



# SCA and St1 enter joint venture to produce and develop liquid biofuels

September 20



# Today's participants

Participant	Company	Role
Henrikki Talvitie	St1	CEO
Timo Huhtisaari	St1	Sustainability Director
Mikael Källgren	SCA	President Renewable Energy
Toby Lawton	SCA	CFO



# St1 vision and strategy

# St1 solving global energy challenges

St1 Vision is to be the leading producer and seller of CO<sub>2</sub>-aware energy

In the spirit of our vision, we research, develop, produce and invest to be able to provide our customers with CO<sub>2</sub>-aware energy while creating positive societal impact

Our operations are strengthened by strategic long-term partnerships in various areas

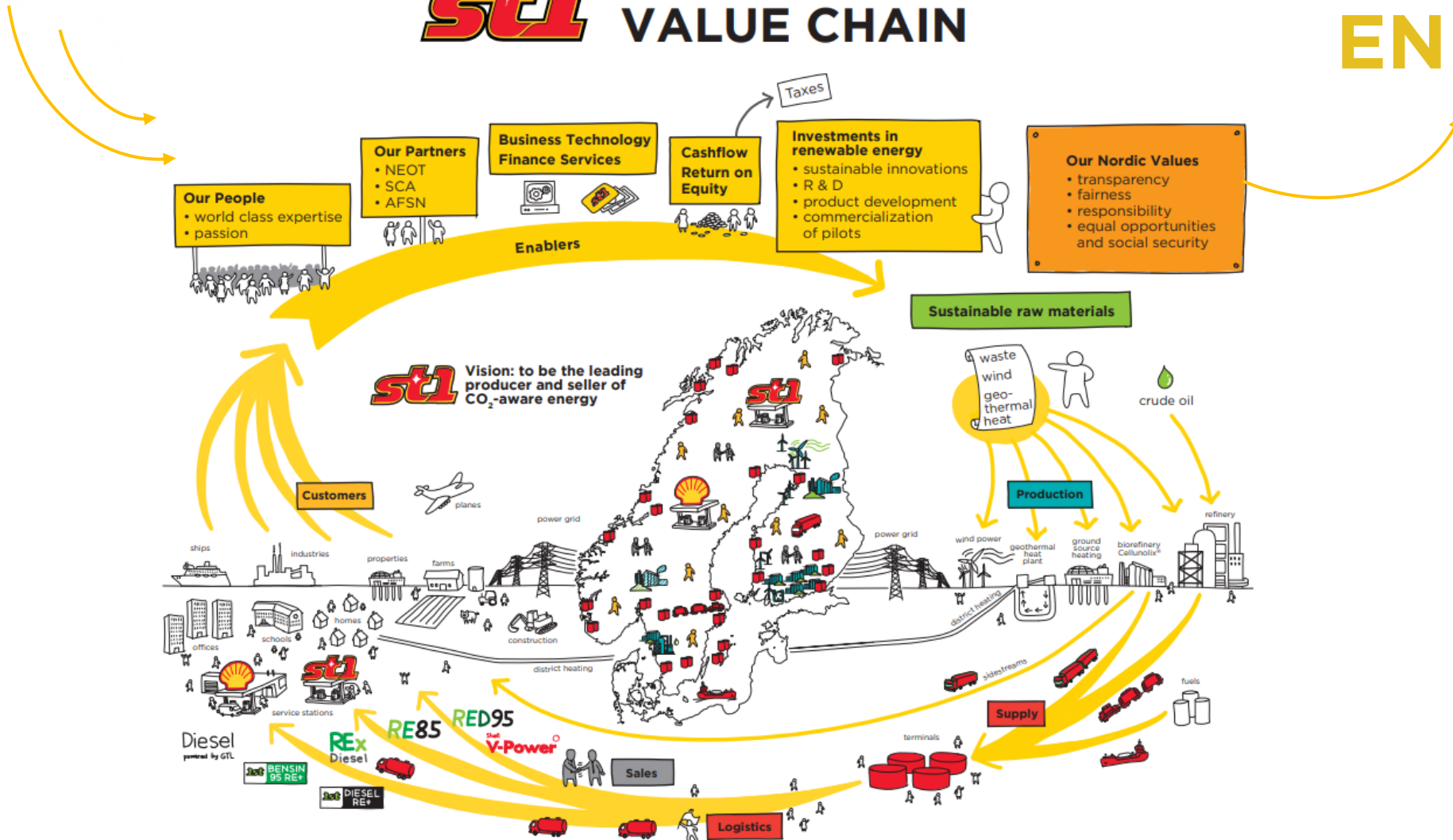
# TRANSITIONING OUR VALUE CHAIN

to a more sustainable one...



...to produce and sell  
**CO<sub>2</sub>-AWARE  
ENERGY**

## **st1** VALUE CHAIN

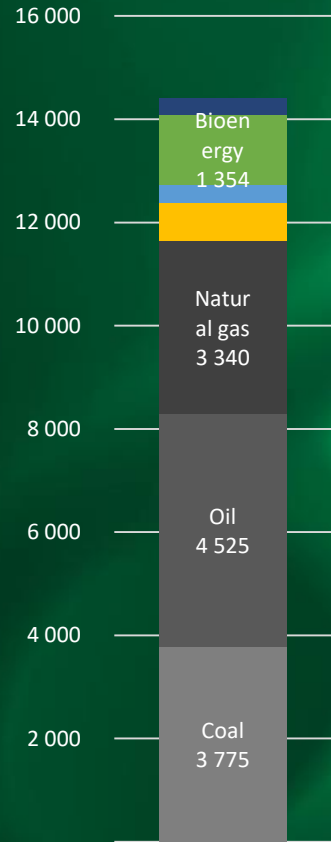


# Market for liquid biofuels

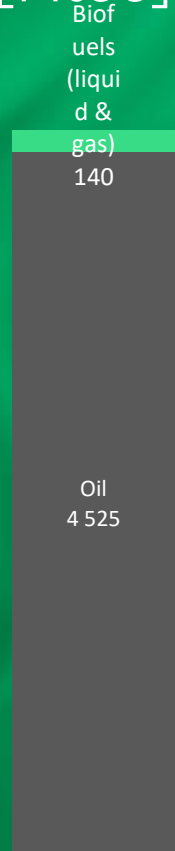
# Biofuels as a part of energy transition



Global Primary energy demand 2019 [Mtoe]

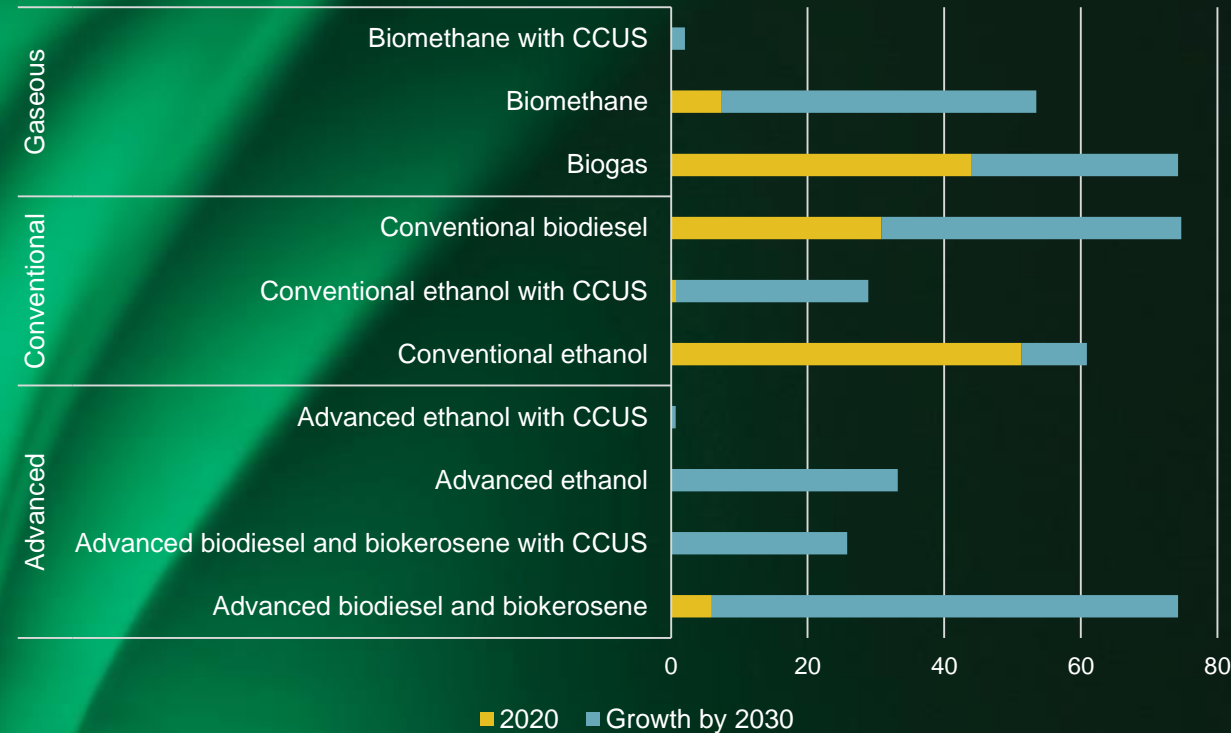


Global Oil and Biofuels 2019/2020 [Mtoe]



Global biofuels production needs to triple from 140 Mtoe to 430 Mtoe in this decade according to 1,5 °C pathway

Note: 20-fold increase in advanced ethanol and biodiesel

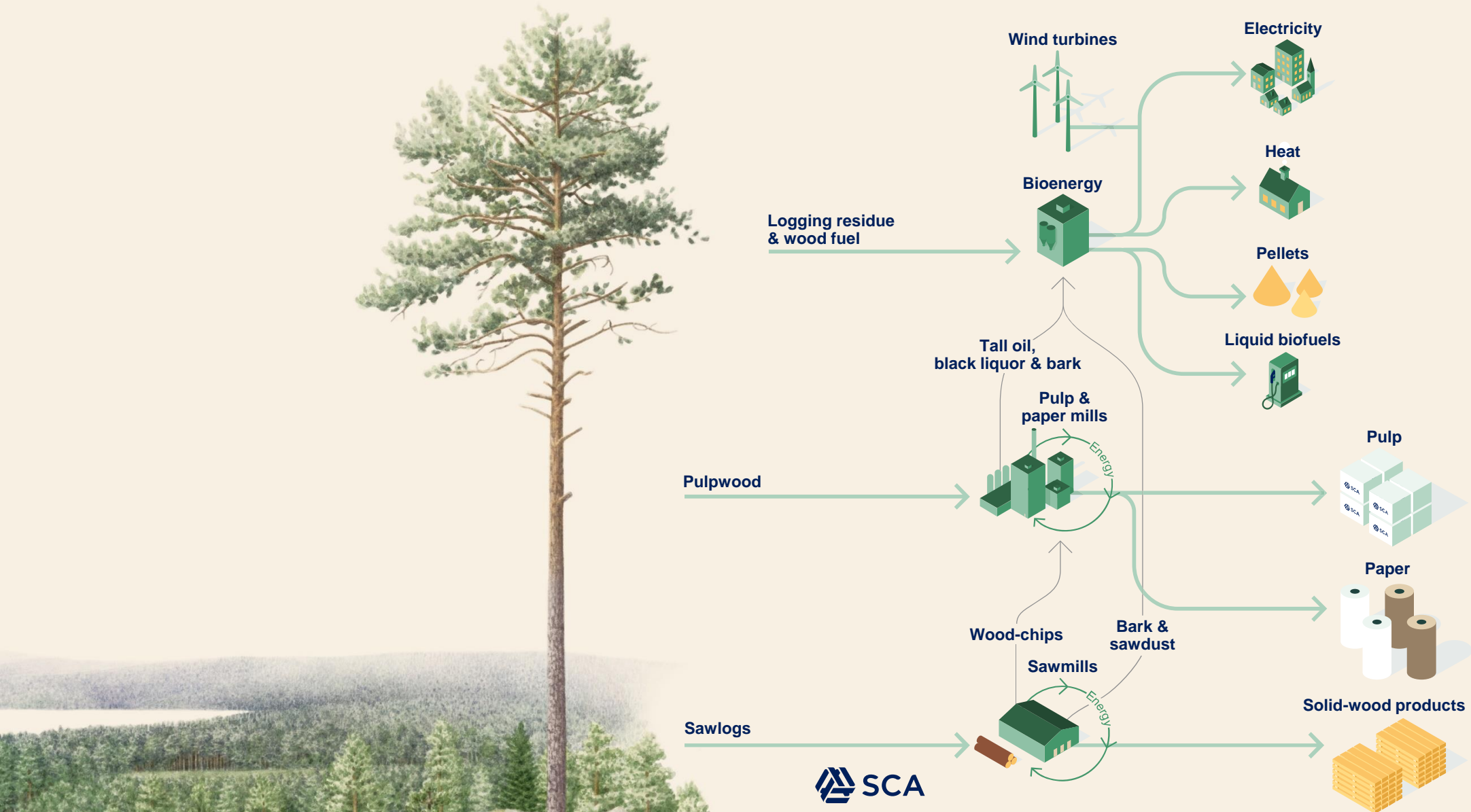


# SCA value chain and strategy



# Europe's largest private forest owner

- a strong and integrated value chain



# Profitable growth strategy



**Increased  
value from  
each tree**

**Growing  
renewable  
forest asset**



## **Invest in integrated value chain:**

- Grow Wood, Pulp and Containerboard
- Renewable energy future value creator



## **Increase forest holdings:**

- Increase growth and harvesting level
- Acquire forest land

**Joint venture  
to produce and develop  
liquid biofuels**

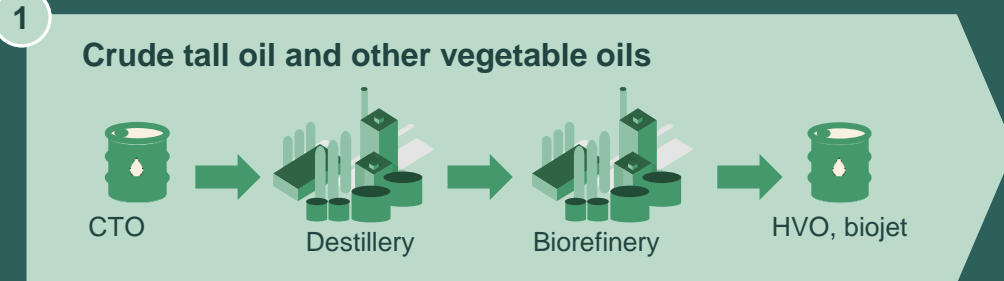


# SCA and St1 creating two companies

## – from forest to fuel station



# Three potential feedstocks with different technology maturity



Mature technology  
In operation 2023



Long term

Under development in  
demo scale – long term  
option



Long term

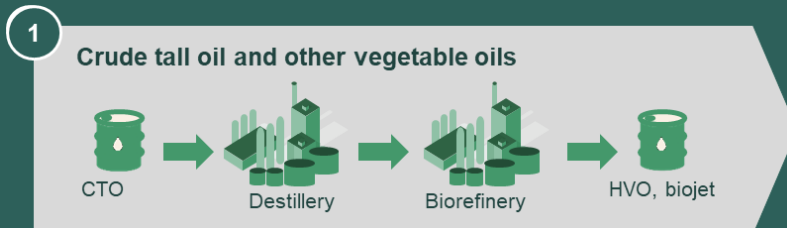
SCA developing  
technology in pilot scale –  
long term option

Time

# Gothenburg Biorefinery

St1 is constructing a biorefinery in connection with its oil refinery area in Gothenburg

- Expected to be completed in early 2023 and production to start in the summer
- In preparation, new hydrogen unit was commissioned in 2020
- The design of the biorefinery brings flexibility to the process by allowing the use of a wide range of feedstocks with a yearly capacity of 200 kt
- Capable of meeting current and future specifications of the renewable fuels to be produced, which include HVO diesel, jet fuel, and naphtha

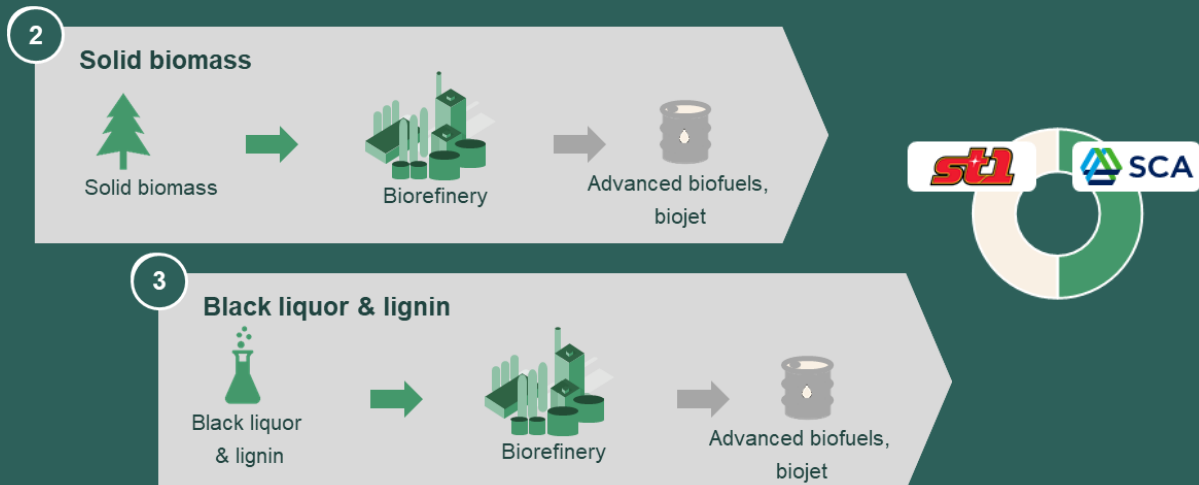




# Östrand Biorefinery

## Development company

- Next to Östrand pulp mill
- Sustainable feed stocks and energy available
- Environmental permit received to build a biorefinery at the Östrand pulp mill
- 300,000 tonnes capacity



# Summary



Joint Venture creates a strong integrated value chain from forest to end-user in energy sector



Growing market for advanced biofuels driven by regulation – Nordic market most attractive



Gap between supply and demand filled by new sustainable domestic feedstock and production



A photograph of a dense forest with tall, slender trees. Sunlight filters through the canopy, creating dappled light on the forest floor. The text "Q&A" is overlaid in the center.

**Q&A**