

# Remanufacturing – Preparing for Growth in Wind Energy Sector

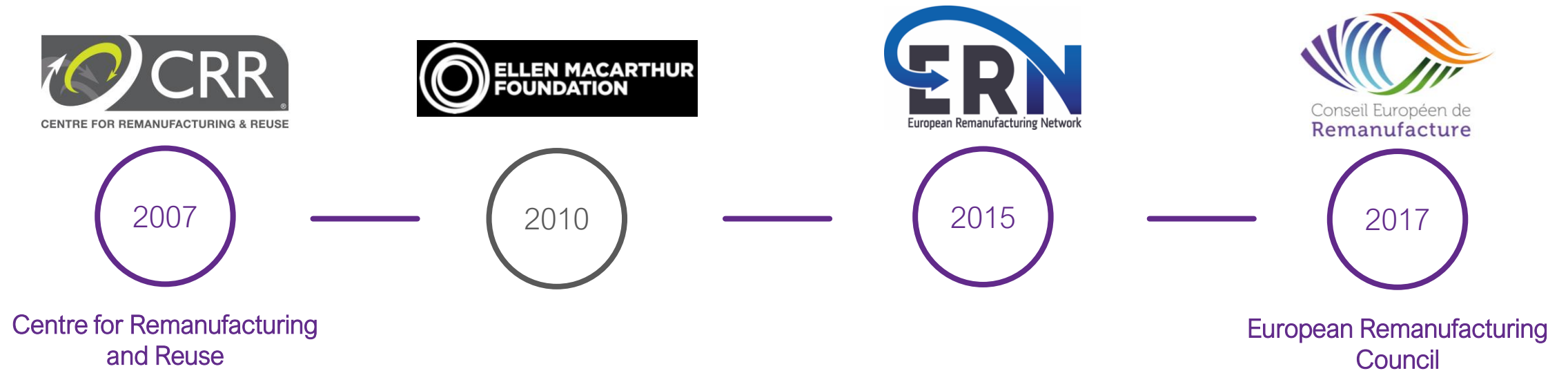


Conseil Européen de  
**Remanufacture**

[www.remancouncil.eu](http://www.remancouncil.eu)

David Fitzsimons  
26<sup>th</sup> June 2019

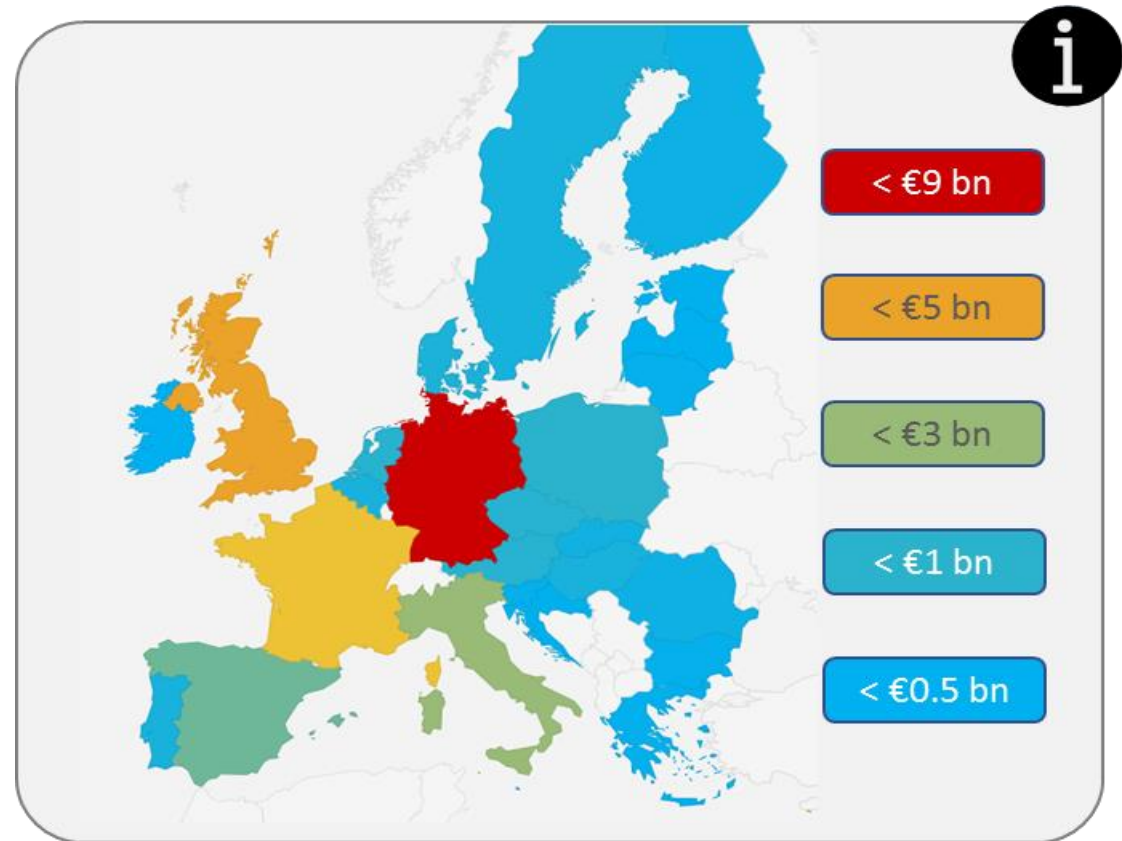
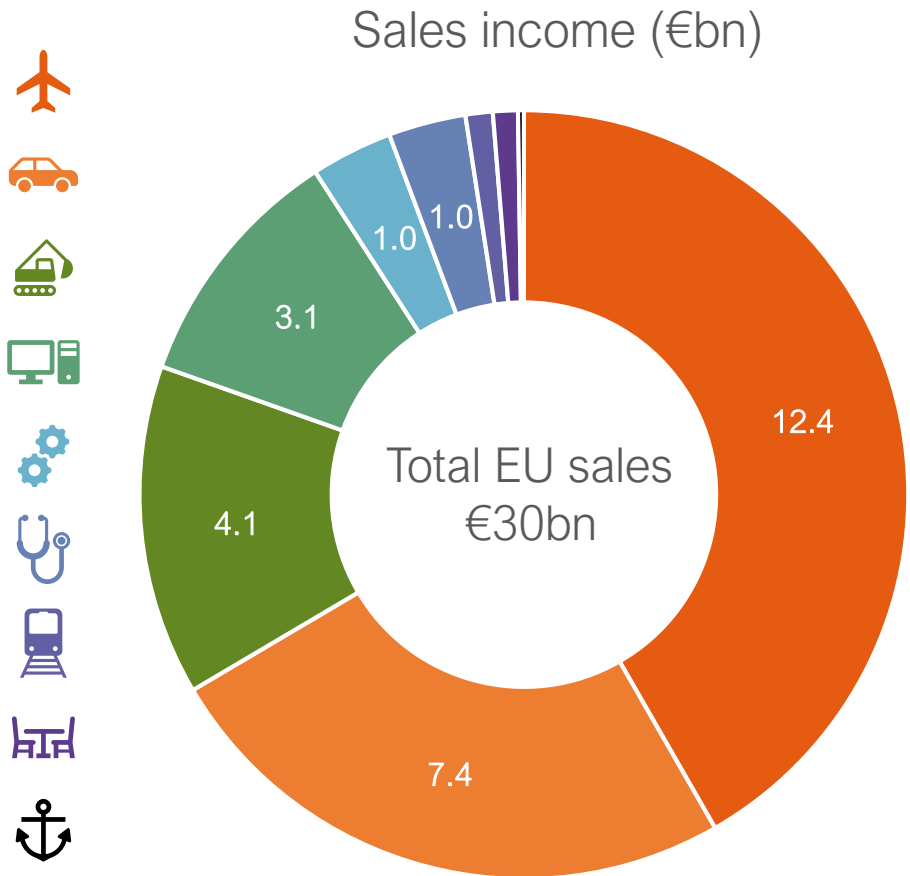
# Steps to European Remanufacturing Council



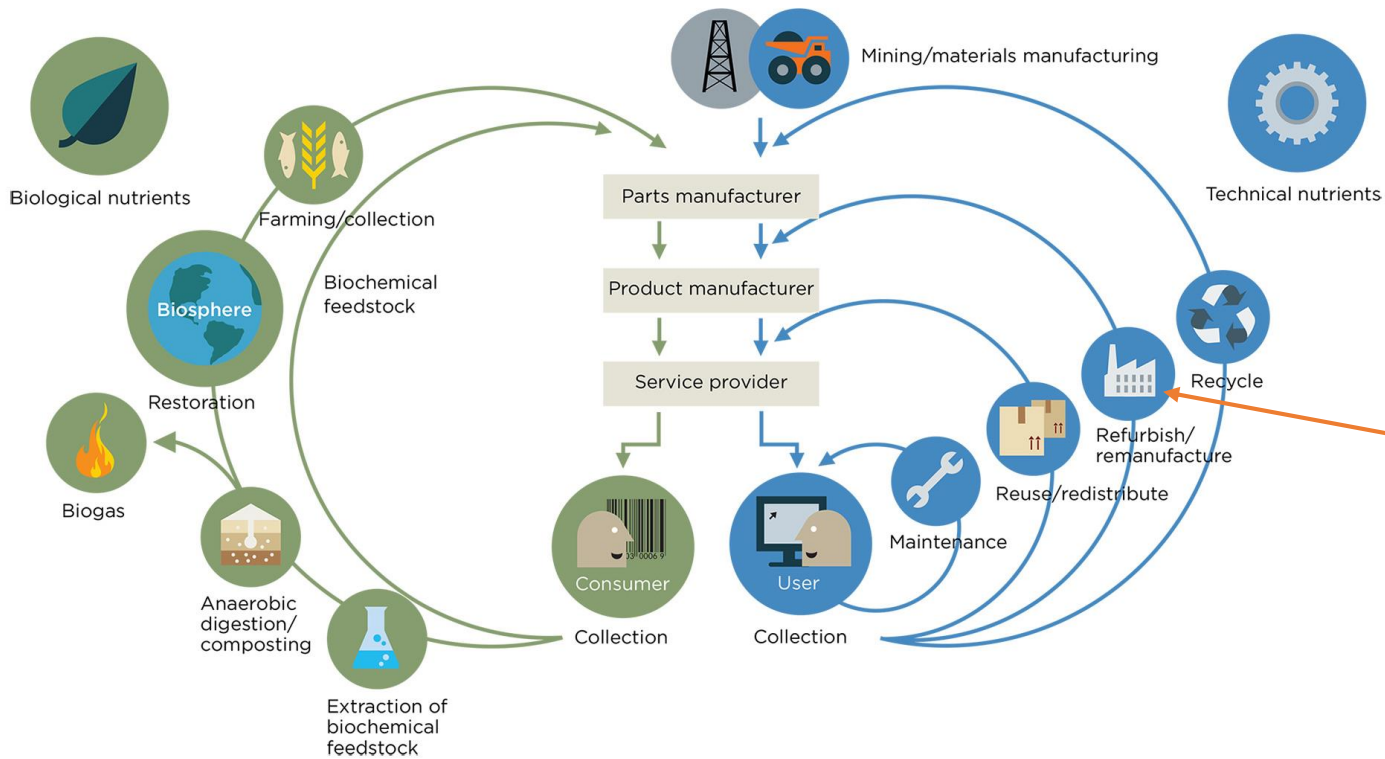
Our aim is to triple the value of Europe's remanufacturing sector to €100 billion by 2030.

The ERN legacy - uniting cross-sectoral actors, sharing knowledge and seeking policy change to promote remanufacturing.

# The Scale of Remanufacturing in Europe



# What is Remanufacturing?



“Returning a product to at least its original performance with a warranty that is equivalent or better than that of the newly manufactured product.”  
BS8887-Part 2

# Work Programme

The work programmes will focus on three fundamental activities:

- Bringing together businesses from every product sector
- Sharing knowledge
- Seeking policy changes to make remanufacturing a normal part of the product life cycle



# Product Value Retention

United Nations Environment Programme  
International Resource Panel



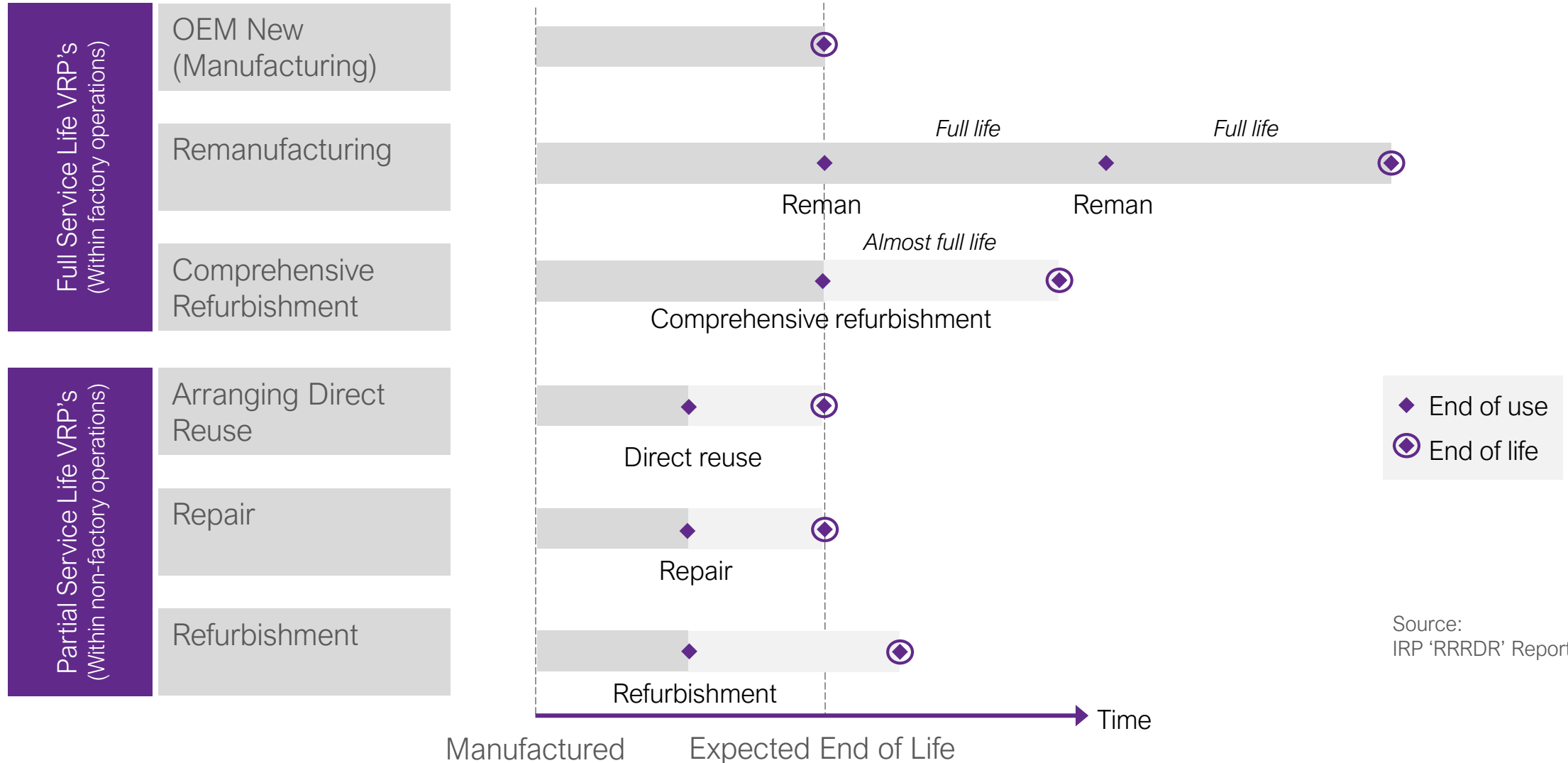
Commissioned a synthesis report from  
the IRP on the most promising potentials  
and solutions for resource efficiency

G7 Alliance on Resource Efficiency

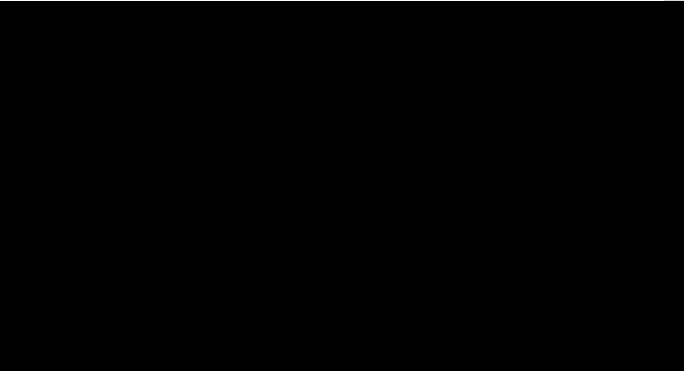
Research and consultation programme to examine  
'Value Retention Policies' (VRPs): a collective  
term for the reuse activities comprising  
Remanufacturing, Refurbishment, Repair and  
Direct Reuse.

- Workshops in Brussels (2017) and Montreal (2018)
- *"Resource Efficiency and Innovation in Circular Economy through Remanufacturing, Refurbishment, Repair, and Direct Reuse"* report by Professor Nabil Nasr, IRP Panel Member, Director of Golisano Institute for Sustainability at Rochester Institute of Technology, USA.
- Published November 2018

# Categories of Value Retention Processes



# Developments in China



8 National  
Demonstration  
Bases for  
Remanufacturing  
e.g. – Hejian City

Support for  
remanufacturing  
businesses

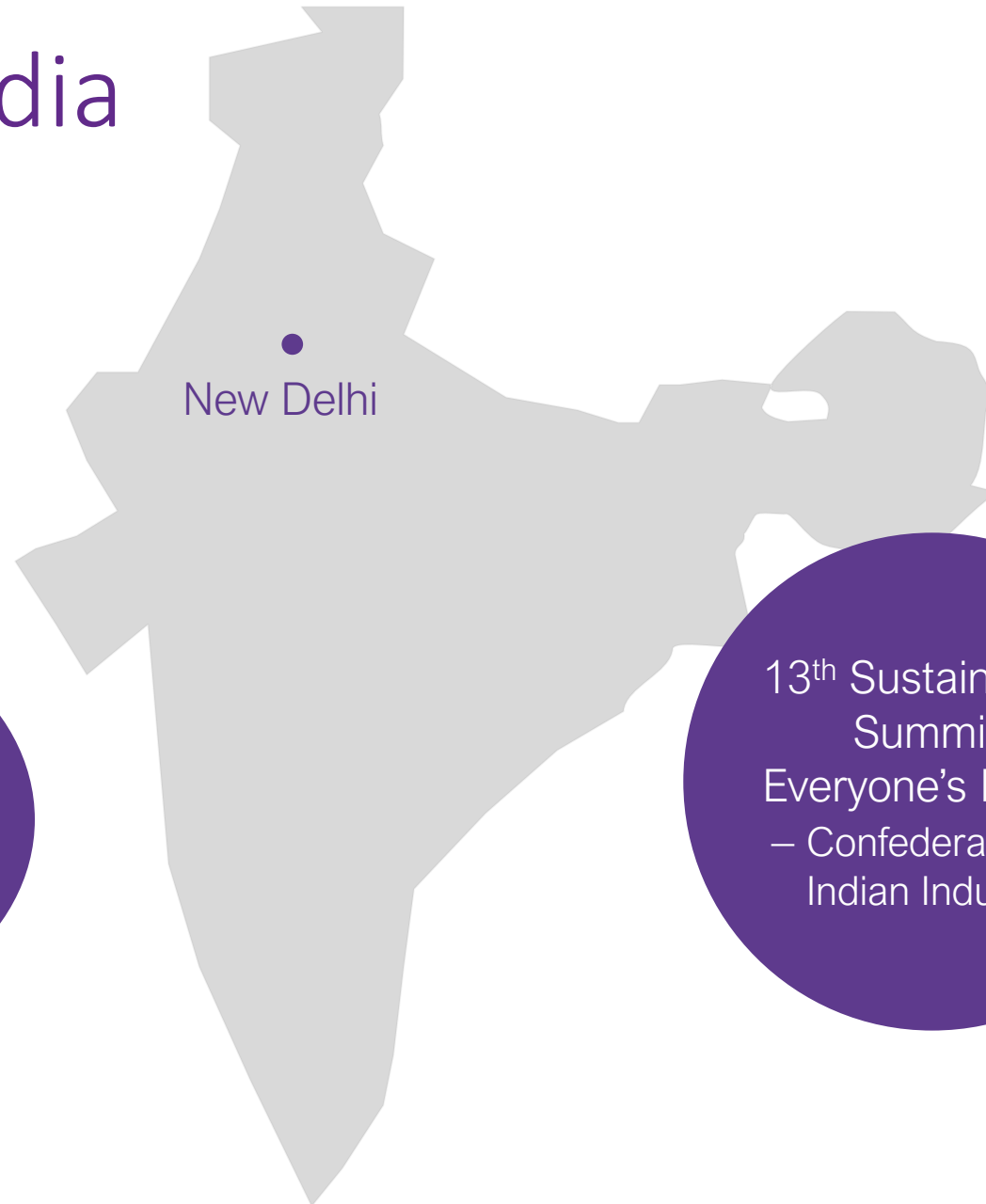
“High speed”  
to  
“High quality”

Regulatory  
change to  
promote  
remanufacturing

Hejian City



# Update from India



EU Circular  
Economy Trade  
Mission  
4<sup>th</sup> - 7<sup>th</sup> September  
2018

13<sup>th</sup> Sustainability  
Summit:  
Everyone's Future  
– Confederation of  
Indian Industry

# Multi-Product Same-Site

supply chain synergy

syncreon



- Opened in Zary 2013 – expanded 2018
- Growing valorisation requirement due to returned internet sales
- 5 “Core” Categories for Remanufacture:
  - From Lexmark cartridges to ATM’s
- High variability (>50%) in weekly “core” returns
- Unit costs for refurbishment and remanufacture reduced through in-house management and control system
- c. 500 employees



# Digital Platforms –

- **Technology platforms** ([IBM Cloud](#))
- **Process platforms** enable industry peers to unlock the value of data and reinvent back-office workflows by recomposing their organization with AI, robotics and automation, designed into key processes ([IBM Group Insurance Platform](#))
- **Market platforms** enable trusted exchange between diverse partners on a global scale, by providing secure, transparent and traceable proof of identity, ownership, payments, logistics and recourse ([IBM Food Trust](#))

- **Value Retention**

Beginning in NL – built environment (FM) platforms. Remanufacturers embedded

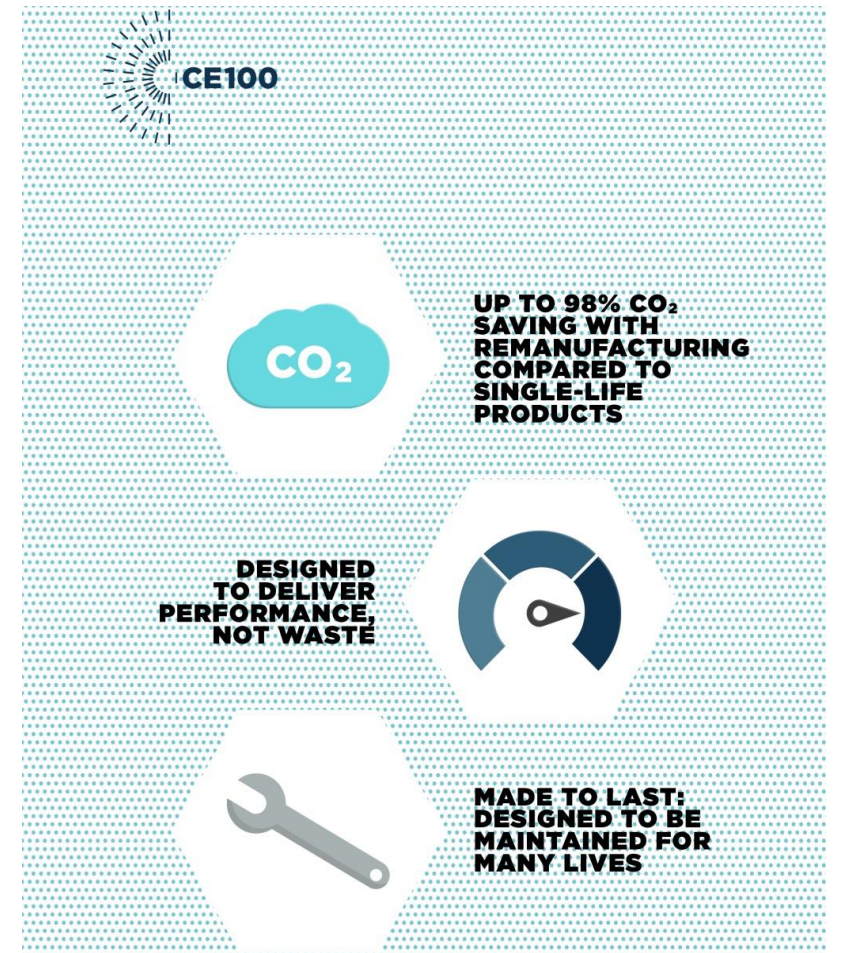
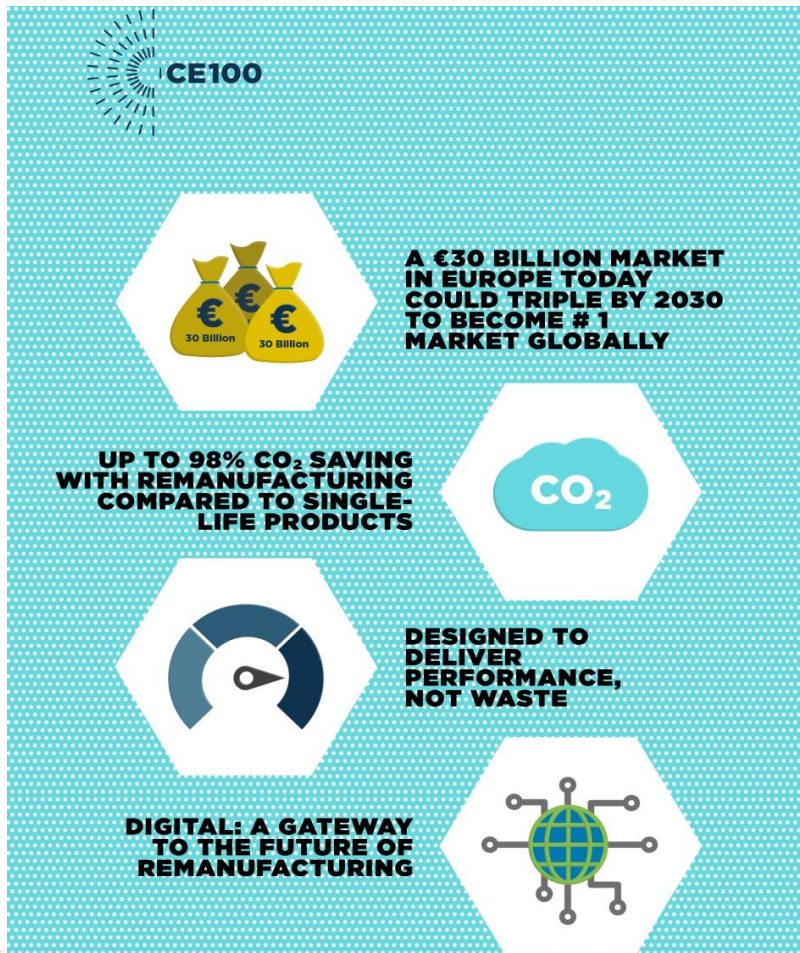
**Next Steps:**

Multiple opportunities to improve asset management. Aviation, HS Rail, Marine, Military



Erich Clementi

# #BetterThanNew – White Paper 2019



## Sources of Learning/Inspiration

- **Sectors** – Mobility (esp' High Speed Trains, Aviation, Automotive)
- **Planned Maintenance Contracts** – I.T. / Aviation / Shared Ownership
- **Data Management** – Utilities/Tyres
- **Academics** – Grenoble, Fraunhofer, Linkoping, TU Delft...
- **Financial Institutions** – Circular Economy financing