

An aerial photograph showing a dense forest with trees in various shades of green, yellow, and orange, indicating autumn. A body of water is visible on the left side of the image, and a road or path runs along the bottom right. The overall scene is serene and natural.

Towards 100% circularity, together

Christoffer Wahlborg, Stena Recycling AB

It starts here.



Christoffer Wahlborg

Bachelors degree in Management and Marketing and a Masters degree in International Business

Industry Manager Automotive, Stena Recycling AB at HQ in Gothenburg

Lives with wife and twin daughters

2

MANUFACTURING

Optimizing waste management and material value, as well as maintaining high safety standards, forms the basis of our work in customer operations.

3

RECYCLING

With efficient recycling processes and continuous technological development, we ensure high recycling rates and conservation of materials.

1

DESIGN

We contribute with expertise in material selection and design. By making the right decisions from the start, we can jointly create recyclable products.

4

RECYCLED RAW MATERIAL

Our work throughout product life cycles increases the availability and quality of recycled resources.



WE CARE FOR RESOURCES BY PROVIDING WORLD LEADING CIRCULAR SOLUTIONS

Global Sustainability Challenges

Climate change
caused by global
GHG emissions

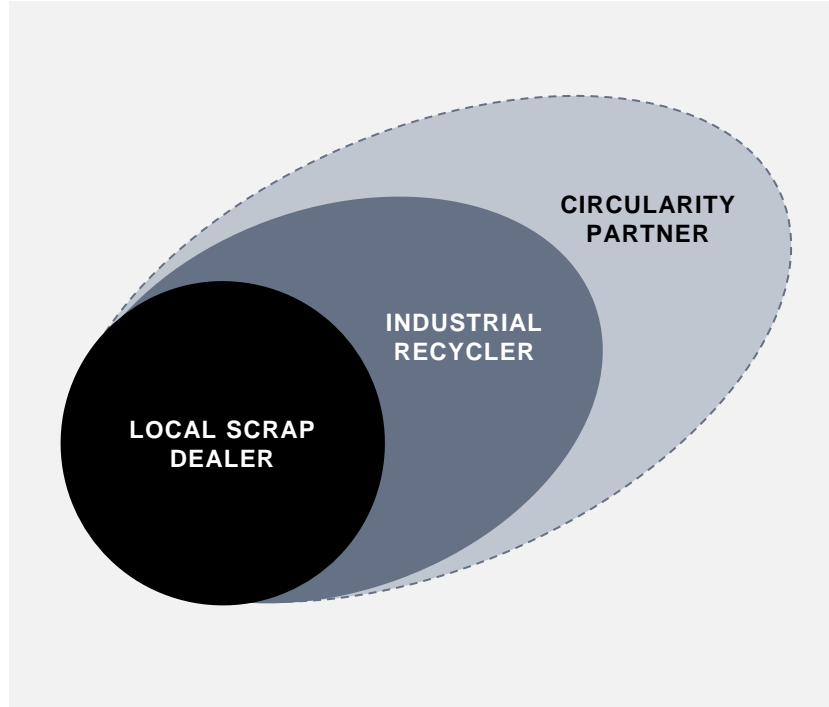
Overconsumption
of resources leads
to risk of scarcity

Linear production
models cause
unnecessary
waste of resources



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STENA RECYCLINGS JOURNEY | From local scrap dealer to circularity partner



ELECTRIFICATION & BATTERIES

CIRCULAR SOLUTIONS & PARTNERSHIP

SCALE REUSE

CIRCULAR CONSULTING

DIGITAL OFFERINGS

It starts here.

STENA RECYCLINGS JOURNEY | Circular initiatives



STENA NORDIC RECYCLING CENTER

- Largest recycling center in Northern Europe.
- Continuous technology development for new processes to strengthen material recycling ability.
- Financed by dark green bond.



PLASTICS RECYCLING

- New process for LDPE plastics started in 2018.
- Lanna - several resource-efficient and circular solutions which mean that we collect and process used plastic and then create new recycled plastic raw material.

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STENA RECYCLINGS JOURNEY | Circular initiatives



ELECTRONICS

- Recycling of plastics from electronics.
- Re-use of electronics.
- Re-appli: Sales of home appliances for re-use.
- Moreco: Re-use of it-equipment and servers.

It starts here.



BATTERYLOOP

- Re-use of batteries from ELV (end-of-life vehicles) for energy storage purposes.
- When a battery is considered end-of-life in a vehicle, it usually has about 70 % capacity to store energy left.
- These batteries are suitable for energy solutions in buildings and other facilities.

STENA RECYCLINGS JOURNEY | Circular initiatives



BATTERY CENTERS

- Locally present in seven markets in Europe
- Extensive collection network
- Diagnostics and preparation for re-use
- Safe discharging and dismantling

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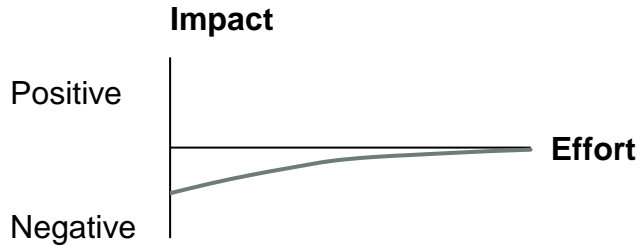
BATTERY RECYCLING CENTER, HALMSTAD

- Scalable and module-based mechanical recycling and sorting capacity
- 10 000 ton/year capacity

CIRCULAR ECONOMY | By transitioning to the circular economy framework, we enable business to do 'more good' and not just 'less bad'

From linear...

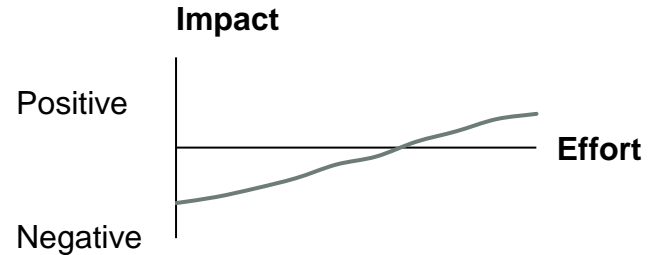
TAKE → MAKE → DISPOSE



Wasteful by design



...to circular

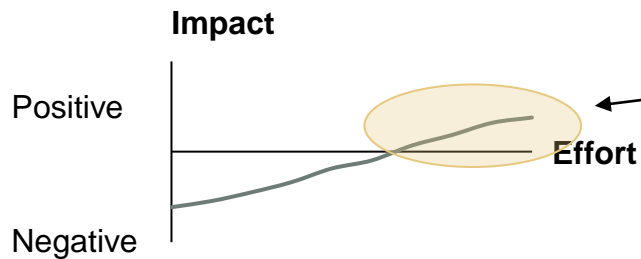


Restorative and regenerative by design

It starts here.

SOURCE: Stena Circular Consulting

...to circular



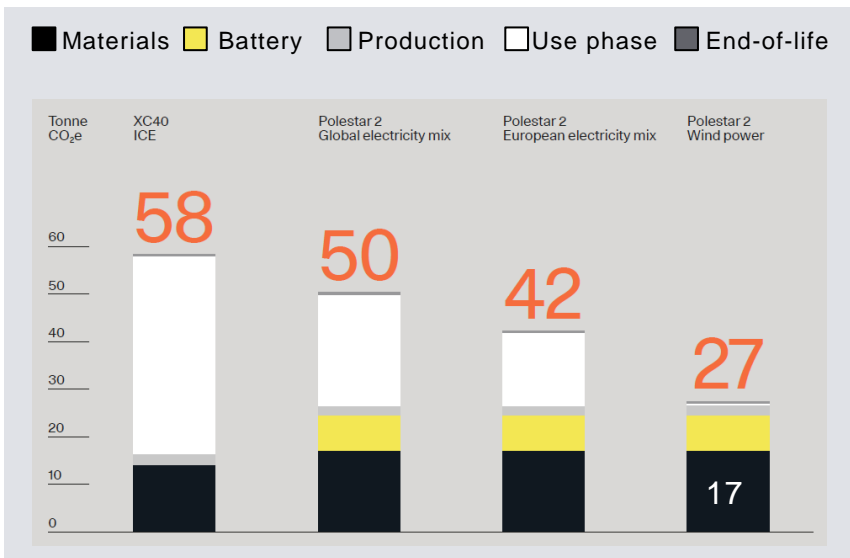
HOW DO WE ACHIEVE THIS?

Restorative and regenerative by design

It starts here.

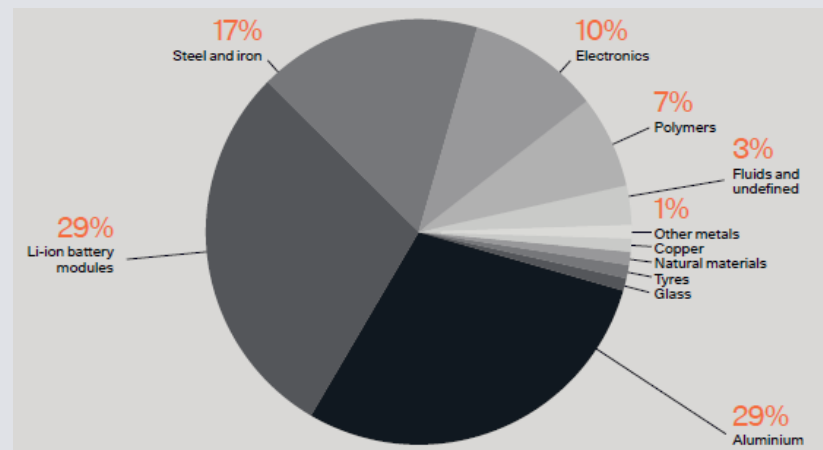
CO2 FOCUS IN AUTOMOTIVE | For electrical vehicles, the next step in CO2-reduction will be materials - with aluminum and batteries as high priority

Materials growing impact on CO2 (Polestar example)



Aluminum & “batteries” largest “CO2 impact materials”

Polestar LCA analysis: Polestar 2, model year 2020



It starts here.

SOURCE: Polestar, Life cycle assessment, Carbon footprint of Polestar 2, published 15/9/2020

CO₂ TRACKING TOOL – STENA RECYCLING

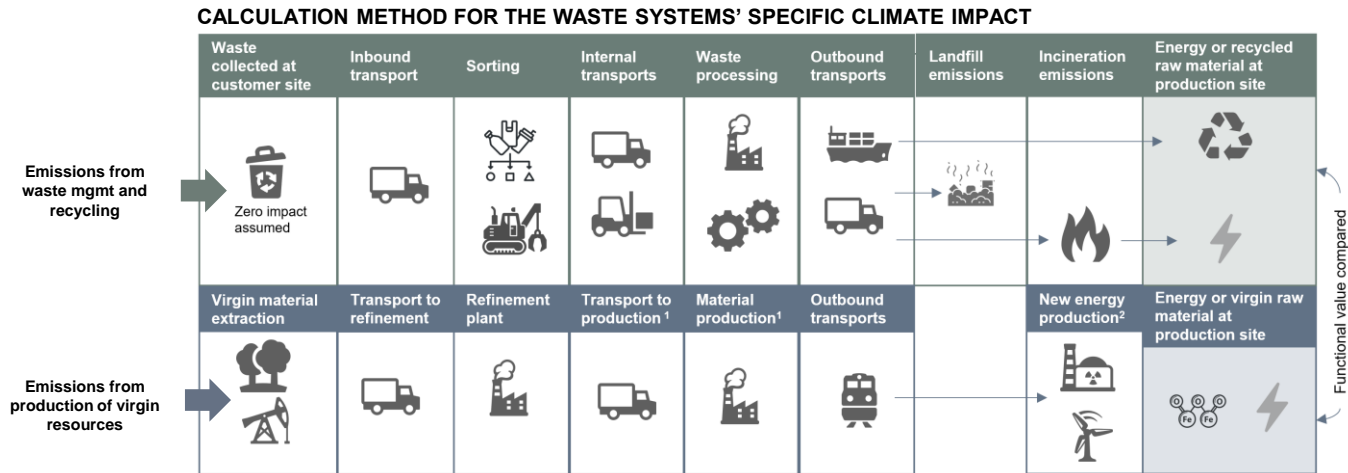


Tracking climate impact and CO₂ savings – all the way from waste to new circular resources.



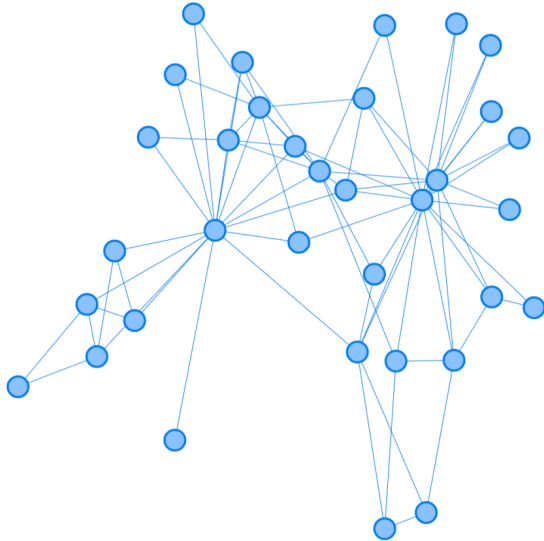
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WASTE MANAGEMENT FOOTPRINT | Stena Recycling works toward helping customers understand the climate footprint from the management of their waste



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VALUE NETWORKING | Could closer relationships be the next transitional key performance index to a more circular economy?

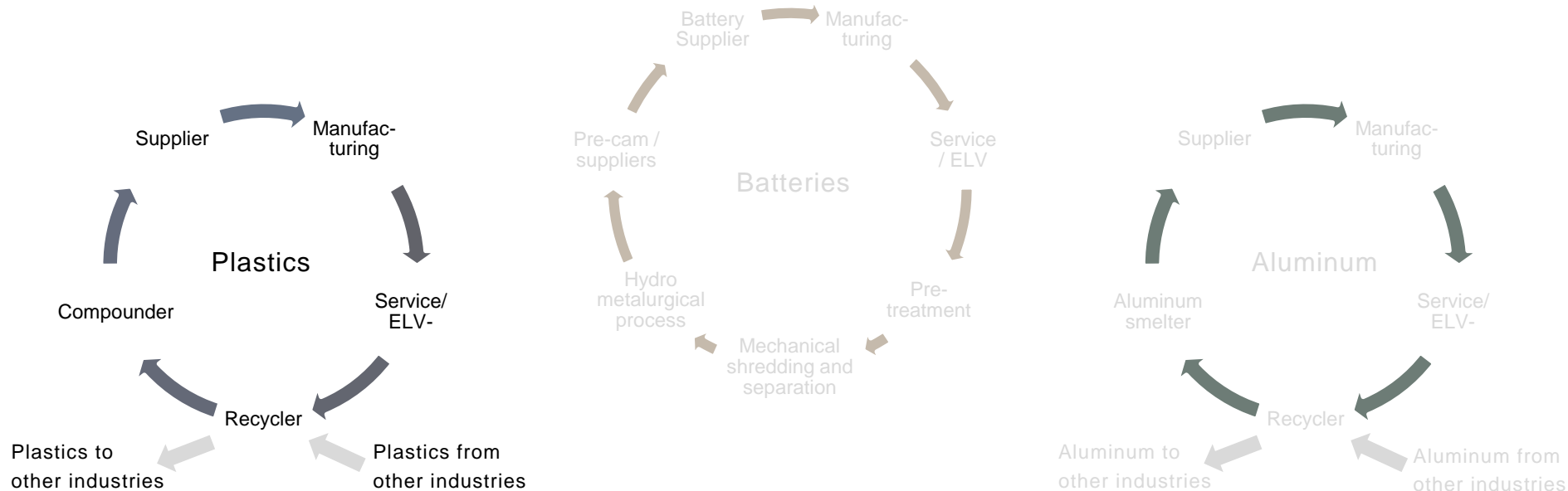


To understand the opportunities of a transition to a more circular economy, we need to shift our focus from value chains to value networks.

By crossing multiple value chains, we create value networks and in the value network we create value together.

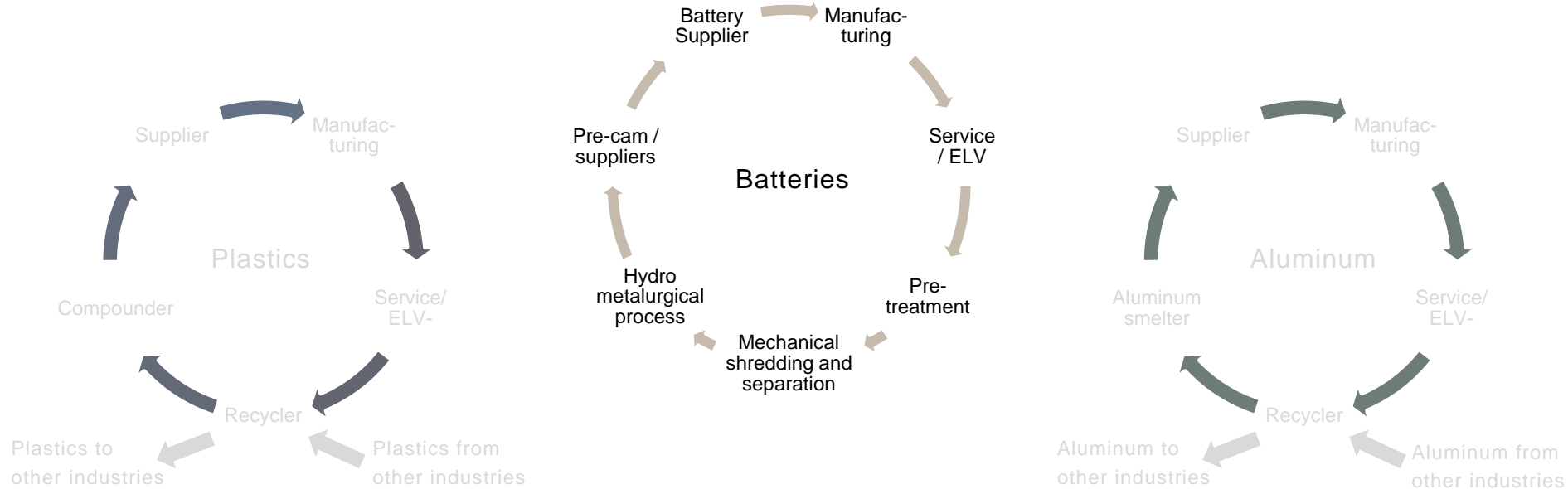
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VALUE NETWORKING | By working together we can achieve more and find optimal solutions within and beyond the automotive industry



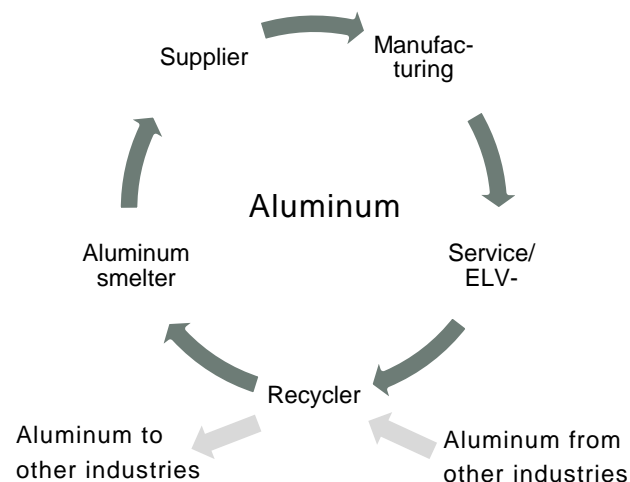
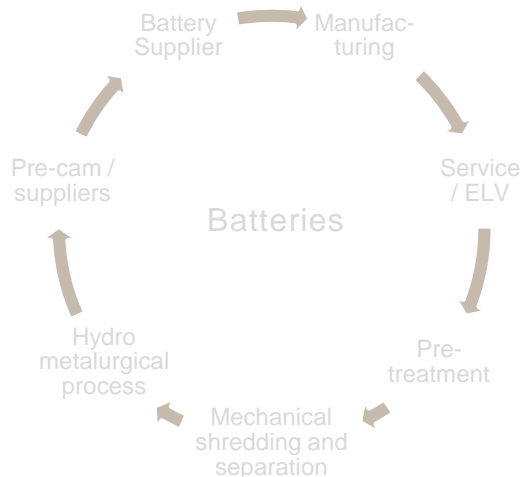
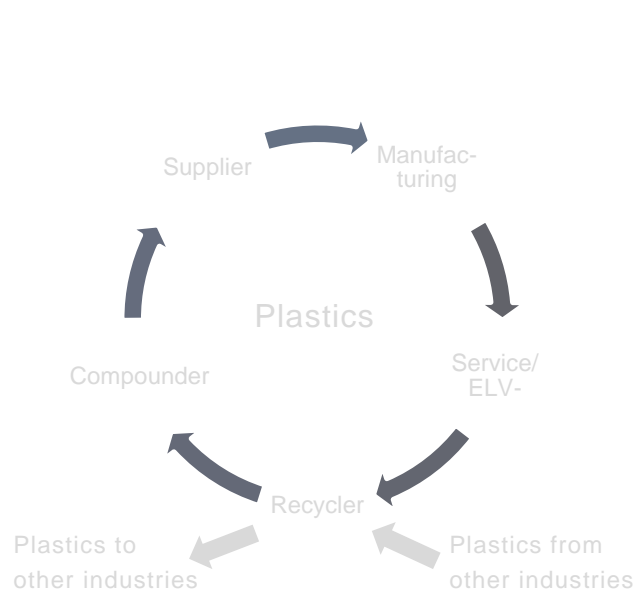
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christoffer.wahlborg@stenarecycling.se