



Eco-friendly transformers by KONČAR D&ST

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Key topics



Company presentation



Challenges and market demands



Impact of the Končar D&ST transformer on the environment



Environmentally sustainable product



Future





KONČAR D&ST Company profile

KONČAR
D&ST



- ❖ regional leader in the production of distribution, medium power and special transformers up to 160 MVA and 170 kV
- ❖ established in 1991
- ❖ joint stock company, part of Končar Group
- ❖ 100% owner of Power Engineering Transformatory Sp. z o.o. (PET) in Poland





KONČAR D&ST Company profile



- ❖ transformers delivered to more than 100 countries
- ❖ export in 2022: 90%
- ❖ turnover in 2022: 242 mil EUR
- ❖ employees in 2022: 744





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Challenges and market demands

KONČAR
D&ST



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21-CMP11



NACIONALNA
RAZVOJNA
STRATEGIJA



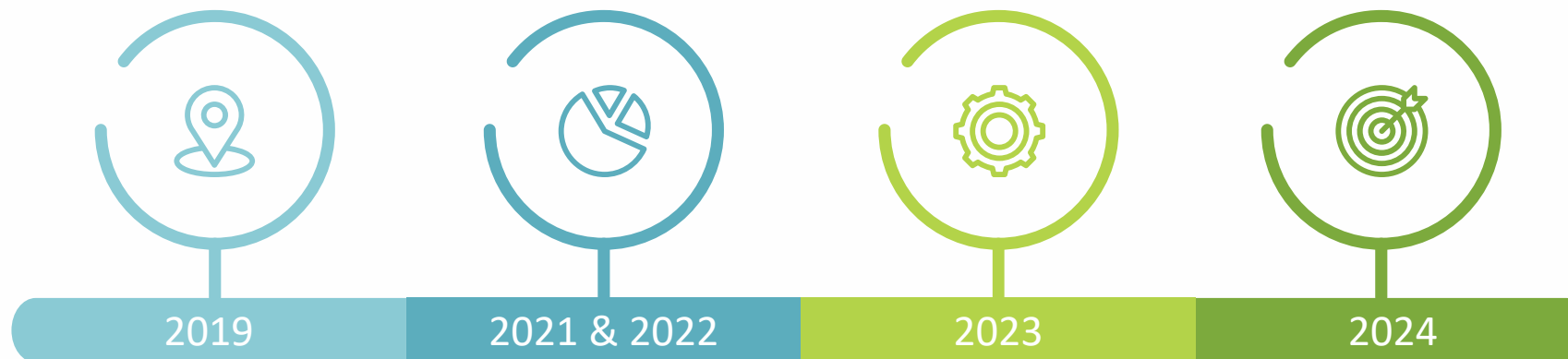
EUROPEAN
GREEN
DEAL

ESG

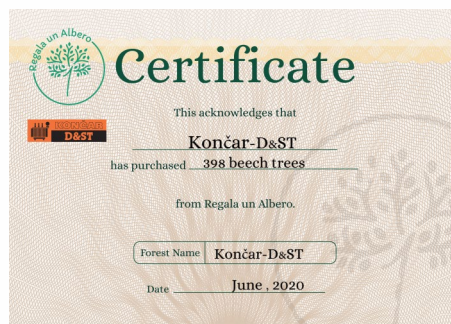




Challenges and market demands



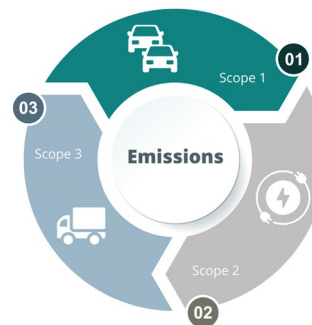
- ◆ issued the first CFP certificate for distribution transformers



- ◆ issued sustainability reports
- ◆ CFP calculations for both DT and MPT



- ◆ sustainability report for 2022 in preparation
- ◆ ESG strategy planning



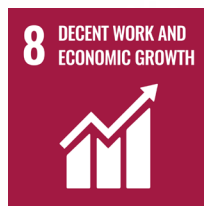
- ◆ establishment of ESG strategy and goals





Challenges and market demands

WHERE WE ARE NOW



WHERE WE WANT TO BE



**SUSTAINABLE
DEVELOPMENT
GOALS**



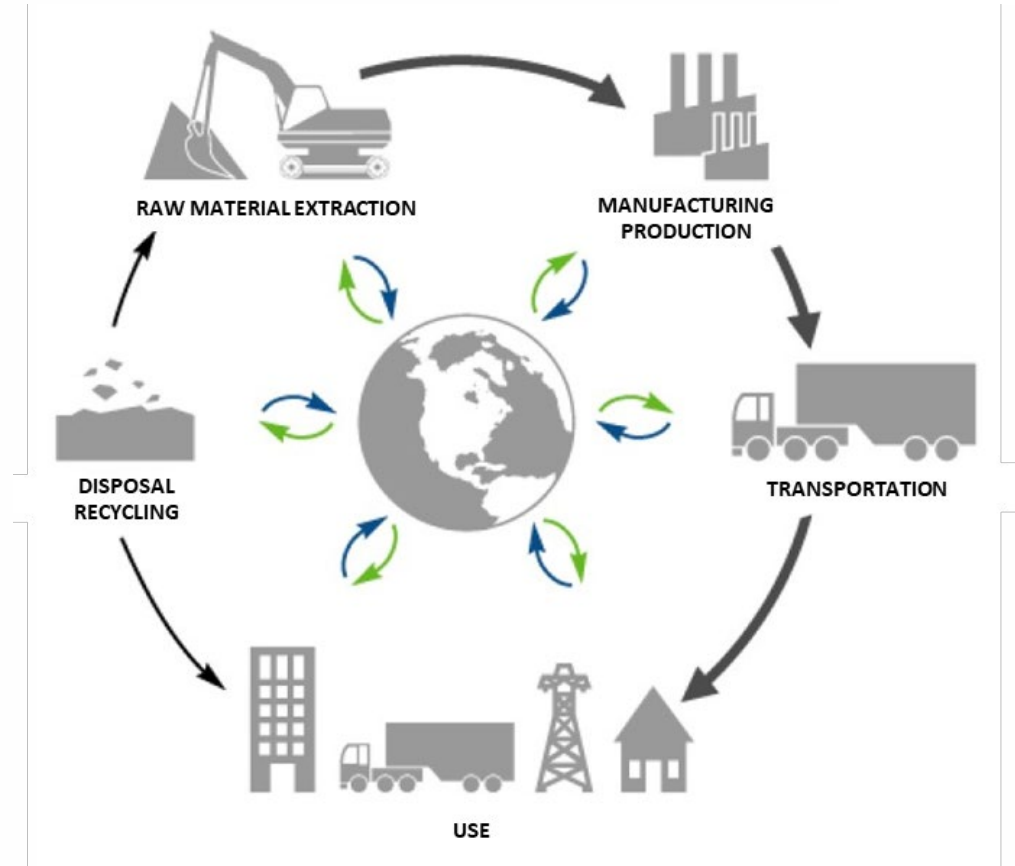




Impact on the environment

- ❖ product lifecycle-based thinking
- ❖ upstream and product manufacturing impact
- ❖ downstream impact
- ❖ negligible environmental polluters
- ❖ minor threat to the population and nature

KONČAR
D&ST





Ecodesign



- ❖ requirements of European legislation and the EN50588-1 standard – reduced electrical losses and noise levels
- ❖ larger dimensions and masses of the conductors, cores and the transformers themselves → higher carbon footprint in the upstream part, but lower carbon footprint during the use phase (lower carbon footprint in total)

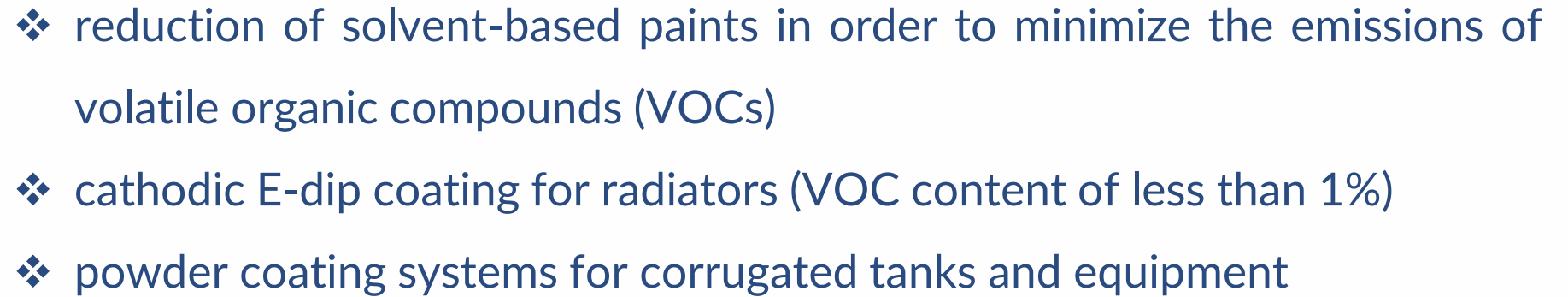


Environmentally friendly insulating fluids



- ❖ esters (natural and synthetic), biodegradable mineral and recycled insulating fluids
- ❖ ester insulating fluids – high fire and flash point, biodegradable
- ❖ new natural esters obtained from different agricultural crops
- ❖ first in region to produce a transformer with a nominal power of 40 MVA filled with mineral biodegradable oil produced from biowaste







Cleaner Manufacturing



- ❖ electricity at the production site in Zagreb 100% from renewable sources





Less Impact during the Lifecycle



- ❖ use of materials with a reduced impact on natural resource availability
- ❖ more energy-efficient operation with lower losses and noise levels
- ❖ lower maintenance costs during lifetime







Possibilities for the future

- ❖ use of materials and components with a reduced carbon footprint
- ❖ use of materials and components with an increased proportion of recycled content
- ❖ reuse of transformer parts at the end of the product life cycle
- ❖ increasing the reuse of packaging materials





**Together towards green
growth**

Thank you

