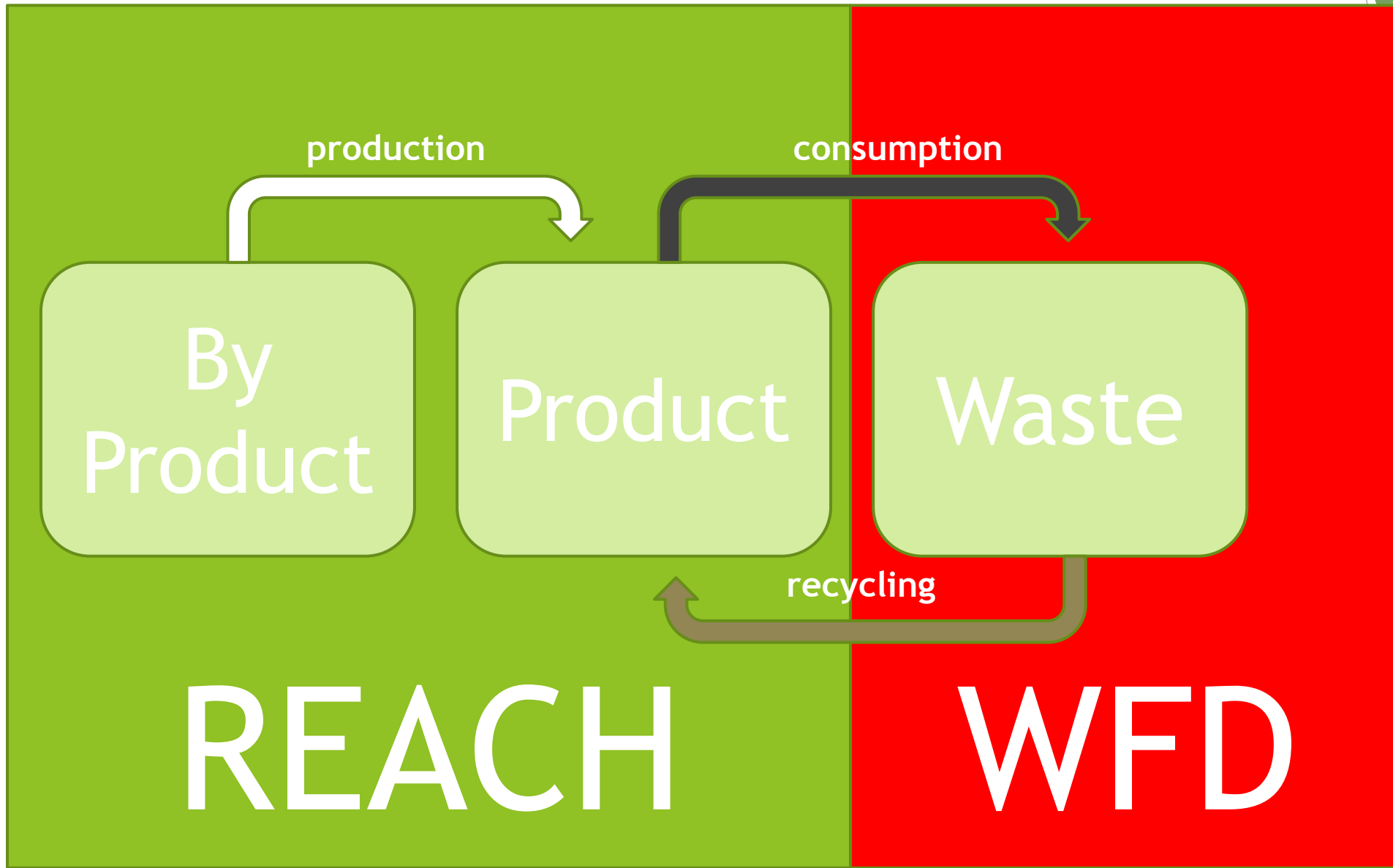
Discarding

- ▶ Discarding also covers activities and operations such as recycling and recovery operations, which put waste material back to good use.
 - ▶ Recycle
 - ▶ Energy Recovery
 - ▶ Landfilling
 - ▶ Backfilling
 - ▶ Preparing for reuse, servicing or repair?
 - ▶ Reuse
 - ▶ Other Disposal

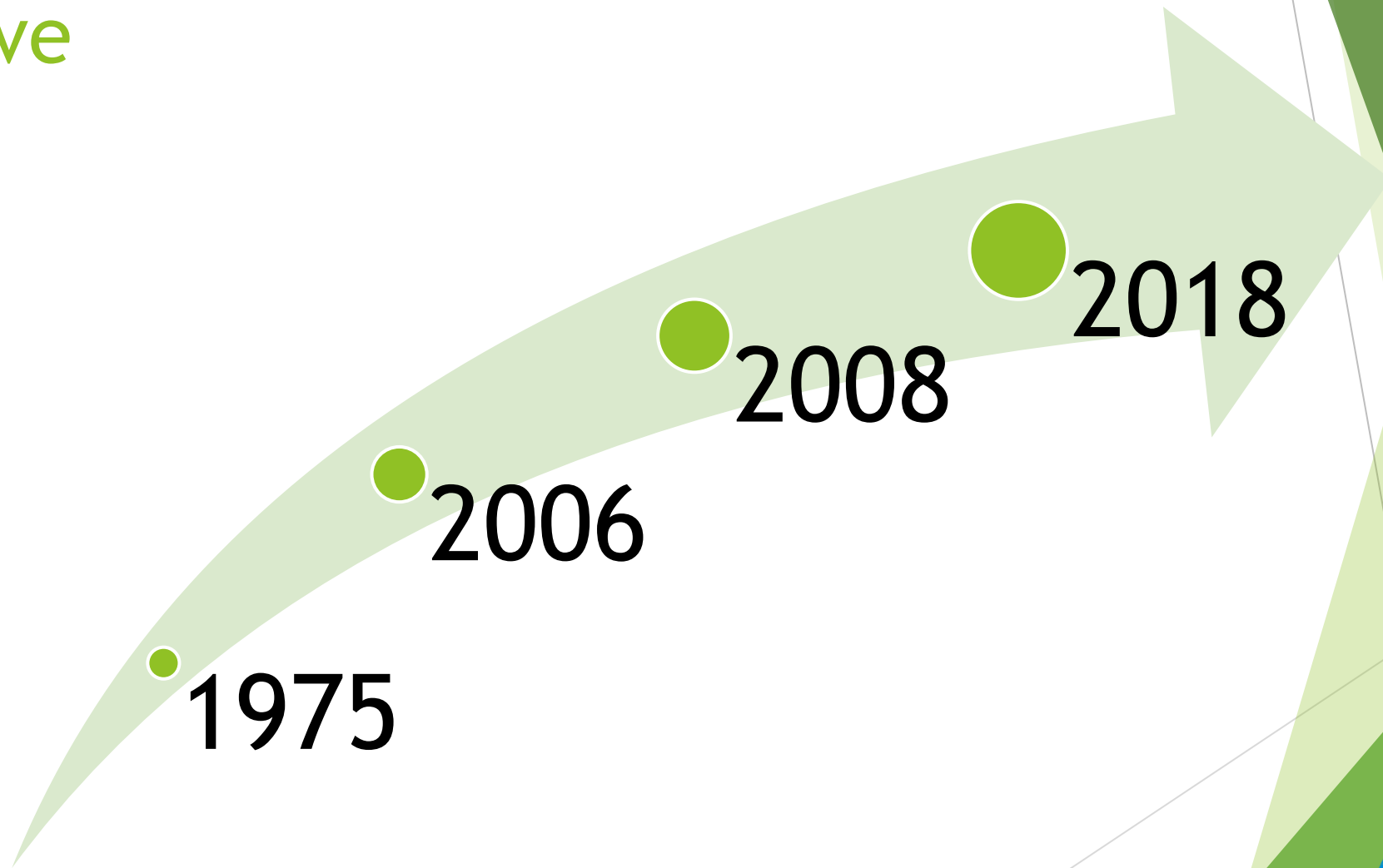
Pre 2008 model



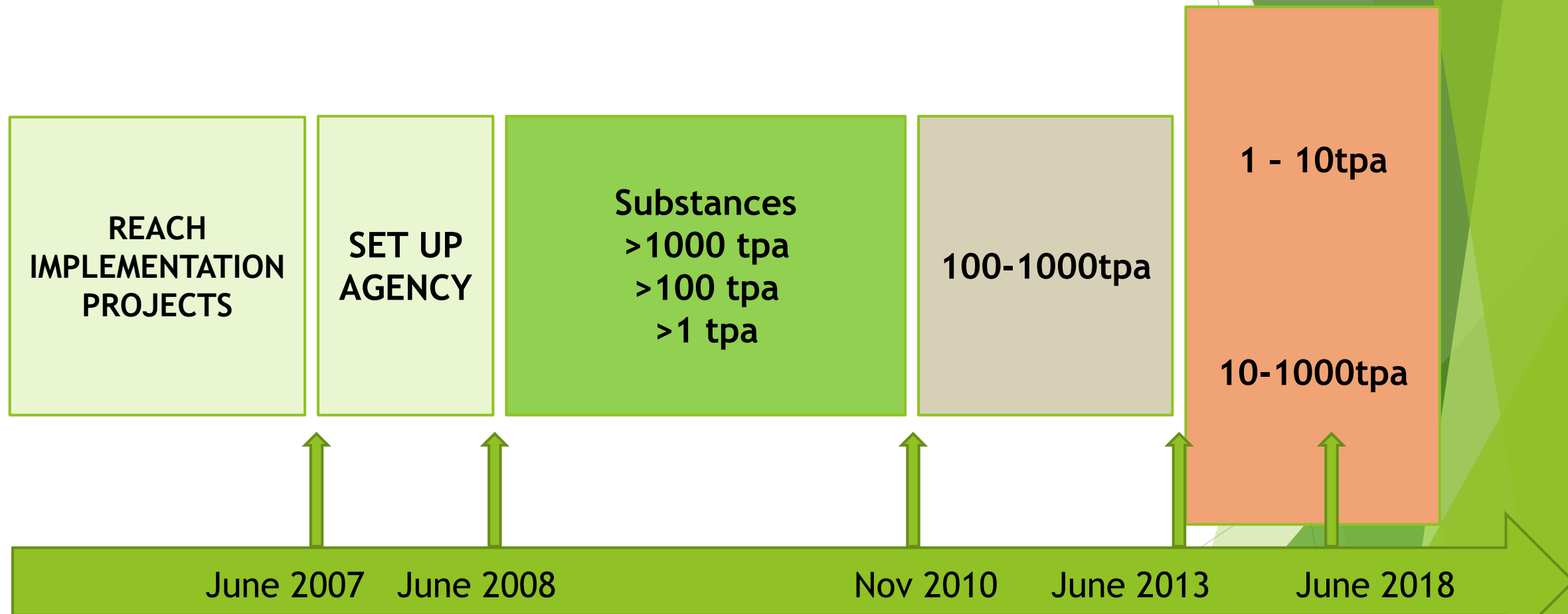
Post 2008 model



The Story of the Waste Framework Directive



The story of REACH





What is REACH

- ▶ Its what governs substances in products that are sold in EU since 2006

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) is a [European Union regulation](#) dating from 18 December 2006. REACH addresses the production and use of [chemical substances](#), and their potential impacts on both human health and the environment. Its 849 pages took seven years to pass, and it has been described as the most complex legislation in the Union's history and the most important in 20 years.

- ▶ Covers 143,000 chemicals
- ▶ Focusing on substances of very high concern (SVHC) 0.1% by mass threshold

The relationship between REACH and waste

- ▶ Its not broadly understood within the waste industry
- ▶ It may be key to unlocking the potential of a material that has been classed as waste proving that its has become a material again depending on its chemical make up
- ▶ The revised 2018 WFD reinforces the role of REACH and product standards

REACH Case Law contribution

The answer to the second question is therefore that the REACH Regulation, in particular Annex XVII thereto, in so far as it authorises the use, subject to certain conditions, of wood treated with CCA solutions, is, in circumstances such as those in the main proceedings, relevant for the purpose of determining whether such wood may cease to be waste because, if those conditions were fulfilled, its holder would not be required to discard it within the meaning of Article 3(1) of Directive 2008/98.

Reuse of telegraph poles in Finland in a sensitive habitat

Case Law contribution

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Relevance of the definition

- ▶ The definition is vague but also inclusive
- ▶ There are many more issues with interpretation than with the actual definition.
- ▶ First phase case law has now helped us understand by products and end of waste
- ▶ Second phase case law is seeking to integrate product specification including REACH into the approach to end of waste

When a material is definitely not a waste

- ▶ if a material hasn't been discarded it isn't waste.
- ▶ deliberately created in a production process and is a product
- ▶ reused again for the same purpose as was originally intended
- ▶ a by product of a production process

When a material is reused and doesn't become waste

- ▶ Reuse has meant a material is used again for the same purpose as was originally intended.
 - ▶ donating goods to a charity or second hand shop in re-usable condition
 - ▶ items that are leased and used several times by a number of people they remain fit for re-use
 - ▶ a wooden pallet being reused as a pallet as long as it is fit for re-use as a pallet
 - ▶ roof tiles or slate carefully removed from one building, stored to retain their integrity and then certain to be fitted onto another building's roof
 - ▶ networks where people can give away items for free that are fit for re-use,
 - ▶ when a charity or second-hand shop receives items, checks them and carries out a very minor repair to ensure its reuse as originally intended

When a material is a by-product and not waste

- ▶ The residue is a by-product and not a waste when the material meets all of these conditions:
 - ▶ it's a result of a production process
 - ▶ it's certain to be used, if there's a definite market for it, if it fulfils the same specifications as other products on the market or if there's an economic benefit for the producer
 - ▶ it can be used directly, with no further processing before it's used - you can carry out normal industrial practices, it's produced as an integral part of the production process - but it doesn't necessarily have to be made ready for use at the same place where the residue is produced
 - ▶ it has a lawful use and meets relevant product and environmental and health protection requirements,

Reset

Do you want to start over?

No

Yes

Rethinking

How can we avoid wasting materials and preserve their usefulness for as long as possible and avoid needing to extract new raw materials?

Then we can tackle how we deal with the waste properly.

Issues with the definition

- ▶ Its not the definition it's the interpretation
 - ▶ 5 different answers to the same question
 - ▶ the death of common sense
- ▶ By product registration
 - ▶ Abuse of definition - *one persons By Products is another persons waste*
 - ▶ Delays and uncertainty with registration - being resolved
 - ▶ Most other member states do not record or require registration
- ▶ Preparation for reuse
 - ▶ Are these waste activities or simply servicing or just 2nd or 3rd life
 - ▶ Pallet refurbishment
 - ▶ Tyre casings
 - ▶ Computers
 - ▶ WEEE
 - ▶ Furniture

Issues with the definition

- ▶ We are missing the point - resources are key
 - ▶ 1st we should be keeping materials in the chain of utility as long as possible
 - ▶ 2nd we should be applying the Waste legal framework
- ▶ We are impeding circular economy, failing in our task to strengthen the economic value of waste
- ▶ Missing opportunities to recovery energy and continuing to rely on fossil fuels
- ▶ We give almost all our valuable recycle materials to other countries

Issues with End of waste

- ▶ We lack a series of basic publicly available standards. This would catapult us into a high recycling society, save money, reuse virgin resource consumption
 - ▶ Wood
 - ▶ Aggregates
 - ▶ Pallets
 - ▶ Soils
 - ▶ Road Planings
 - ▶ Biomass from landscaping and agriculture
 - ▶ Architectural salvage materials
- ▶ As a society we choose complex regulatory approaches
 - ▶ We have made a journey from uncontrolled or unauthorised behaviour
 - ▶ Public confidence in both regulators and the waste management community is low
 - ▶ We don't have the resources to manage, inspect or as a society afford the economic costs
 - ▶ We have hardly any hazardous waste recovery or disposal facilities on Island

Future for end of waste

- ▶ Progress with EOW has been slow and we need to re evaluate future roles
- ▶ The EU only managed 3 EOWs since 2008 and no new ones are close to being agreed - JRC reports
- ▶ WFD 2018 makes significant changes
 - ▶ Major re write of Article 6
 - ▶ Push for National EOW criteria instead of EU wide
 - ▶ Advocating local case by case EOW criteria where national standards are not in place