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Turpentine Market Outlook

How Innovation is Transforming Current Supply Constraints into a Disruptive New Source of Turpentine

Pine Chemical Association Conference 2026

Live sensory experience at the end of the presentation

DRT the Best for Nature
A company of dsm-firmenich

dsm-firmenich

Created leader in Nutrition, Health, and Beauty

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Holistic well - being

Taste, Texture & Health
Converging the delicious and nutritious

Health, Nutrition & Care
Together, making our world a healthier place

Perfumery & Beauty
Delivering well- being and sensory delight to consumers

Fueled and backed by Science

€9bn
Sales

4.5%
Avg. OSG[2] in 2024 - 25

~7%
R&D spend of sales

~20%
Adj. EBITDA margin

21 000
Employees , all around the world

97
Manufacturing sites

[2] Organic Sales Growth, LfL continuing basis

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DRT a subsidiaries of dsm-firmenich – The Best for Nature

Nature is our origin and, inspired by its ecosystems, a circular economy is the model that drives us

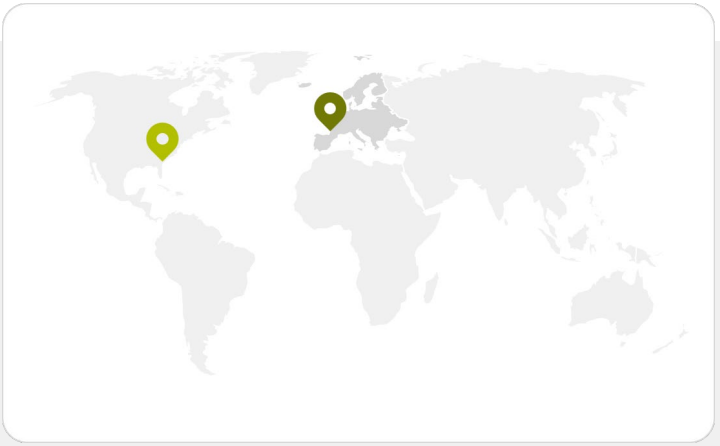
94 years
of experience

N°1 turpentines processor in the world with 2 distillation plants

90 +
DRT contributes to the manufacturing of more than 90 ingredients used in numerous everyday products

90% of our standard products are bio-sourced

N°1 broadest ingredients portfolio from pine derivatives



01 **DRT VIELLE SAINT-GIRONS**
Production of tall oil derivatives, terpene resins and natural extracts

02 **DRT CASTETS**
Fine chemicals

03 **DRT LESPERON**
Production of rosin derivatives

04 **SBS MOURENX**
Fine chemicals & Pharmaceutical products

05 **DRT AMERICA Rincon, Georgia**
Terpenes intermediates

We also rely on our other factories and international offices as well as dsm-firmenich network for even increased global reach.

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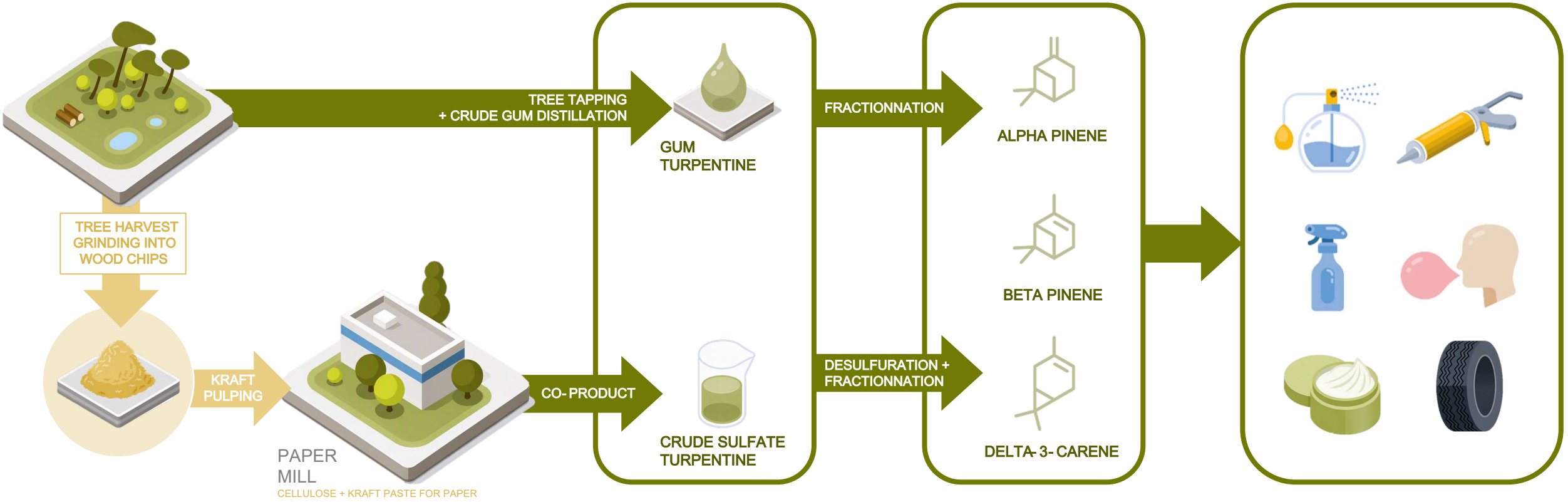
Turpentine : Origins & Key applications



GUM
TURPENTINE

CRUDE
SULFATE
TURPENTINE

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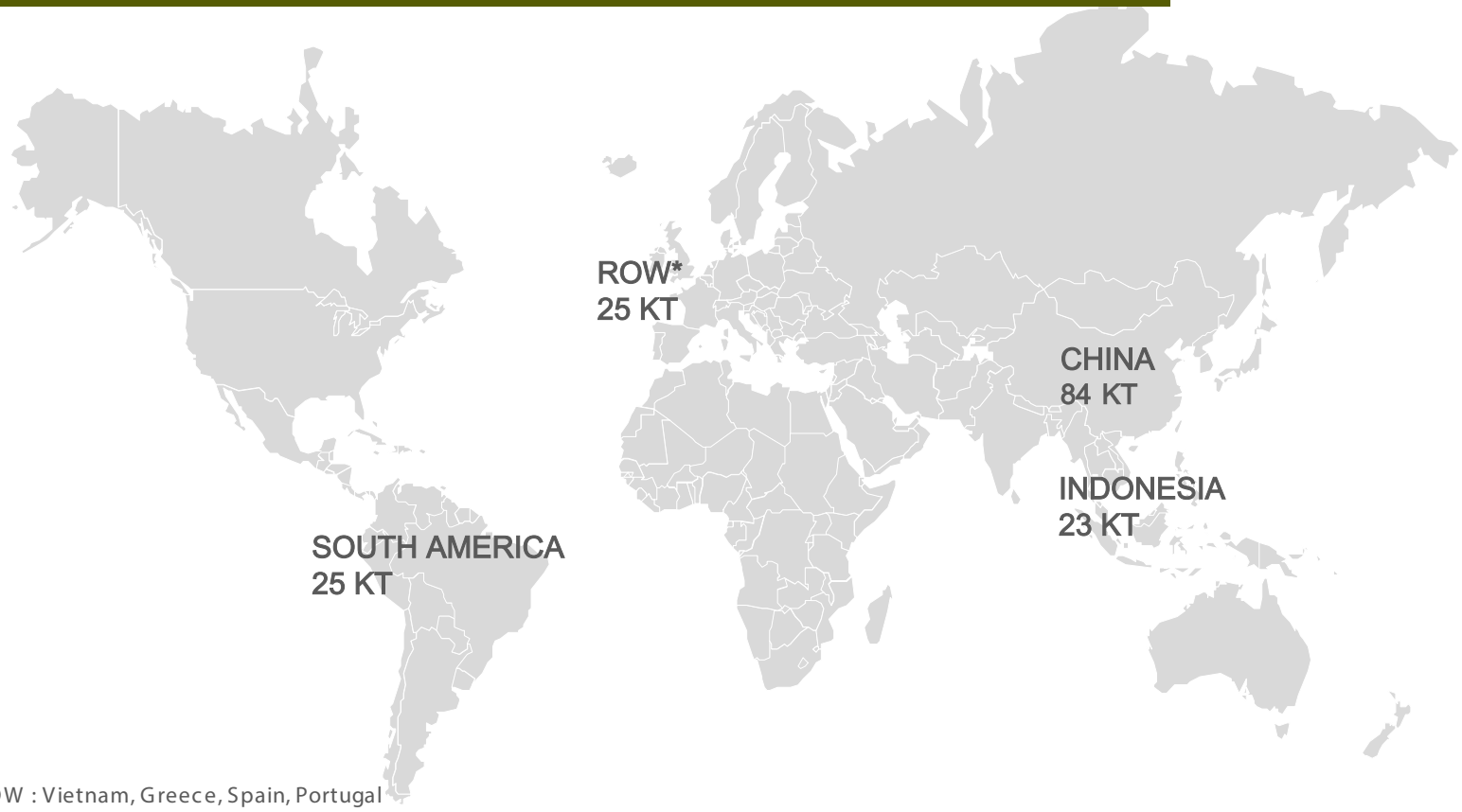
Turpentine : GT Market Outlook

GUM TURPENTINE

Global capacity estimated : 170 KT (- 4,8% VS 2021)



*ROW : Vietnam, Greece, Spain, Portugal

LAST MARKET EVENTS AT A GLANCE

- **Climate change impact :**
  - **Forest fires** in Brazil, Spain, Portugal & Greece
  - **Floods** delaying tap season in China
- Workforce issues : industry not attractive & know how disappearing
- **High uncertainty on crop from a region to another**
- **Low** inventories
- **Logistic** complexities remaining
- **EXW Price increase** by >+30% the last 6 months after a year relatively stable

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Turpentine : CST Market Outlook

CRUDE SULFATE TURPENTINE

Global capacity estimated : 180 KT (- 14,2 % VS2021)

*ROW : China, Africa, Oceania

LAST MARKET EVENTS AT A GLANCE

- **Limited supply available** due to:
  - Unfavorable market conditions
  - Shutdown / fires / strikes on **Pulp mills**
  - More usage of **hardwood**
  - **Recycle paper**
  - Lower **T cooking process**
  - Sector consolidating
- **More & more t urpentine players** in the market introducing CST in their distillation mix to optimize price
- **Demand continue to increase** and is >> production of CST + GT (estimation 15-20 % of over capacities)
- **EXW Price has increased** by 20 % in the last 3 years

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Expected next 15 years evolution of volumes from traditional Turpentine sources

BIOREFINERY-BIOFUEL

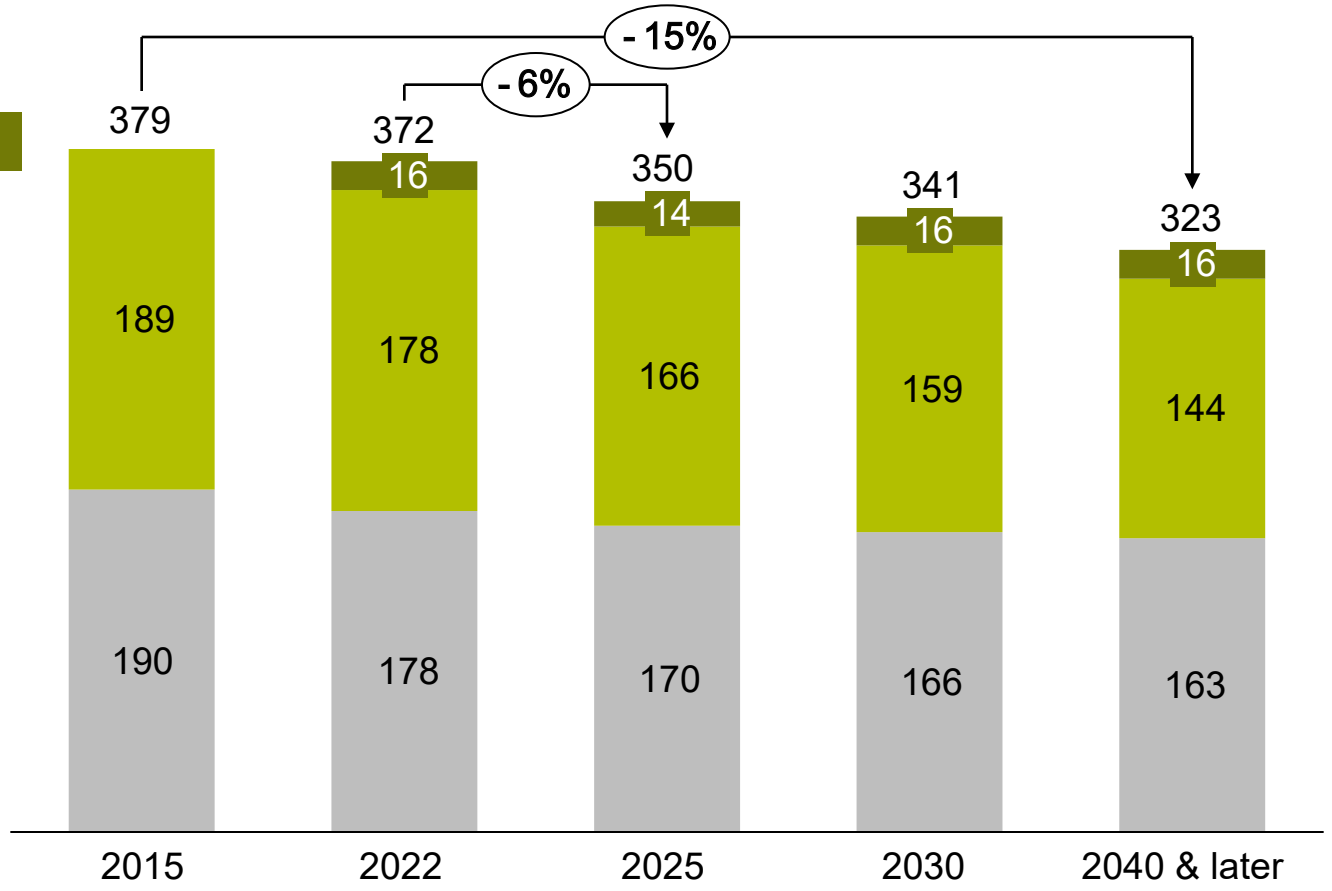
CHEMICAL PULPING INDUSTRY

TAPPING

CST HL

CST

GT



TO REMIND

- Forecasted decrease on the next 20 years, from both tapping & pulping
- While growing customer demand for terpene derivates

CHALLENGE

How can we match supply with demand ?

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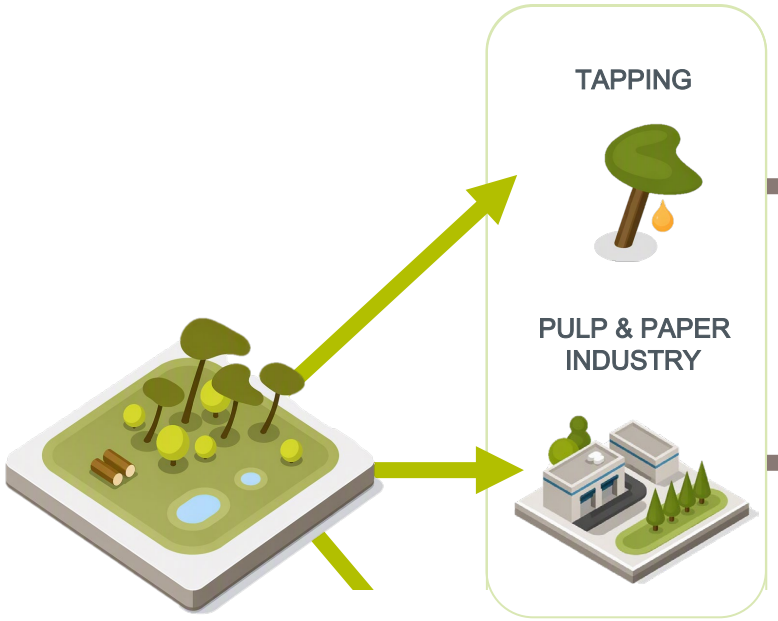
Focus on D - F Strategy & D - F Technical Support Philosophy



SUPPLIER'S INDUSTRY ORIGIN TYPE& CORE BUSINESS	D- F STRATEGY
ANCESTRAL → Production of crude Gum ⇨ 100% of turnover based on GT & GR and derivates	MARGINAL SPOT OPPORTUNITIES
MID 20th CENTURY → Production of paper, cardboards, tissues… ⇨ << 1% of turnover based on CST	TECHNIC- COMMERCIAL PACKAGE OFFER WITH EXCLUSIVE LONG TERM WIN- WIN PARTNERSHIP -> TECHNICAL SUPPORT FOR QTTY & QUALITY IMPROVEMENT

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Innovation program since 2019

TARGETED INDUSTRIES

MDF / HDF INDUSTRY

OSB INDUSTRY

PLYWOOD INDUSTRY

SAWMILL INDUSTRY

DEDICATED ORGANIZATION

- Within Procurement
- 4 people combining expertise's :
  - pulping experts
  - process engineers
  - organic chemists
- Internal QC, R&D, OPS, REGUL… support
- Specific budget line for this project

D- F OFFER &REALISATION

- Technical – Commercial package offer
- More than 15 audits performed
- Both EU & LATAM covered

→ Confirmation of technical feasibility

→ Confirmation of great turpentine potential

→ First contract signed

MDF TURPENTINE HIGHLIGHTS

→ First isotanks consumed from different qualities

→ First Derivates sold in F&F and Industry segments

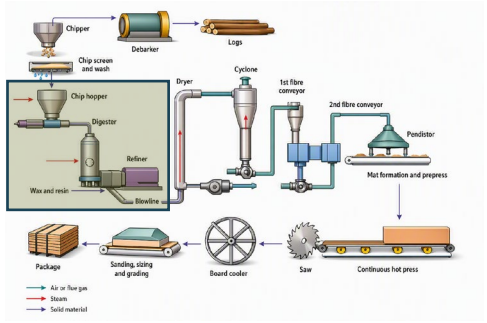
→ D- F pioneer in new turpentine sourcing development

→ Innovation as key driver for D - F

Dream is now a Reality !

MDF Industry, new source & new quality of Turpentine

MDF Production process



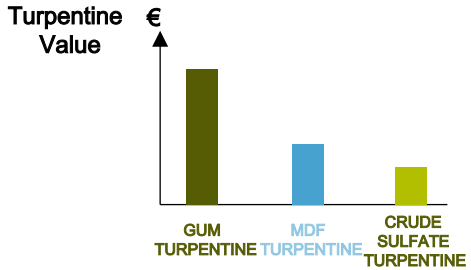
- Similar to mechanical pulping process
- Different technologies for turpentine extraction, including royalty-free solutions

MDF Turpentine quality

	GUM TURPENTINE
Main Pinus species	Massoniana / Elliottii / Merkusii / Pinaster
Alpha + Beta pinene	80 - 90%
Delta-3-carene	< 12%
Heavier terpenic compounds	< 2%
Sulfur content	< 50 ppm
Other impurities	No
Odors/smell of end product	OK directly in Fine Fragrances (F&F)

MDF TURPENTINE HIGHLIGHTS

- Regulatory :
  - Process + QA : equivalent to CST
  - REACH TOPP definition evolution to include MDF Turpentine
- MDF Turpentine not directly applicable to F&F
- MDF Turpentine valorization



Live sensory experience at the end of the presentation

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MDF & Panel Industry : game changer for Turpentine sourcing

Global capacity estimated: 50 KT (up to 80 MT)

*ROW : Turkey, Africa, Oceania

MDF INDUSTRY BUSINESS MODEL

- Diversification of business
- New stream revenues
- Short payback & Quick implementation
- Sustainability
- Circular economy

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Thank you for your attention

Join us to smell
the innovation !

DRT
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A company of dsm-firmenich

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