

Closing the loop: ETICS on track towards circular economy?

DI Dr.techn. Clemens HECHT

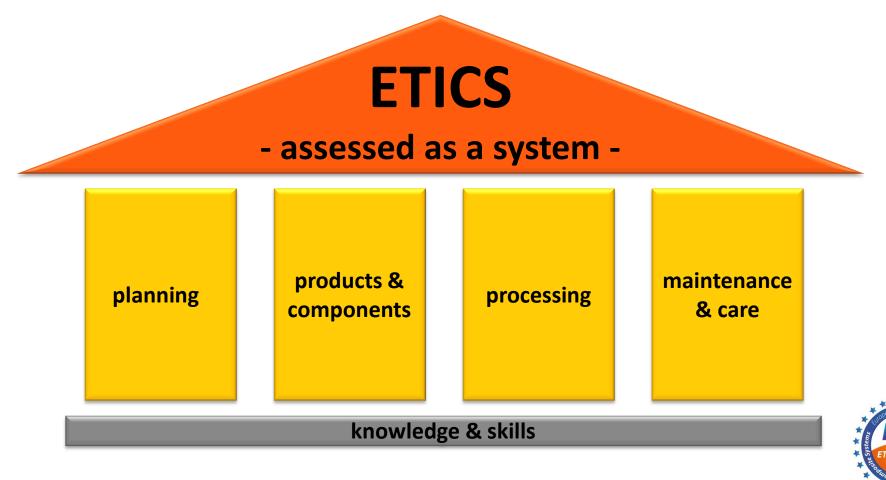
EAE board member Technical Affairs ARGE Qualitätsgruppe Wärmedämmsysteme, ÖSTERREICH/AUSTRIA

4th ETICS-Forum | 5th October 2017 | Warsaw/POLAND





our traditional holistic approach already included the life-cycle of ETICS





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To be future proof a broader view is required

- Proclaiming, with ETICS we contribute to a brighter future for the world, means: we also have to take responsibility for the end-of-life – and beyond!
- Recycling of construction and demolition waste will become more relevant in the near future
- Sustainability assessments of buildings will include this aspect.
- Therefore, designers will have to consider the environmental impact of construction products.

IS the ETICS industry ready to close the loop?



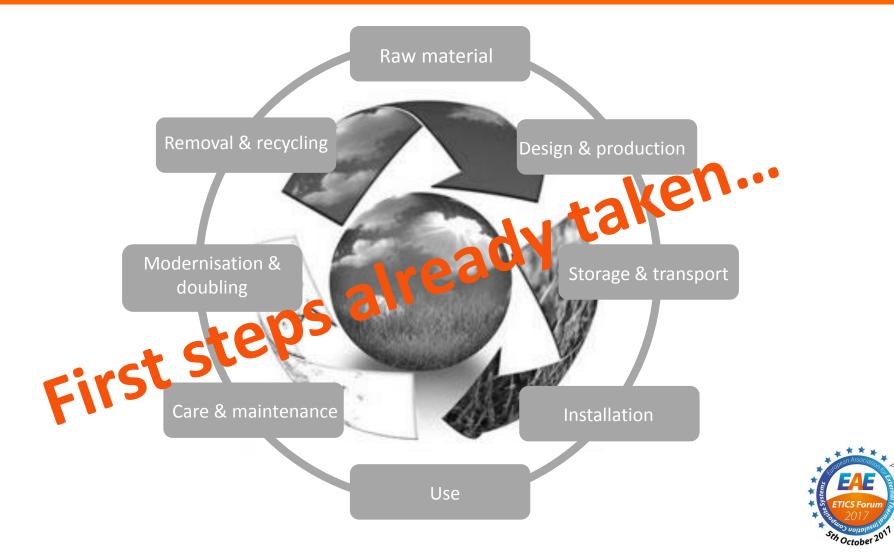






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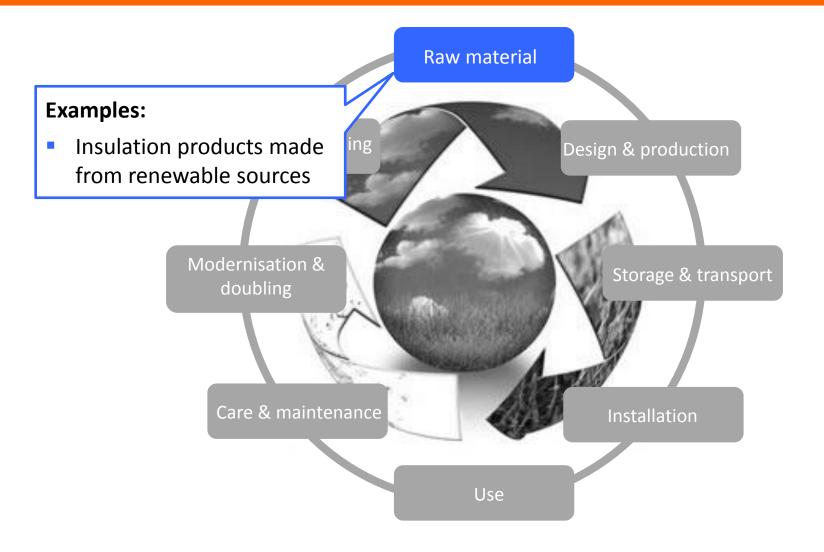


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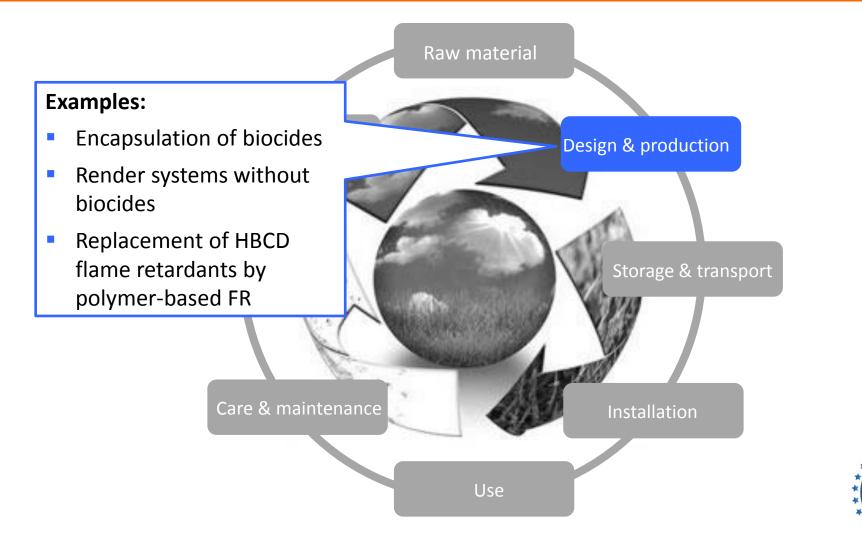




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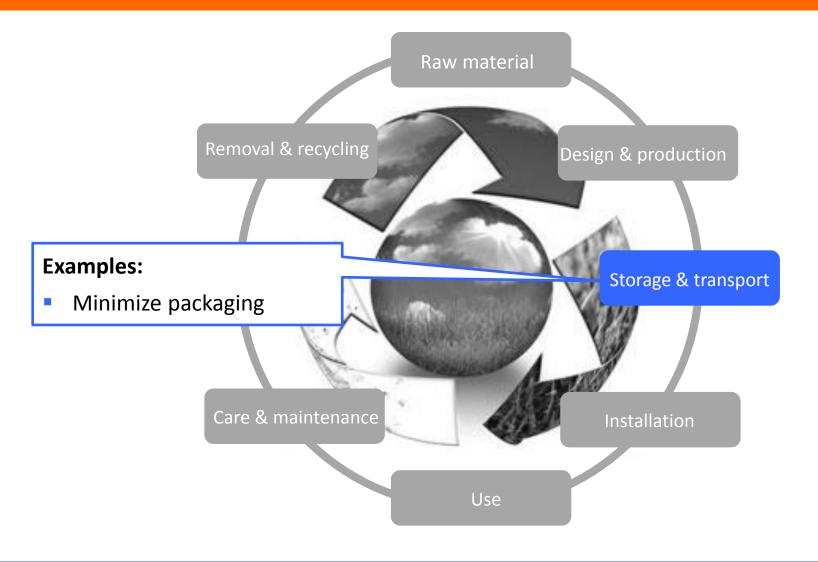
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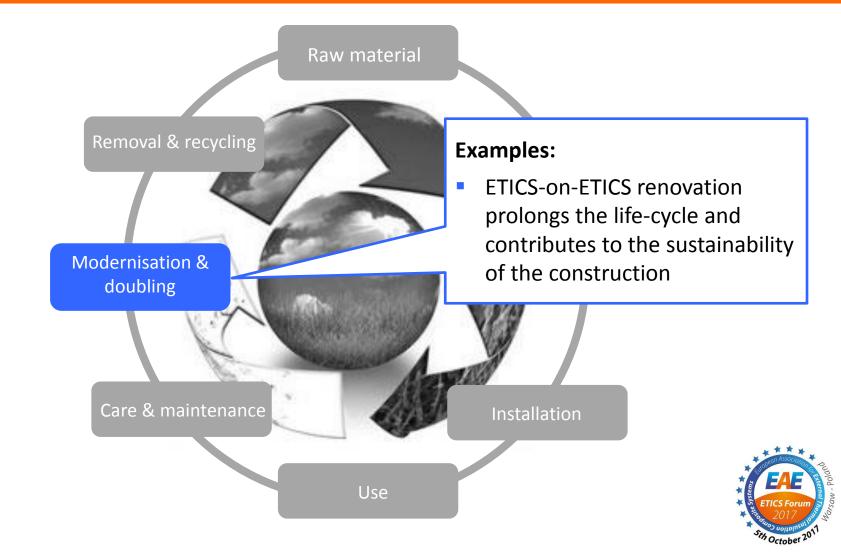
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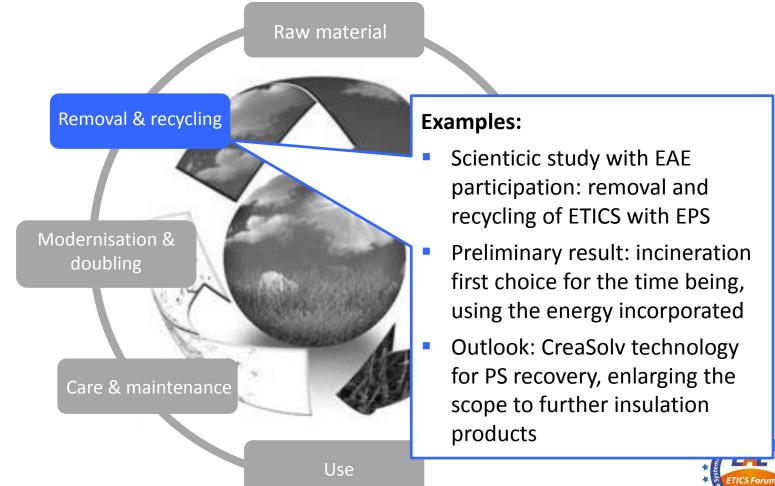




















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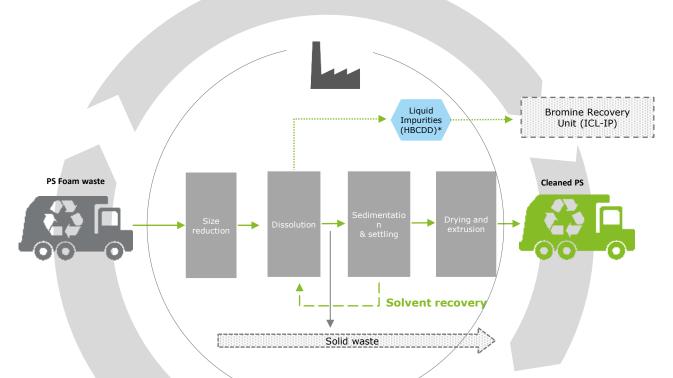
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TICS For



PolyStyrene Loop to test CreaSolv technology at large scale



- Pilot plant aiming to demonstrate economic and technical viability of closedloop recycling of polystyrene foam waste, and
- collecting experience for further improvements





Organisation Cooperative General Council Member council **Cooperative Polystyrene Loop UA** 15-20 members Executive board **Cooperative Polystyrene Loop UA** Supervisory board **Cooperative Polystyrene Loop UA Polystyrene Loop** Netherlands B.V.





- Pilot plant will start production in Q3/2018 in Terneuzen (NL)
- With financial contribution of EAE, several EAE member associations and companies





Key features

- Ensuring the sustainable market place for PS foam products in the next decades.
- PolyStyreneLoop
- Unique dissolution process for plastics with POPs based on the CreaSolv[®] process.
- Upcycling of recycling material.
- An innovative organisational approach of the whole polystyrene value chain.
- Strong support from national and EU authorities given the circular economy agenda.
- With lessons learned concept can be rolled-out.

YES, the ETICS industry and its partners are on the way to close the loop!

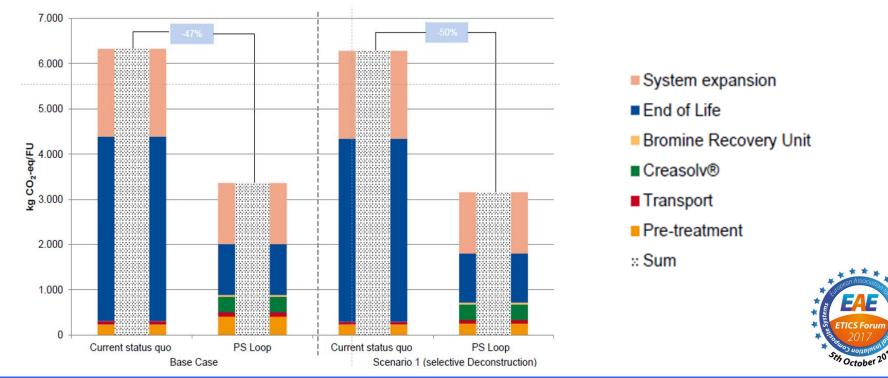






Environmental Benefits (preliminary assessment)

Graph shows preliminary findings of the Life-Cycle Assessment (March 2017), showing a key improvement in carbon footprint, amounting to 50% lower carbon footprint compared to incineration



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NO, the ETICS industry has **not** closed the loop **yet**!

But next steps are already planned:

- "Handbook" for removal and recycling of ETICS with different insulation products and surfaces
 - Including recycling options for mineral wool, polyurethane, phenolic foams, ...
 - Improvements of the recycling process, e.g. tools, compression prior to transportation, etc.
 - Providing guidance for all parties involved along the value chain regarding evironmentally responsible removal, waste treatment, avoiding disposal, and maximum recyclebility





YES, we take responsibility. We are on track towards circular economy, still having some challenges ahead of us!

Thank you for your kind attention!