



Sustainable Energy
&
Bio-Based Carbon



www.stercore.nl

THE

GREENEST

PRODUCTION COMPANY
FROM THE NETHERLANDS

*from bio-based residual materials to
renewable, natural raw materials*



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PROJECT PARTIES INVOLVED

provincie
Drenthe

GasTerra

gasunie
new energy

 Tauw

New
Energy
Coalition

EnTranCe
ENERGY TRANSITION CENTRE

 GETEC
PARK.EMMEN



MEILOF **SMILDE**
LOONBEDRIJF MESTDISTRIBUTIE TRANSPORT
Rijksweg 246 | 9423 PH Hoogersmilde | tel. 0592 - 459254 | www.meiolf-smilde.nl

 DNV-GL

gtl  europe
Proud Partner of
mushroom
valley

 ingenieursbureau voor bouwtechniek
goudstikker - de vries

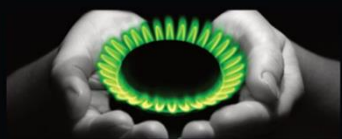


rijksuniversiteit
 groningen

faculteit economie
en bedrijfskunde

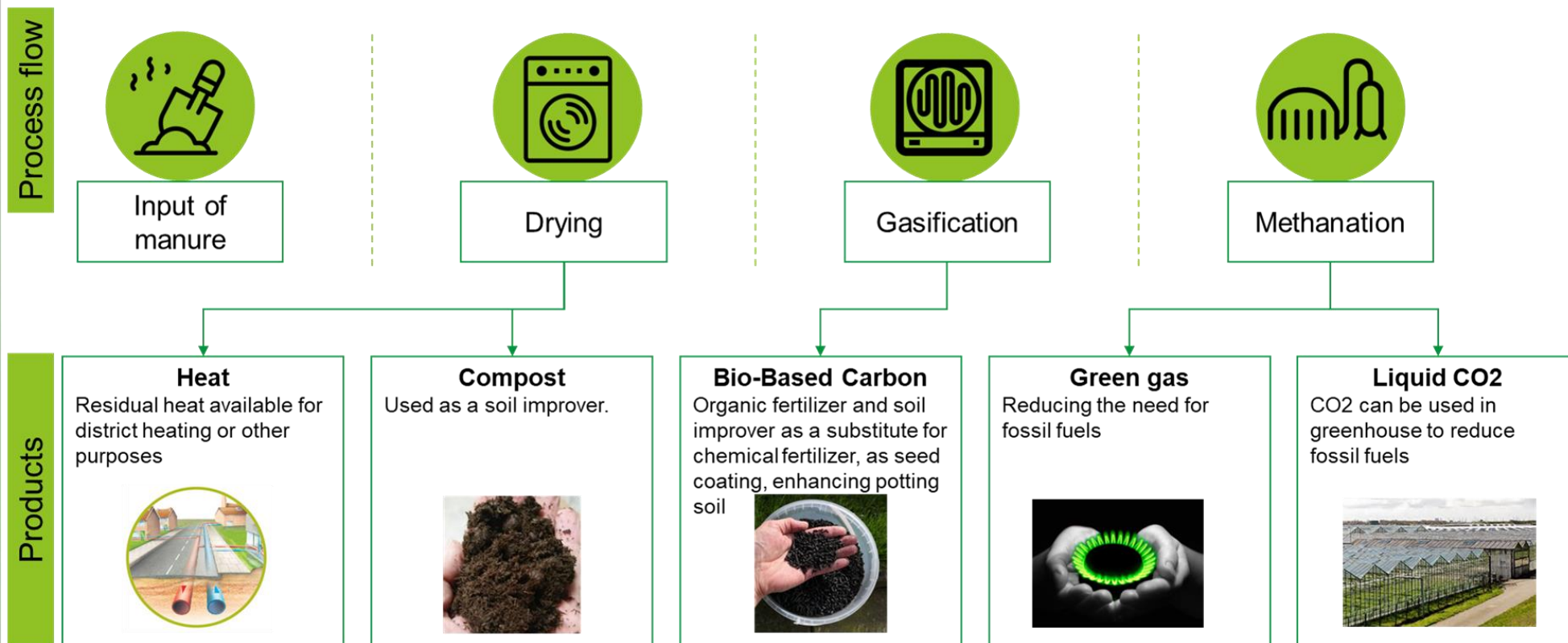


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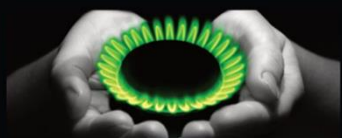
Process flow and business model



The green gas is contractually sold to Shell for a period of 10 years + 5 year option

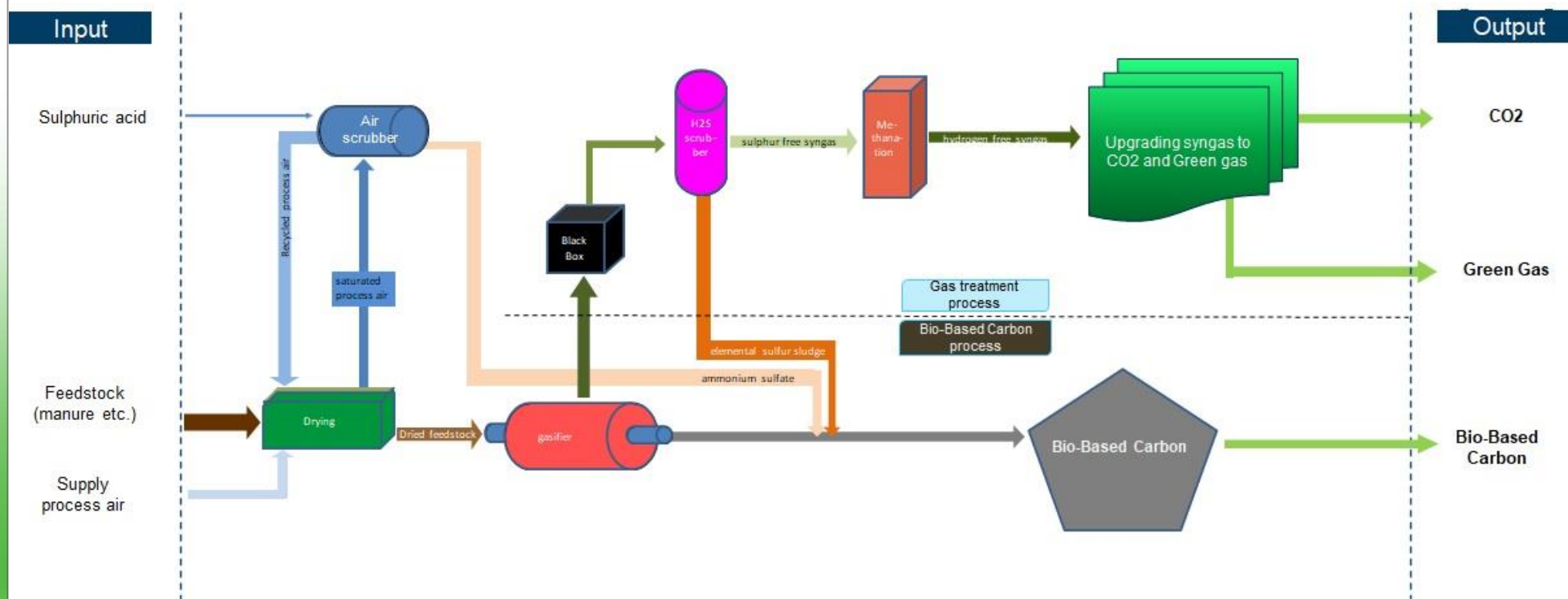


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TECHNICAL PROCESS FLOW



To be considered: the STERCORE process starts at the Bio-Based Carbon

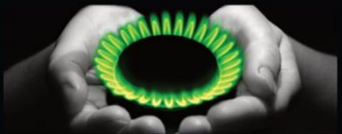
The quality and formulation of the Bio-Based Carbon is determining the necessary:

- feedstock
- technical process
- technical devices
- best available technology





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BUILDING ~ EXTERIOR



EMMTEC engineering

size: 70*120*11 The building is under full negative pressure, guaranteed odour-free

For videos: visit www.stercore.nl



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Explained: what is Bio-Based Carbon?

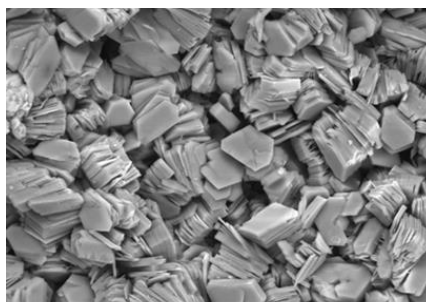
Bio-Based Carbon is a high-quality organic fertilizer and a soil improving amendment.

Able to compete with chemical fertilizers

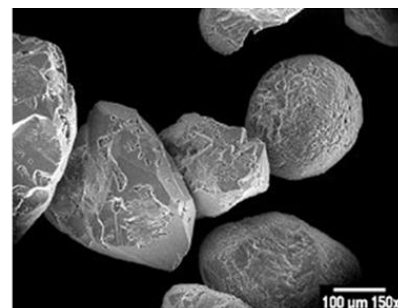
Carbon is a stage beyond just organic matter, the element is directly active in the soil, and therefore does not have to be digested and broken down in the soil first!

- the minerals are available during cultivation, longevity and content depends on formulation
- Bio-Based Carbon has no manure smell and is completely free of germs, weeds etc.
- Bio-Based Carbon meets the EU 2019/1009 criteria to be recognized as end-of-waste product

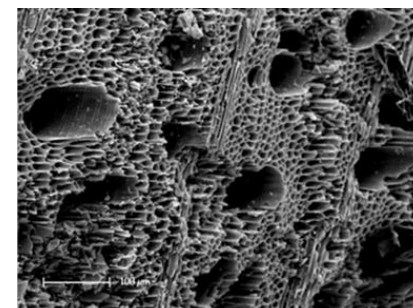
content in STERCORE Bio-Based Carbon			EU Anordnung Annexes II, III and IV to Regulation (EU) 2019/1009		
88% DM	100% DM		max.content in 100 % dry matter		
0,01	0,01	mg/kg	6	mg/kg	PAH16
0,34	0,38	ng/kg	20	ng/kg	WHO toxicity equivalents of PCDD/F /kg
0,00	0,00	mg/kg	0,8	mg/kg	ndl-PCB
0,08	0,09	mg/kg	2	mg/kg	thallium (Tl)



clay



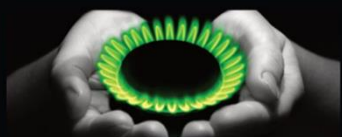
sand



biochar



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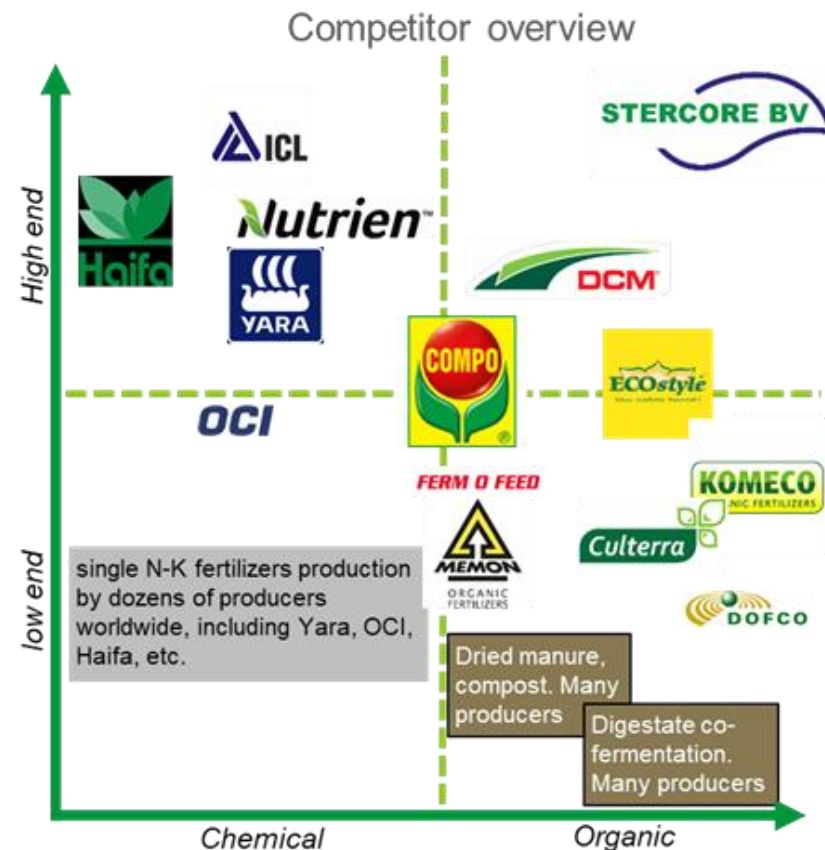


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POSITIONING

Description

- STERCORE focuses on high-value crop cultivators as they are willing to invest in high-quality fertilizer products. Examples of high-value cultivators include flower bulbs, horticulture, tree nurseries, greenhouse horticulture, seed coating, potting soil
- STERCORE focuses with its Bio-Based carbon on the premium segment of the market where major fertilizer producers such as ICL, Yara, OCI, and Haifa are active
- Although STERCORE competes with major fertilizer producers, it already has an extensive network of distribution channels
- In addition, STERCORE already has a strong client base, built up from the previous activities of the founders. There appears to be a lot of interest in export in particular, as non-binding long term supply contracts already have been concluded
- With the expected market growth of the biochar market, STERCORE will operate in a Pull market
- STERCORE is already been contacted by several major fertilizer producers for product information and participation possibilities.





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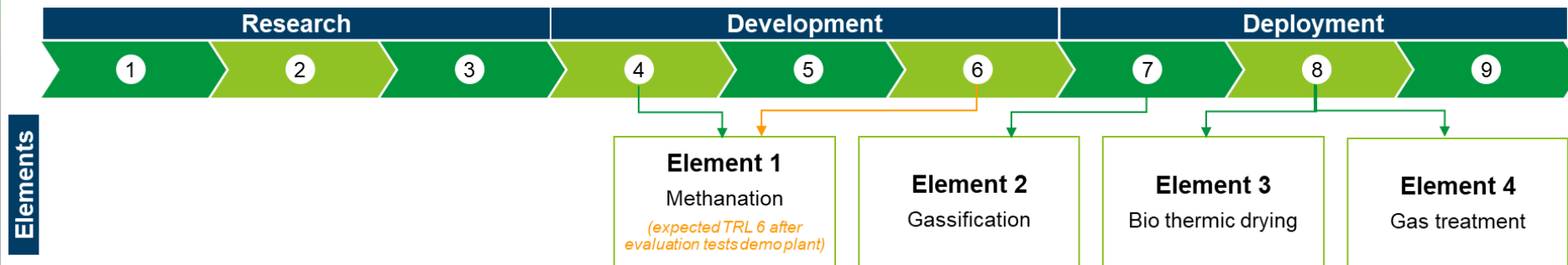
www.stercore.nl

TECHNICAL DUE-DILIGENCE by DNV

Description

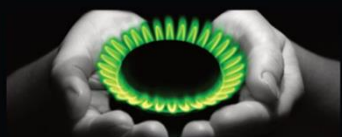
- STERCORE's production process consists of several individual elements which can operate independent of each other and have a TRL of 7+
- Only a single element of the methanation process has a relatively lower TRL. This element has been well-tested but is not yet operating on industrial scale resulting in the lower TRL level
- STERCORE works together with well known suppliers with a good track record to get maximum support
- STERCORE is a system integrator who combines proven technology with an innovative twist to get maximum results
- The management of STERCORE is highly experienced in the field of expertise its active in

Full TDD report is available upon request





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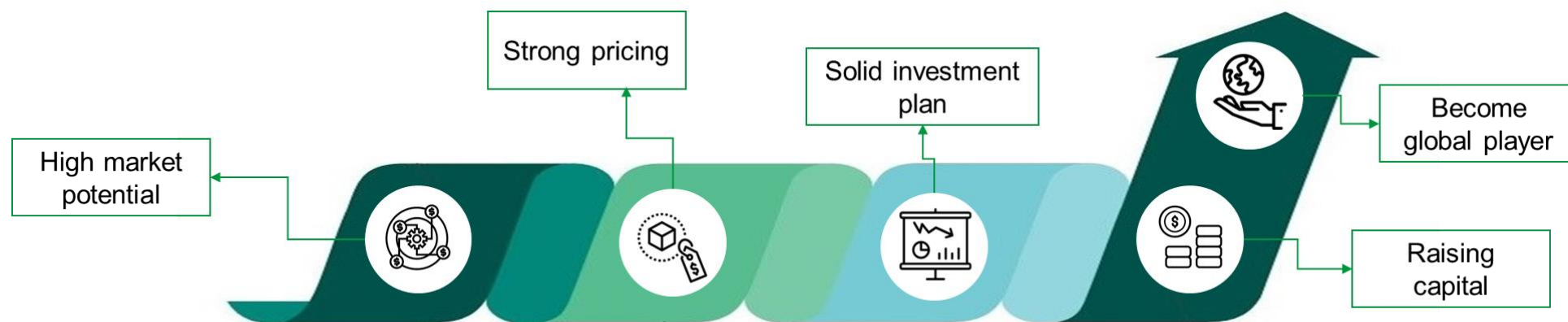
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ECONOMICAL DUE-DILIGENCE by KplusV

Description

- Business economic analysis displays the financial forecast and describes the investment needs. All of STERCORE's financial assumptions are evaluated in this part.
- Commercial analysis: evaluates the way in which STERCORE puts the product on the market and the choices that STERCORE makes concerning product, pricing, promotion and location of the company. In addition, it describes the industry, the competition and the target group.
- STERCORE can acquire a position in the market and meet its budget, however given the innovative nature of the project, the aimed equity/loan capital ratio is unbalanced.

EDD report is available upon request





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STRATEGIC VALUE CREATION & SDGS | LIFECYCLE ANALYSIS

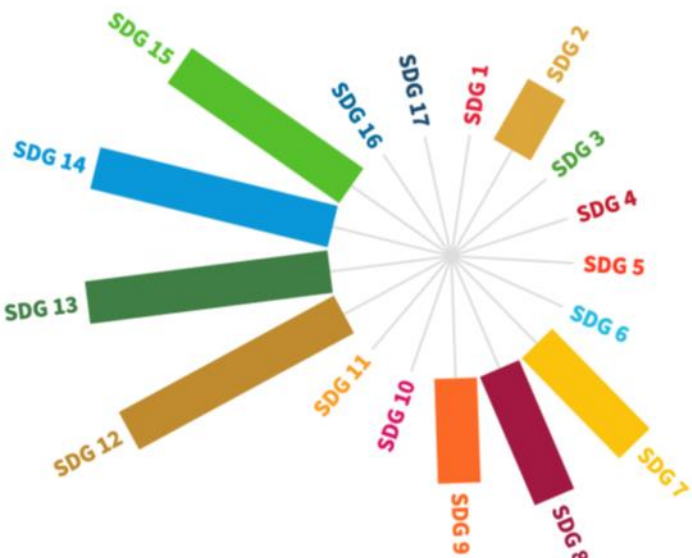
‘This LCA indicates that with STERCORE’s current system a minimum of **2.126,3 ton** CO₂-eq and a maximum of approximately **22.272,1 ton** CO₂-eq will be emitted from well to wheel. This has an impact potential of minimal **-227.961 ton** CO₂-eq and a maximum of **-345.014 ton** CO₂-eq in avoided emissions. Depending on the selected LCA method, potential avoided emissions and method of allocation of the avoided emissions the carbon intensity per MJ green gas ranges between -58 and -294 g CO₂-eq.

CONCLUSION

It can be concluded that STERCORE in all cases leads to climate change mitigation compared to the conventional system.

Therefore, overall STERCORE can be seen as an improvement compared to the current situation of co-digestion, the spread of manure on land, production of chemical fertilizers and the application of it.”

New.Economy.nl



value creation potential Image
Indication of STERCORE SDG contribution and potential



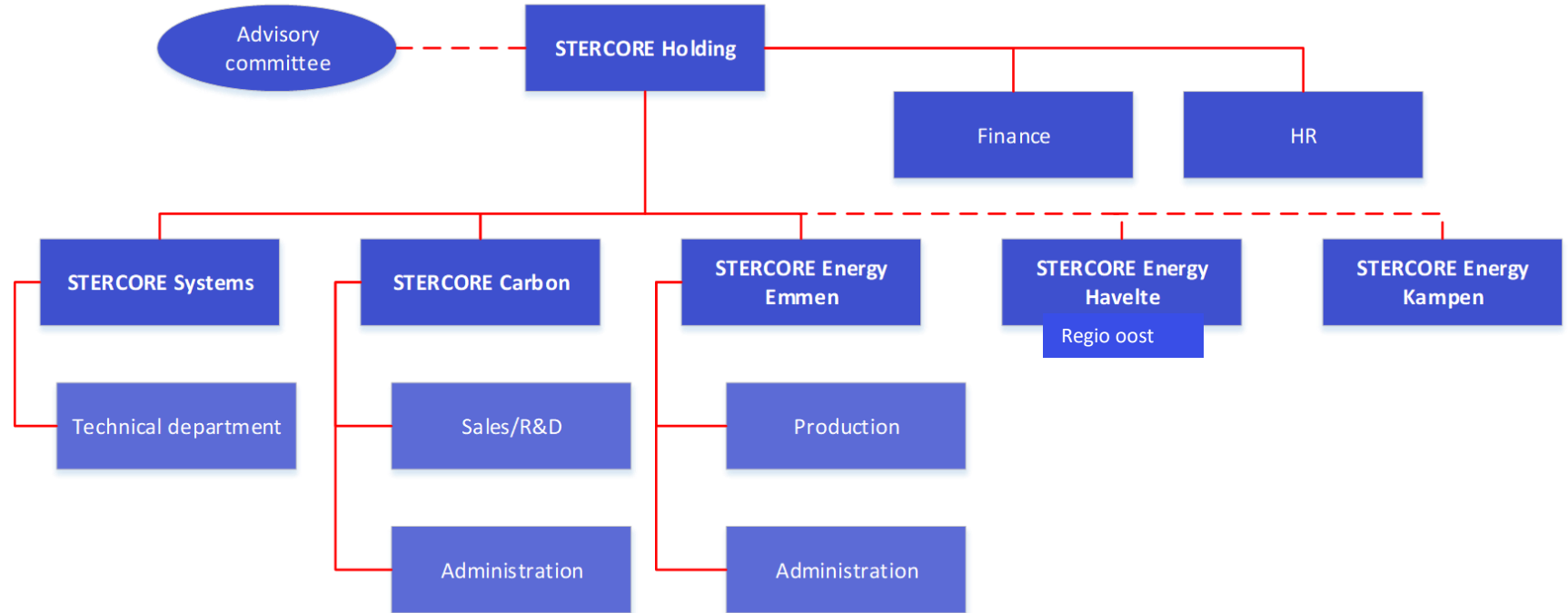


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Legal structure STERCORE® Holding company



Description

- STERCORE HOLDING BV provides financial, HR, legal and other services to the subsidiaries
- STERCORE ENERGY BV's are the actual production locations of STERCORE
- All the technical expertise is brought under STERCORE SYSTEMS BV which is responsible for the well-functioning of the installation including all maintenance, spare parts, etc.
- STERCORE CARBON BV carries out all R&D, marketing and sales activities to valorise Bio-Based Carbon and the expansion of product portfolio



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