

"L'analisi socio-economica nel Regolamento REACH"

Vinyloop

« Il punto di vista delle imprese sui possibili impatti socio-economici delle autorizzazioni e restrizioni REACH »

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- 11/05/2017
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Agenda

- Vinyloop Main data
- Process principles
- The value of the Vinyloop model
- REACH authorization for DEHP & socio-economics consequences
- REACH vs Circular economy: not (yet) compatible

Location



Smart Recycling - Low Footprint

Vinyloop Ferrara SpA



VINYLOOP® Ferrara : Joint Venture

inovyn
An INEOS company

60%



Smart Recycling - Low Footprint

Serge Ferrari

40%

inovyn
An INEOS company

VINYLOOP® Ferrara

→ First industrial plant/pilot in the world

- Seveso plant
- OHSAS18001 (Safety ISO) + ISO14001 (Environment ISO)
- **DEHP authorization from ECHA → feb 2019**
- *Plant for waste treatment with or without fibres (cables, tarpaulins, flooring, membranes,...)*

→ Today we treat cables and tarpaulins with PVC content
>=75%
(~9000T/y of scraps)

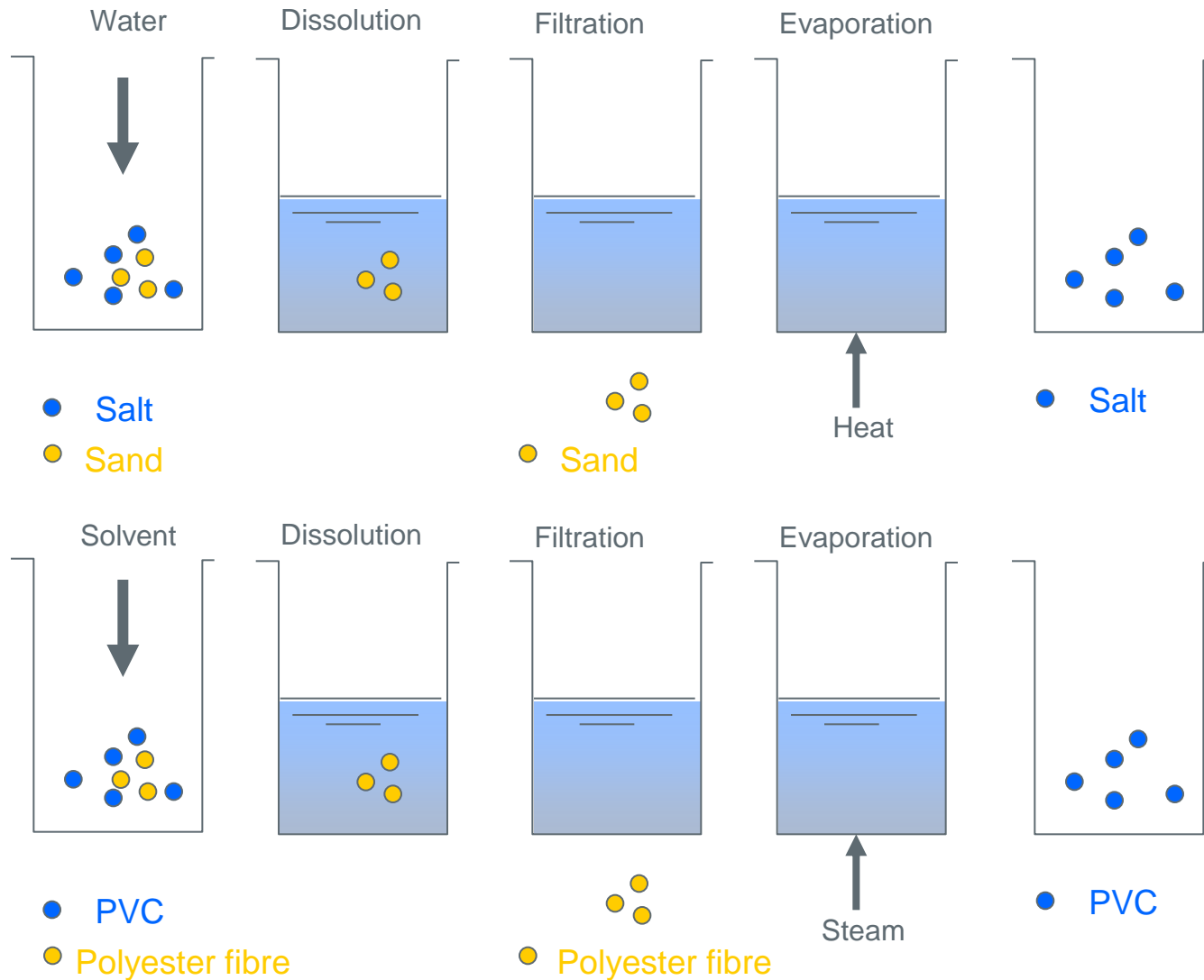
→ Aligned with VinylPlus voluntary commitment



Principles



Smart Recycling - Low Footprint



Vinyloop® Ferrara

Cable (~80%)



SVHC
(DEHP)

Tarpaulin (~20%)



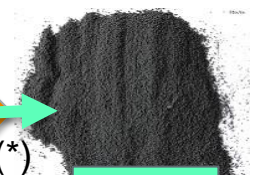
Copper



Fibres



RPVC (*)



DEHP

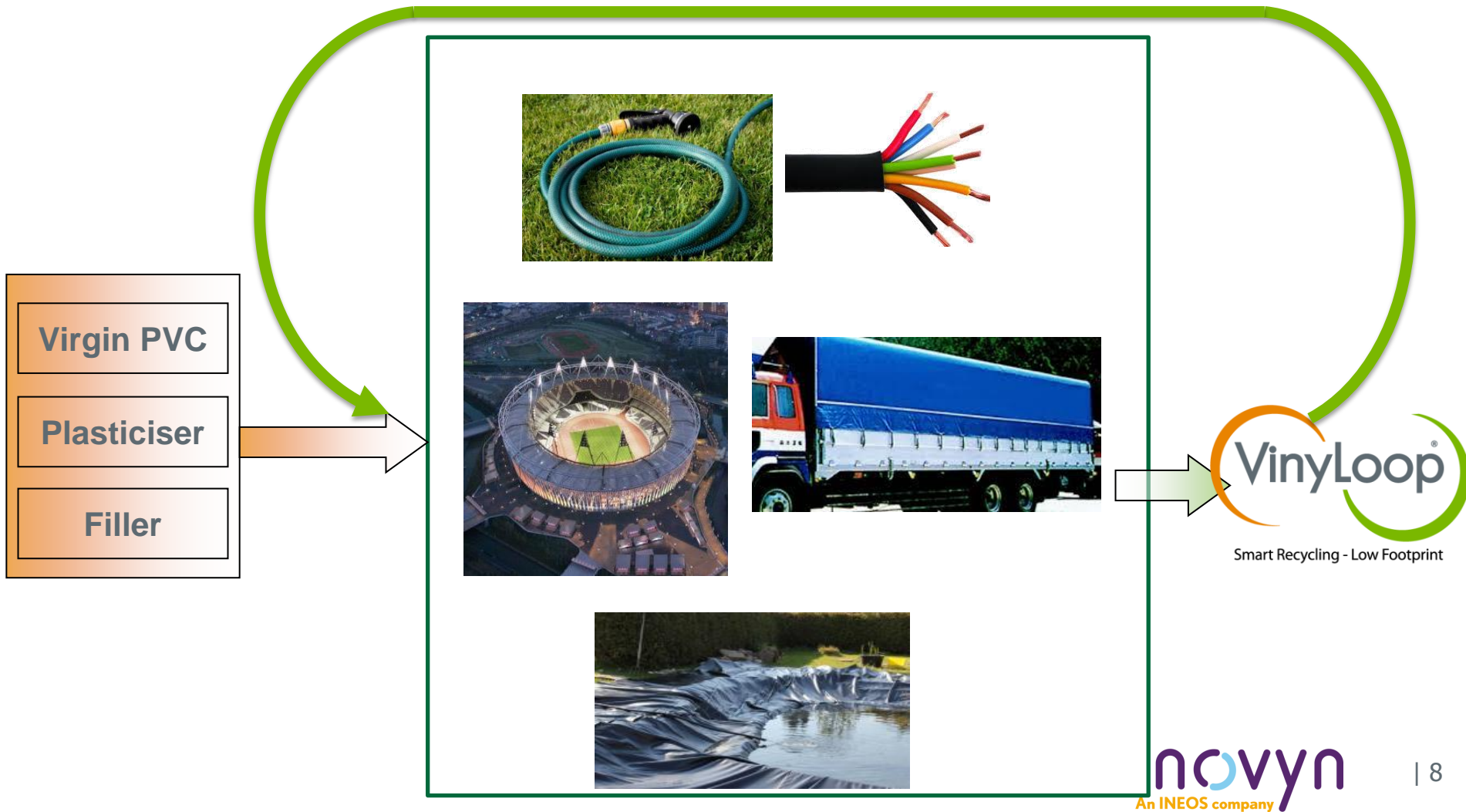
(*) RPVC = PVC + Plasticizer + Filler + additives = similar virgin PVC compound

The value of the model



Smart Recycling - Low Footprint

Sustainable development – Circular Economy



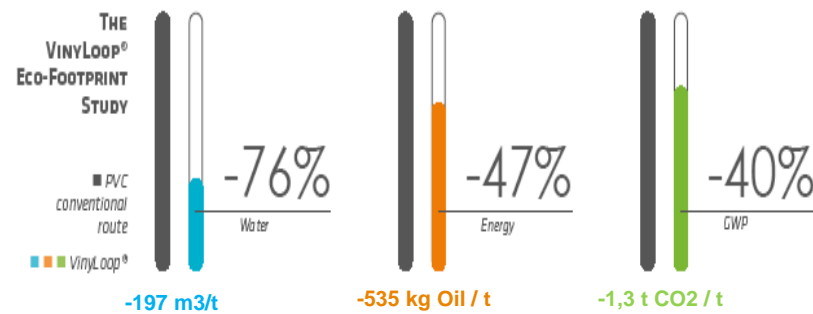
The value of the model

Competitive environment

Market Differentiation with Customers

- **Lower Environmental Footprint**

- LCA critically reviewed by DEKRA (ISO 14040-44)



- **Target customers who seek solutions for their post-industrial and/or post-consumer waste**

- Fitt hose supplier (Italy)
- London Olympic games 2012



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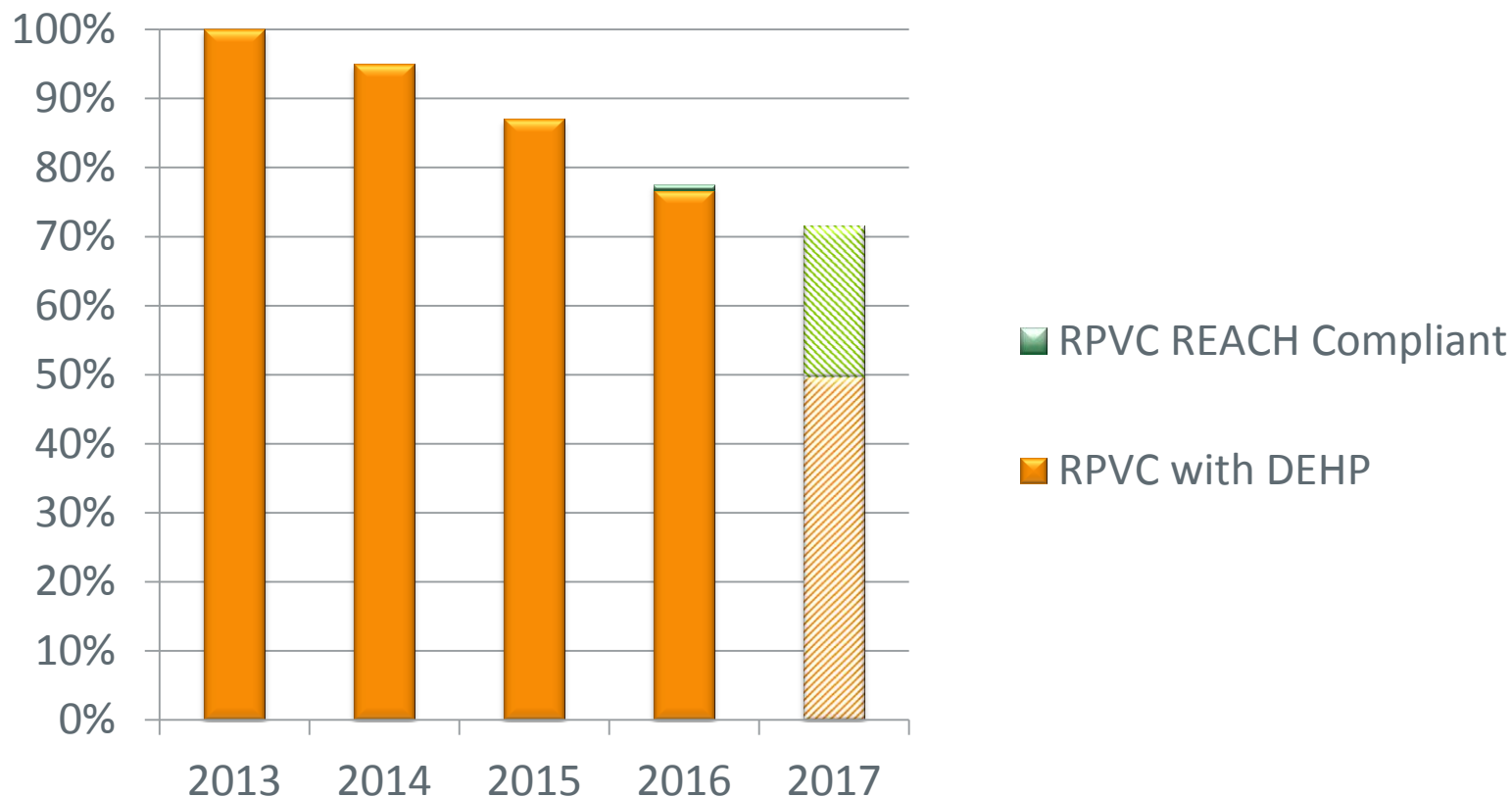
PVC classification, administrative requirements, challenges for recycler

REACH and DEHP Authorization

A long chaotic path

Aug. 2013	Request to ECHA for our RPVC with DEHP
Dec. 2014	RAC & SEAC recommend 7 years Authorization
Feb. 2015	“Sunset Date”: No decision by MS
Nov. 2015	MEPs vote a « non-binding » Resolution to ban on recycled plastics containing DEHP Main Argument: DEHP is an « Endocrine Disruptor »
Dec. 2015	General Court of the European Union – Sentence against EU-COM (Judgment in Case T-521/14) By failing to adopt measures concerning the specification of scientific criteria for the “determination of endocrine-disrupting properties”
22 June 2016	Official authorization DEHP but: <ul style="list-style-type: none">• This authorization was granted until 22 February 2019, so 2.5 years• Obligation to do an Air-monitoring and a Bio-Monitoring• Bio-Monitoring without official procedure???
Feb. 2019	<ul style="list-style-type: none">• New sunset date• No more sales RPVC with DEHP in EU

Sales Evolution of Recycling PVC «RPVC»



This means 50% of our
potential capacity

REACH and DEHP Authorization



Practical consequences of this authorization

- **Scientist Experts of ECHA treat dossier with technical criteria**
- **MS more concentrate on hazard and not on the risk and SVHCs become political "substances". Judgment with no objectivity**
- **MEPs criticizes their own experts**
- **2.5 years to change Business model is too short**
 - Renewal of authorization before July 2017 is impossible
- **Lost 50 % of our market since we requested authorization**
- **Market has 3 reactions**
 - No more recycling products
 - REACH compliant is not wanted
 - SVHC Free recycling product become rule
- **Capacity of the plant 2017 = ~50%**
 - Technical unemployment scheduled in 2017

“REACH/legislation Chemical” VS. “Circular Economy/Legislation Waste”

Chemicals, wastes and products – different worlds

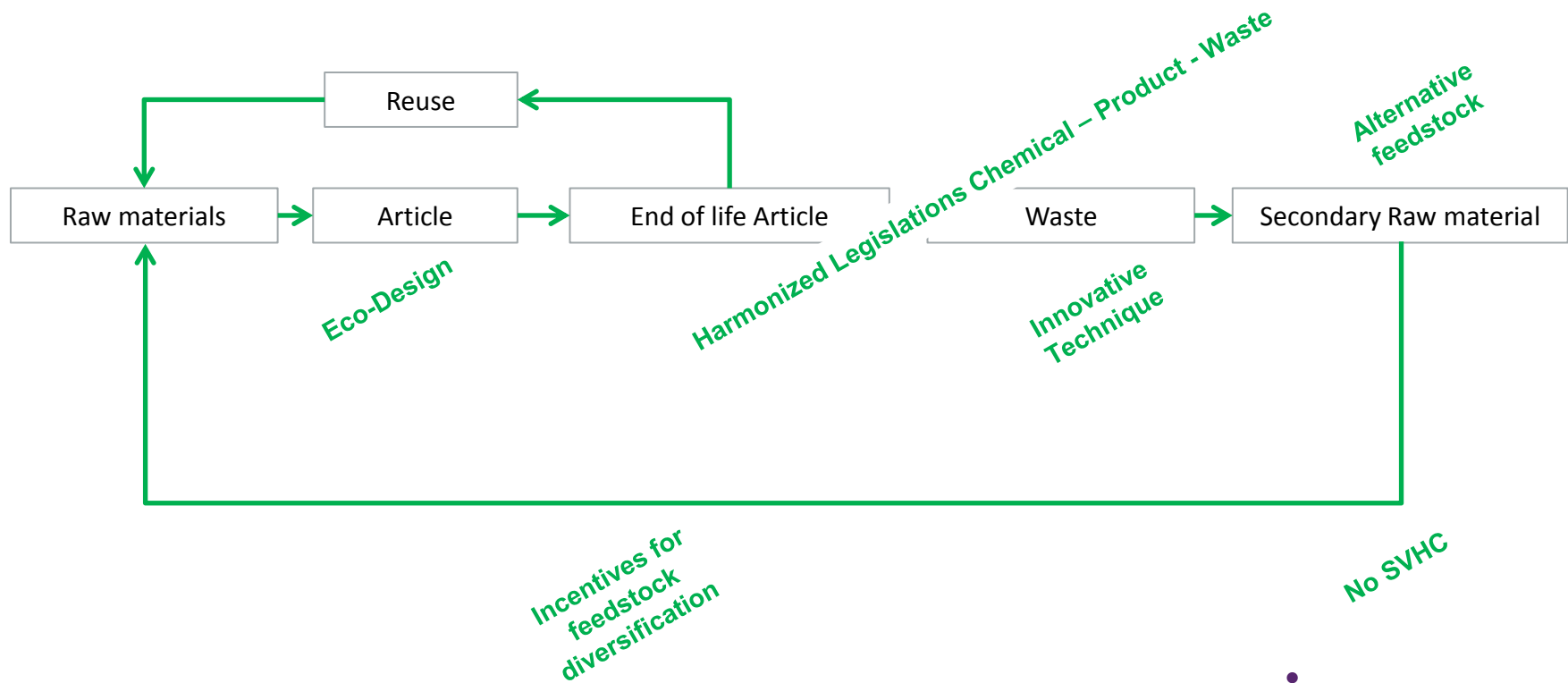


**No clear horizontal approach on how to deal with
legacy substances in recycled plastics**

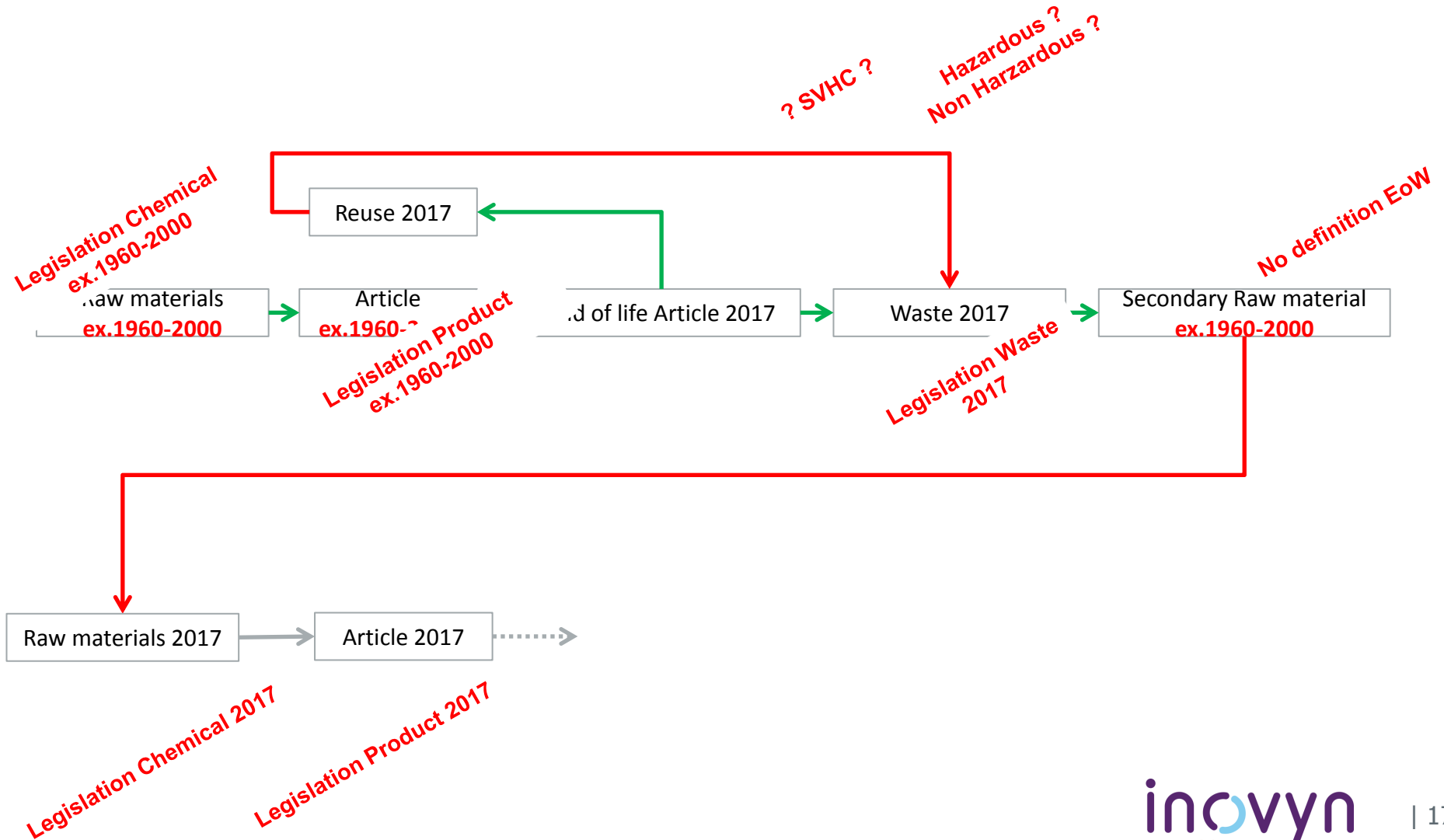
“REACH/legislation Chemical”

VS.

“Circular Economy/Legislation Waste”
EU ideal situation

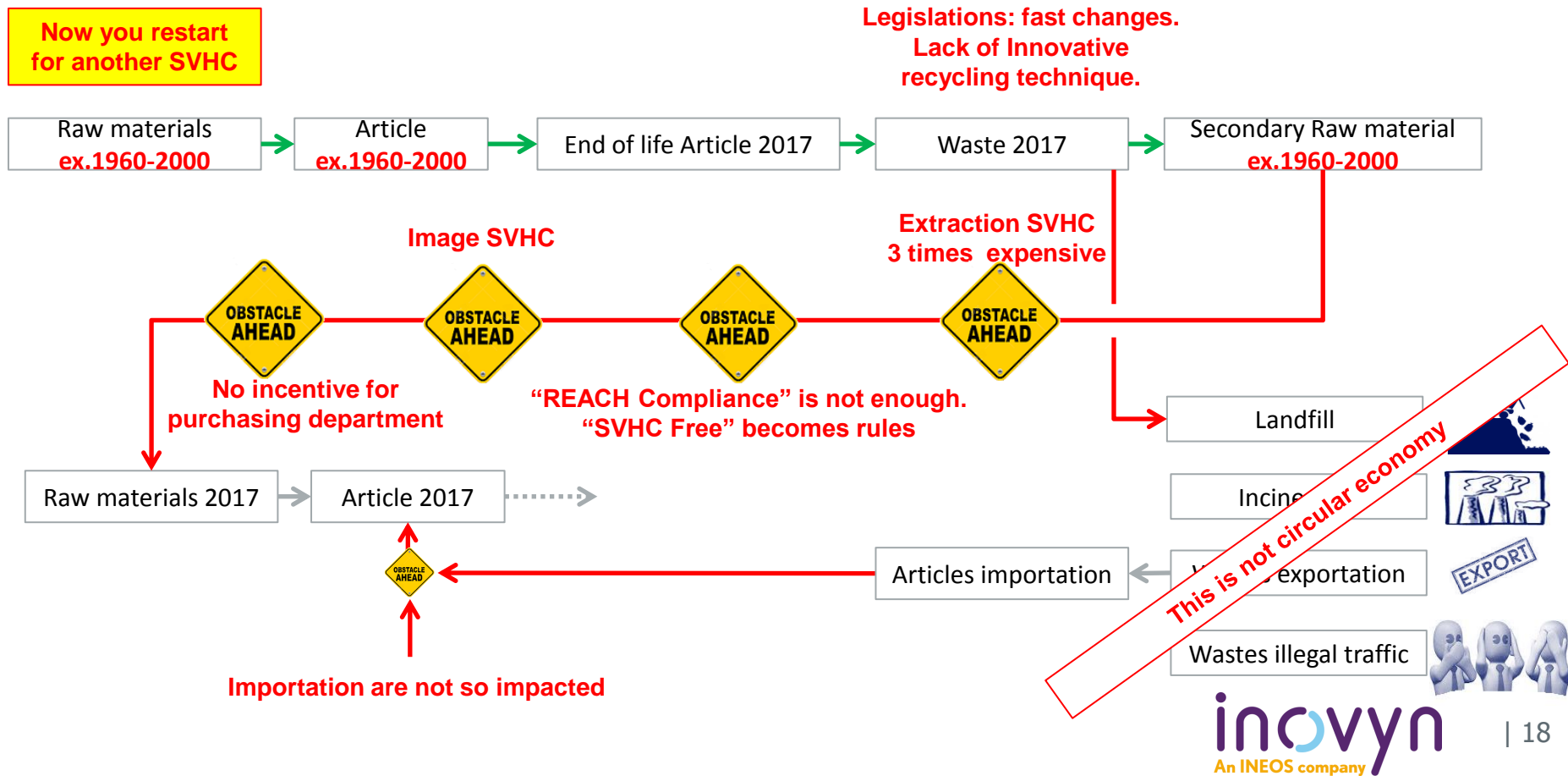


"REACH/legislation Chemical" vs. "Circular Economy/Legislation Waste" The real situation



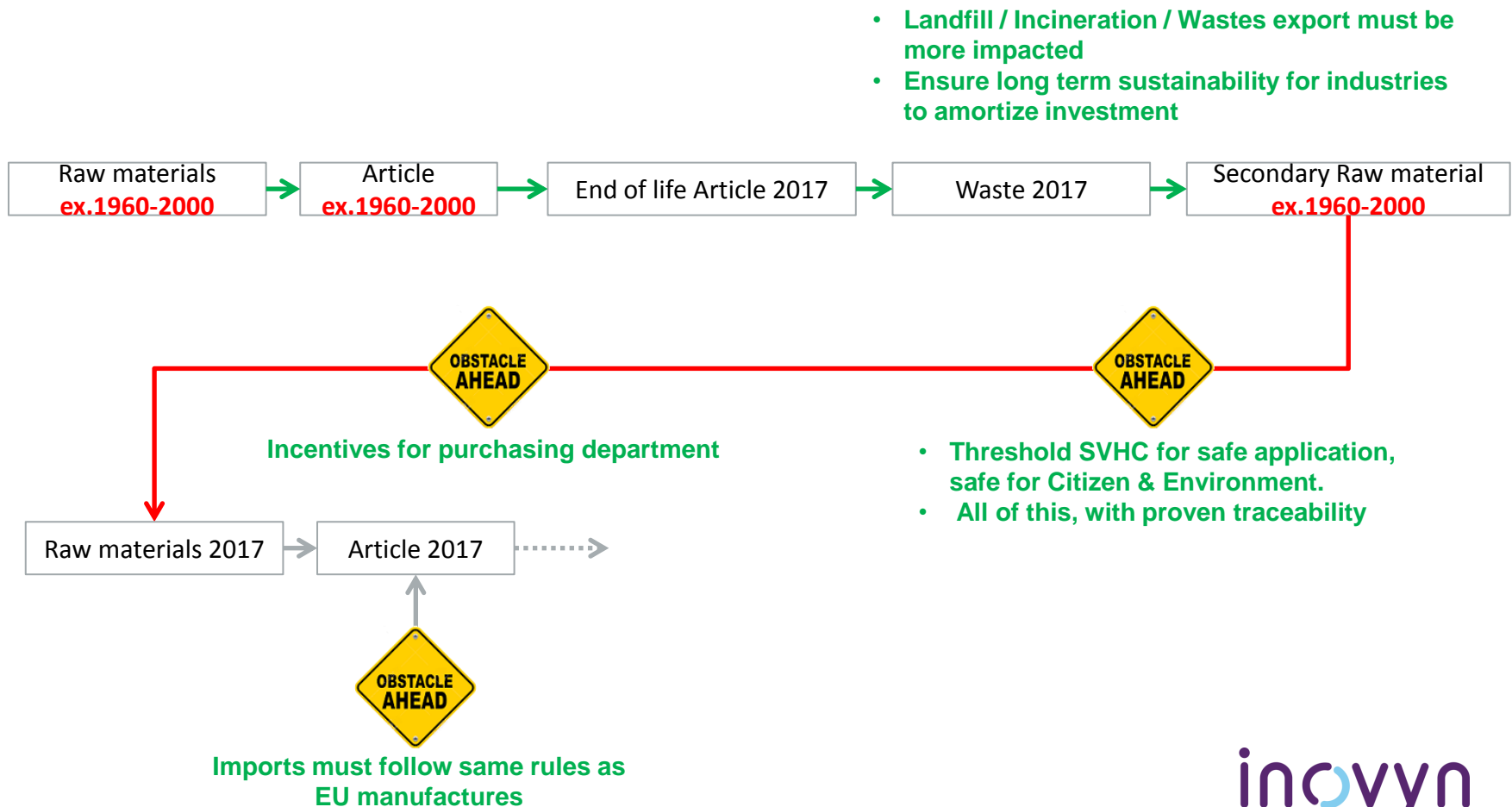
REACH - Circular Economy - Legacy Additives

Recycler view: Barriers for each SVHC



REACH - Circular Economy - Legacy Additives

Recycler contribution view



Conclusions



- Current regulations situation is putting recyclability of flexible PVC at risk
- The update of the SVHC candidate list is too fast and it slowed down long-term investment projects in recycling
- Imported PVC articles are able to bypass the REACH regulation with minimal criteria to demonstrate compliance (>10 Mtons of imported articles containing DEHP since 2011 which will become waste and recycling solution become more and more less)
- “REACH/Chemical policy” is not yet compatible with “Circular Economy/Waste policy”
- Landfill remains a cheaper option in some MS of the EU and this is against recyclability
- Landfill and incineration must be more impacted because that mean destruction of resources
- Materials should be recycled as long as there is a proven traceability into applications where there is no risk to health and the environment
- REACH must be adapted for recycling market
- EU must promote the creation of an efficient / attractive market for secondary plastic raw materials
- Eco-design: producers shall think about recyclability of their products and re-integration of recyclate back in their products
- Our example model: Vinyloop fulfils EU Circular economy principles
 - Lower environmental impact, Take back at end-of-life, Recyclability, No downcycling

