



PROGRAMME

15.00 – 15.30 NETWORKING BREAK

15.30 – 15.50 KEYNOTE

Christian Hoffmann, Energy Transformation, UPM

15.55 – 16.05 INNOVATION PITCH

Pekka Harju-Autti, CEO, Treebuddy

16.15–16.45 PANEL DISCUSSION

Host: Dr. Jan Feller

**Panelists: Linda Tissen, Michael Hanf, René Graichen, Christian Hoffmann,
Marina Basso Michael**

16.45 Closing

17.00 Departure to Port of Hamburg (bus transfer)

Christian Hoffmann

Energy Transformation, UPM



UPM - WE CREATE A FUTURE BEYOND FOSSILS

Christian Hoffmann

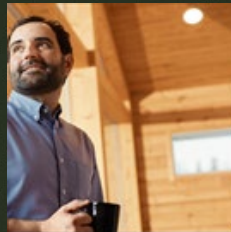
*German - Finnish Business Forum
Hamburg, 3. November 2022*



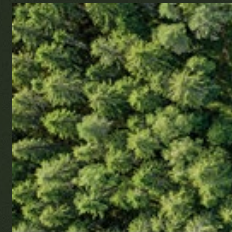
Our businesses



UPM Pulp
A versatile range of chemical pulp for many growing end uses



UPM Timber
Certified sawn timber



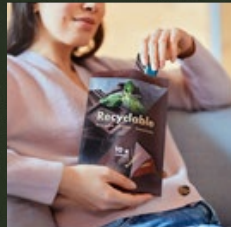
UPM Forest
Sourcing wood raw material for sustainable and recyclable products



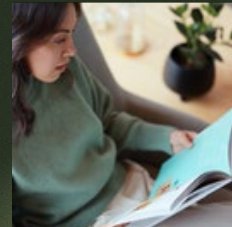
UPM Energy
Low-emission electricity generation of hydro, nuclear and thermal power



UPM Raflatrac
Self-adhesive label materials for promotion, information and functional labelling



UPM Specialty Papers
Labelling materials, release base papers, flexible packaging papers, office and graphic papers



UPM Communication Papers
Magazine paper, newsprint and fine papers for a wide range of end uses



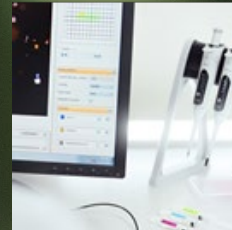
UPM Plywood
Plywood and veneer products for construction, vehicle flooring and LNG shipbuilding



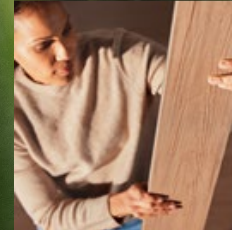
UPM Biofuels
Wood-based renewable diesel and naphtha



UPM Biochemicals
Glycols, lignin products, renewable functional fillers



UPM Biomedicals
Wood-based biomedical products for medical and life science applications



UPM Biocomposites
UPM ProFi decking materials and UPM Formi composite material

Our global presence

Sales 2021
EUR 9.8 billion
17.000 employees

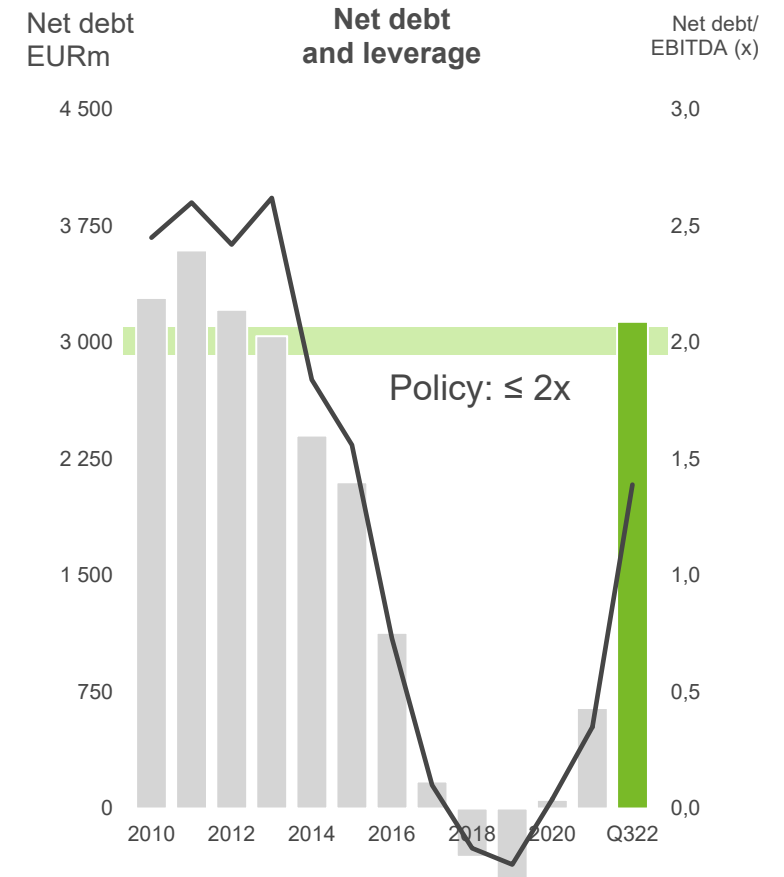
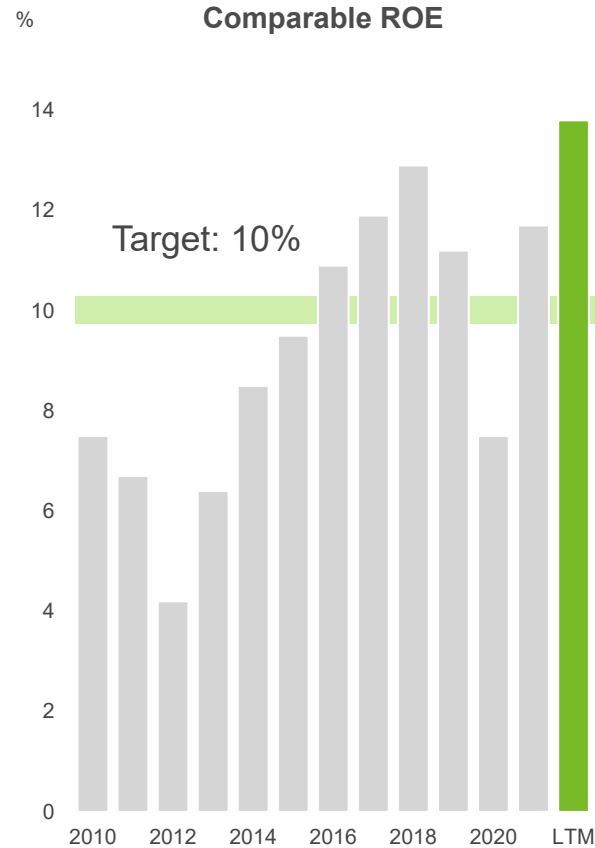
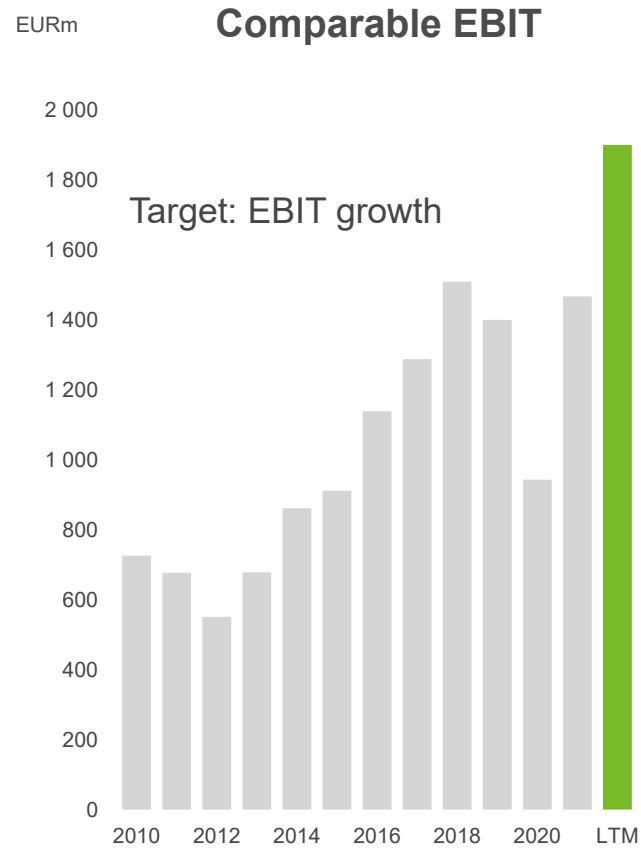
63%
Europe

19%
Asia

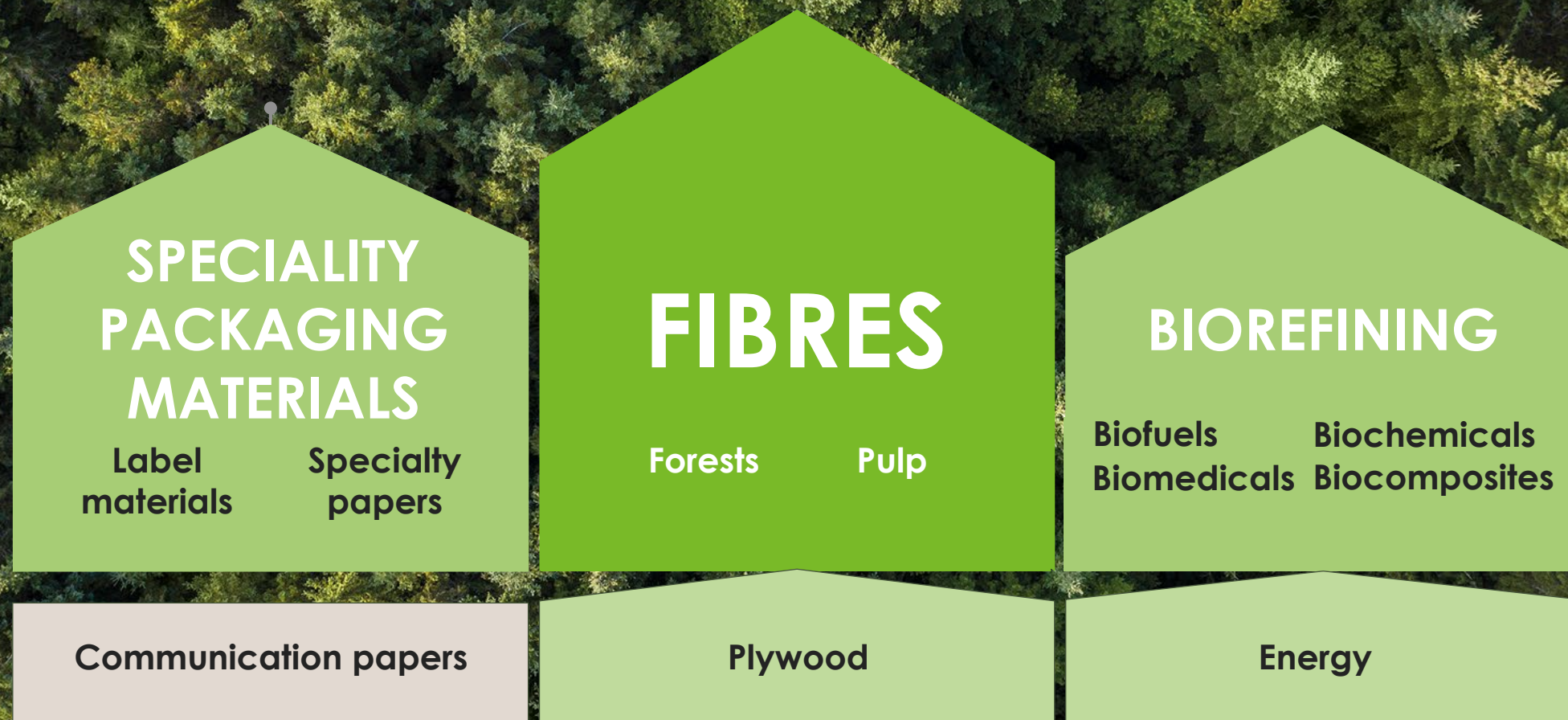
12%
North
America

6%
Rest of the
world

Earnings above pre-pandemic levels



Long-term value creation driven by our spearheads for growth



Our climate commitment



WE ACT THROUGH FORESTS

Committed to climate-positive forestry and enhancing biodiversity



WE ACT THROUGH EMISSION REDUCTIONS

-65% from own CO₂ emissions
-30% from CO₂ emissions of supply chain



WE ACT THROUGH PRODUCTS

Innovative products
Scientifically verifying the climate impact of all our products



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

**BUSINESS
AMBITION FOR**

1.5°C



**OUR ONLY
FUTURE**

**THE Paris...
CLIMATE 10 years
PLEDGE Early**

UPM **BIOFORE-BEYOND** FOSSILS

Leader in responsibility



MSCI
ESG RATINGS



Global Compact
LEAD
2021 PARTICIPANT

Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA

Sustainability Award
Gold Class 2022

S&P Global



New business in wood-based biochemicals

Responding to strongly growing demand for sustainable solutions



Industrial scale 100 % wood-based biorefinery in Leuna, Germany



Alternatives to fossil materials in various consumer-driven end-uses



EUR 750 million investment
Total annual capacity of 220,000 tonnes

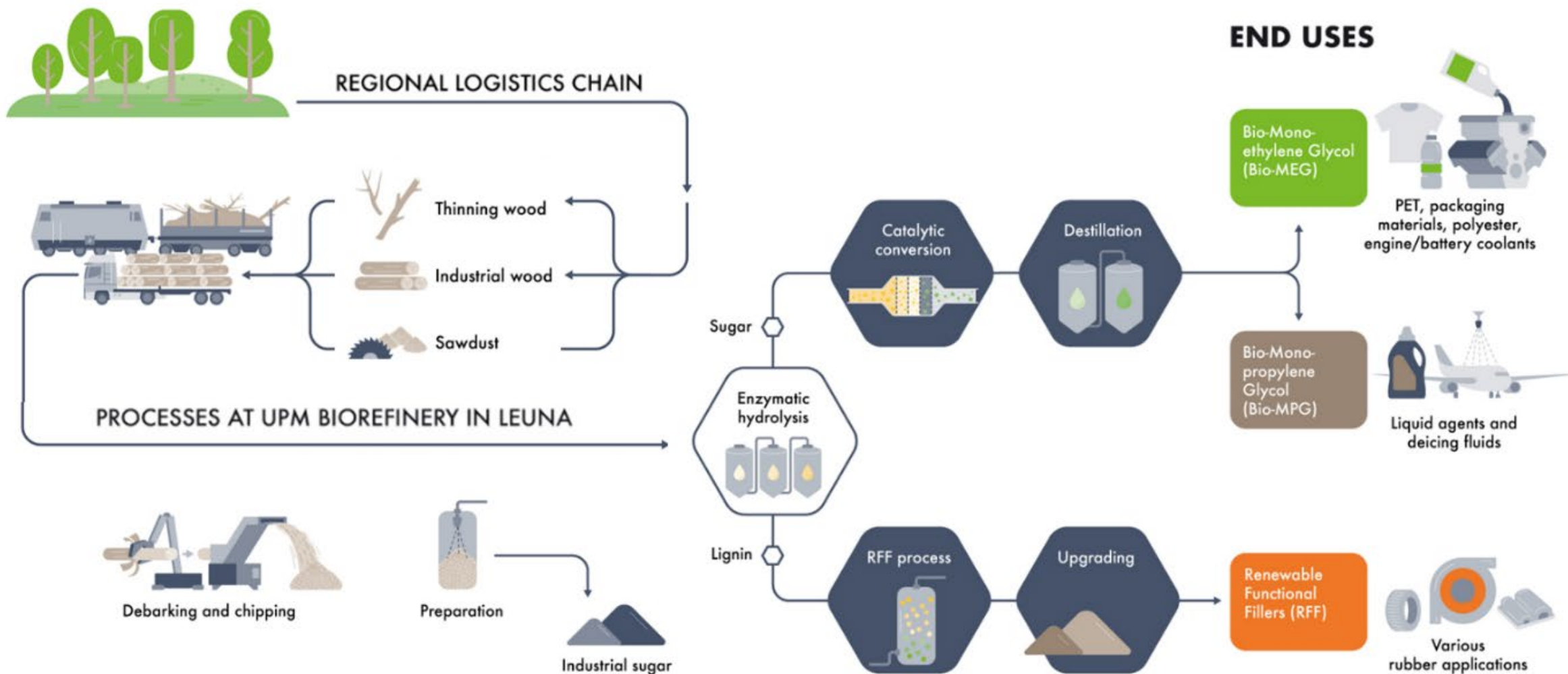
ROCE target of 14%



Scheduled to start up by the end of 2023



UPM's biorefinery in Leuna: Unique set-up converting all components of wood into materials





ERJ **Elastomers for** **5**
TOP 10 SUSTAINABILITY

SUSTAINABILITY

| Company | Project title | Score |
|---|---|-------|
| UPM Biochemicals | Renewable functional fillers (RFF) for a lighter and more sustainable future | 556 |
| Synthos | Extending the magic triangle with a new multi-functionalised SBR | 555 |
| Arlanxeo | Keltan Eco | 540 |
| Eneos Materials Corp. (formerly JSR Elastomers) | New styrene-butadiene rubber (SBR) binder for SiOx anode in lithium ion battery | 538 |
| Nynas | New bio-based processing oil | 523 |
| Semperit | Green Evo Star | 515 |
| Cabot Corp. | Engineered elastomer composites (E2C) | 515 |
| Eneos Materials Corp. (formerly JSR Elastomers) | New hydrogenated styrene-butadiene rubber | 510 |
| Techsyn | New tire technology platform for improved sustainability performance | 500 |
| Xillix GmbH | Lignin-based, renewable functional filler to replace carbon black | 495 |

The latest E4S Top 10 sustainability project rankings





Digital Twin - UPM BioChemicals

UPM Energy's carbon free electricity generation provides cost competitive and reliable energy



Reliable CO₂-free baseload energy to support the electrification of the society



Flexible generation, crucial to balance the volatile energy system



Finland's electricity self-sufficiency significantly improved



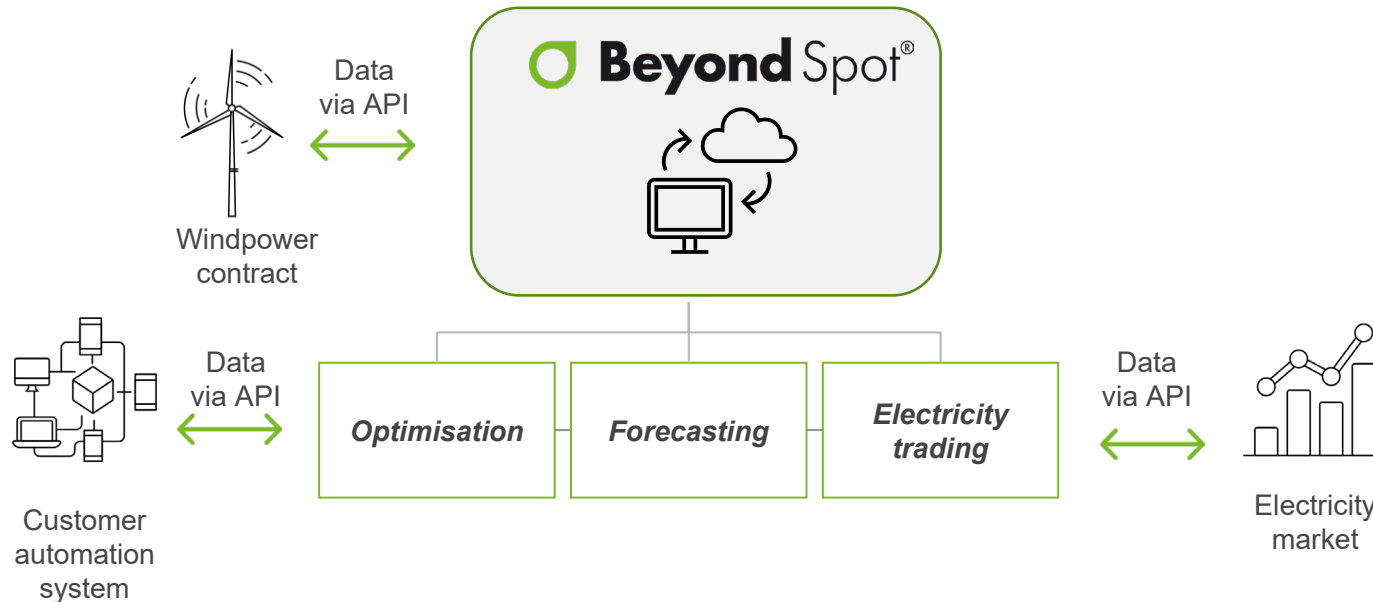
Digitalization of hydro power operations and trading



**Smart
River
Concept**

- *IoT river system measurement systems*
- *AI based river system and power plant optimization*
- *Automated trading tools for Intraday and Reserve markets*
- *ML based maintenance process and tool*

Beyond Spot[®]



An innovative energy management service for energy business - combination of right data, current tools and competence.

We help you **uncover energy savings, sustainability targets and revenue potential** by digitalising, automating and optimising your energy management.

UPM **BIOFORE** **BEYOND** FOSSILS



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

**BUSINESS
AMBITION FOR 1.5°C**



**OUR ONLY
FUTURE**

**THE Paris...
CLIMATE 10 years
PLEDGE Early**

Pekka Harju-Autti

CEO, Treebuddy



**NO BS,
JUST TREES**



Need to tackle holistically the global environmental “Triple challenge”:
Climate change, biodiversity loss, and environmental pollution

Green transition: massive innovation and capital reallocation

Consumers become increasingly conscious of their goods’ environmental impacts

Need for solutions that have all three: People & Planet & Profit

Dominance of capitalistic language throughout the world: Need to include the
services of nature to this capitalistic language

Note: Digitalization is not a technical evolution but rather an industrial and social revolution driven by citizens and customers

- Conversion of almost everything into **services** rather than ownership: SaaS, cars as a service, gadgets, real estate etc.
- **Personalization** of the majority of goods offered: consumers' choices are exploding. Improved functionalities, designs, sharing etc. Higher ROI and more enjoyable for consumers
- Investment in **employees**, the individual success driver is the key. Work Environment > Flexibility, on-demand, lifelong learning, **learning to learn**, **intrinsic work motivation**

The world needs 1000 billion trees (UN 2020)

A huge emerging 1.000 B\$/year market

PROBLEM

Tree planting organizations around the globe always have two weaknesses:

WEAK VERIFIABILITY

They are unable to show in a transparent and real-time manner where and how many trees they have planted

SHORT-TERM FOCUS

They are focusing only on tree planting which is in itself rather easy - but it's tree caring that really counts to ensure long-term impact

Most of 11m trees planted in Turkish project 'may be dead'

The Guardian

Agriculture and forestry union says up to 90% of saplings they have looked at so far have died



▲ The Speaker of Turkey's parliament, Mustafa Şentop, planting a tree in Ankara on 11 November 2019 as part of National Forestation Day. Photograph: Anadolu Agency via Getty Images

Up to 90% of the millions of saplings planted in **Turkey** as part of a record-breaking mass planting project may have died after just a few months, according to the country's agriculture and forestry trade union.

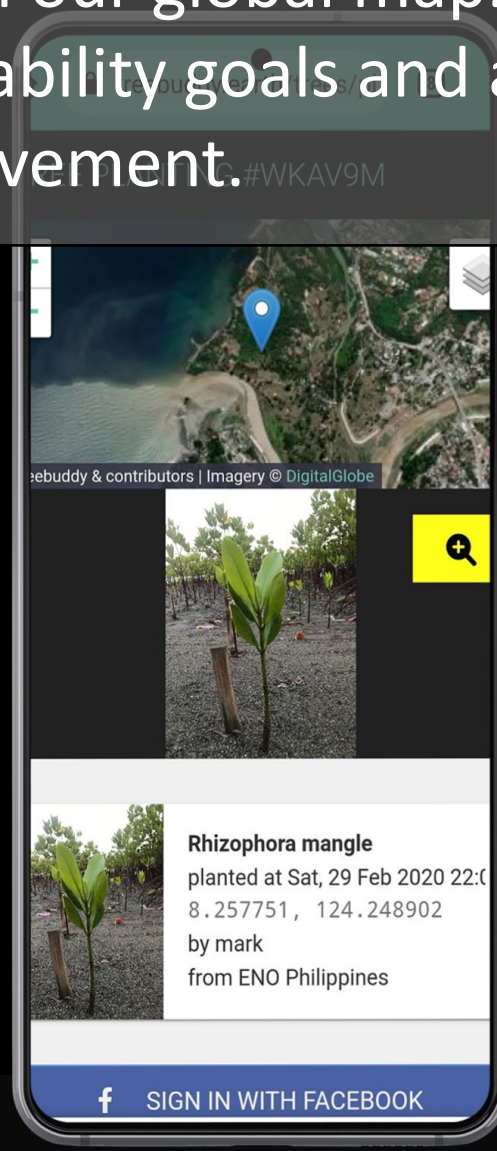
Treebuddy Earth addresses both of these problems with a seamless solution





Trees as a service (TaaS)

Our Trees-as-a-service puts every single tree on our global map. Enabling B2B clients to meet their core sustainability goals and allowing anyone to seamlessly join the reforestation movement.



- Economic incentives to local tree planters and communities
- Treebuddy has already amassed a huge network of tree planters: 10,000 communities in 157 countries



Economic incentives: 1€ after planting and status updates after 1,5,10,15 and 20 yrs

See your growing company forest in a world map

- A customer loyalty gift
- Event gift for all participants for large events
- API integration as part of own business
- Give climate positivity to your workers



PERSONAL CONNECTION to trees and COMMUNITY ENGAGEMENT



- Access to our virtual community of peers and planters
- Enabling direct interaction with local community through bespoke events
- Learn more about tree planting and care directly from the experts and tree planters themselves!



PUTTE'S**GREENSTAR^{*}**
HOTEL**MY:D****SMARTLY.IO**

"We are incredibly happy with the Treebuddy partnership. It allows us to share gifts that truly make an impact in so many ways. Our customers and our very own Smartlies love the passion and interactiveness during the Treebuddy Club meetings and we are looking forward to a close collaboration in the future."

Mark de Bruijn, Director of Global Customer Experience Marketing, **Smartly.io**

"We want to be sustainable in all of our actions. TreebuddyEarth fits our ideology just perfectly. Treebuddies are subscribed based on the monthly amount of all the pizzas sold. We feed the people with our lovely pizza, enable to plant Treebuddies all around the world and those trees help communities to grow. It's a kind of circle of niceness!"

Maija Ijäs, restaurant manager, **Putte's** pizza restaurants

TreebuddyEarth – growing across the globe



4,000+ users

30M trees

157+ countries

TREEBUDDY MONEY FLOW

1.5 € / tree
COMPANIES



0.5 € / tree

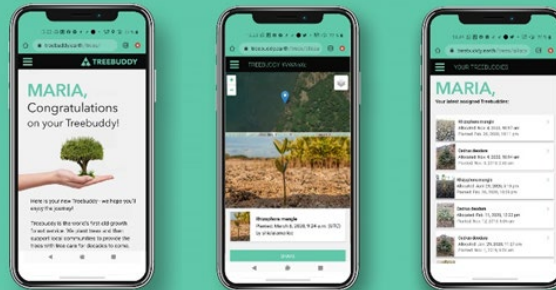


TREEBUDDY

1€ / tree

TREE PLANTERS

EMPLOYEES, CUSTOMERS



- when planting a tree they mark it to the global map with a photo
- Every 1,5, 10, 15, 20... years a Status Update of a tree with a photo

We manage global demand with the most reliable tree planting organizations

UNIQUE SOLUTION: GLOBAL COMPETITION ANALYSIS

| | Biodiversity | CO ₂ | Digital Business | On Map | Frequent interaction with planters | B2B2C benefit | Long Term Sustainability | Climate positive employees |
|-----------------------------|--------------|-----------------|------------------|-----------|------------------------------------|---------------|--------------------------|----------------------------|
| forestswithoutfrontiers.org | Yes | No | No | No | No | No | Partly | No |
| plant-for-the-planet.org | Partly | Partly | Yes. Donations | 1 or many | No | No | No | No |
| carbonfootprint.com | Partly | Yes | Yes | No | No | No | No | No |
| mossy.earth | Yes | Yes | Yes | GPS | No | No | No | No |
| treevotion.com | Partly | Partly | No | No | No | No | Partly | No |
| Onetreeplanted.org | Partly | Partly | Partly | No | No | No | Partly | No |
| cedarcoin.org | Yes | Yes | Yes | No | No | No | Yes | No |
| 8billiontrees.com | Partly | Yes | No | No | No | No | Yes | No |
| tree-nation.com | Partly | Yes | Yes | Yes | No | Partly | No | No |
| Treebuddy.earth | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

IN GLOBAL NEWS:





 swissinfo.ch










Fastest News Reporter In Canada, North America and Europe














DESDE 1927









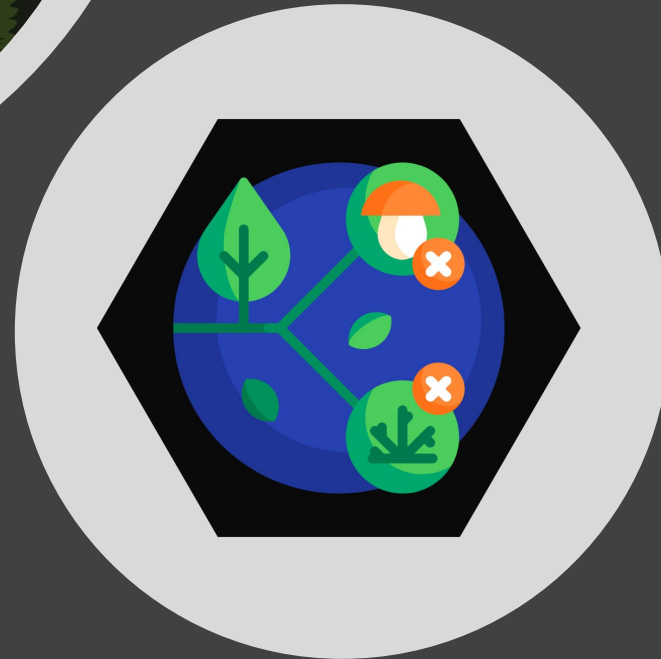
Treebuddy.Earth has been featured in 140 global media sites in 40 different countries

READY TO SCALE UP FOR MILLIONS OF TREEBUDDY

Join our global mission : Investment round on-going



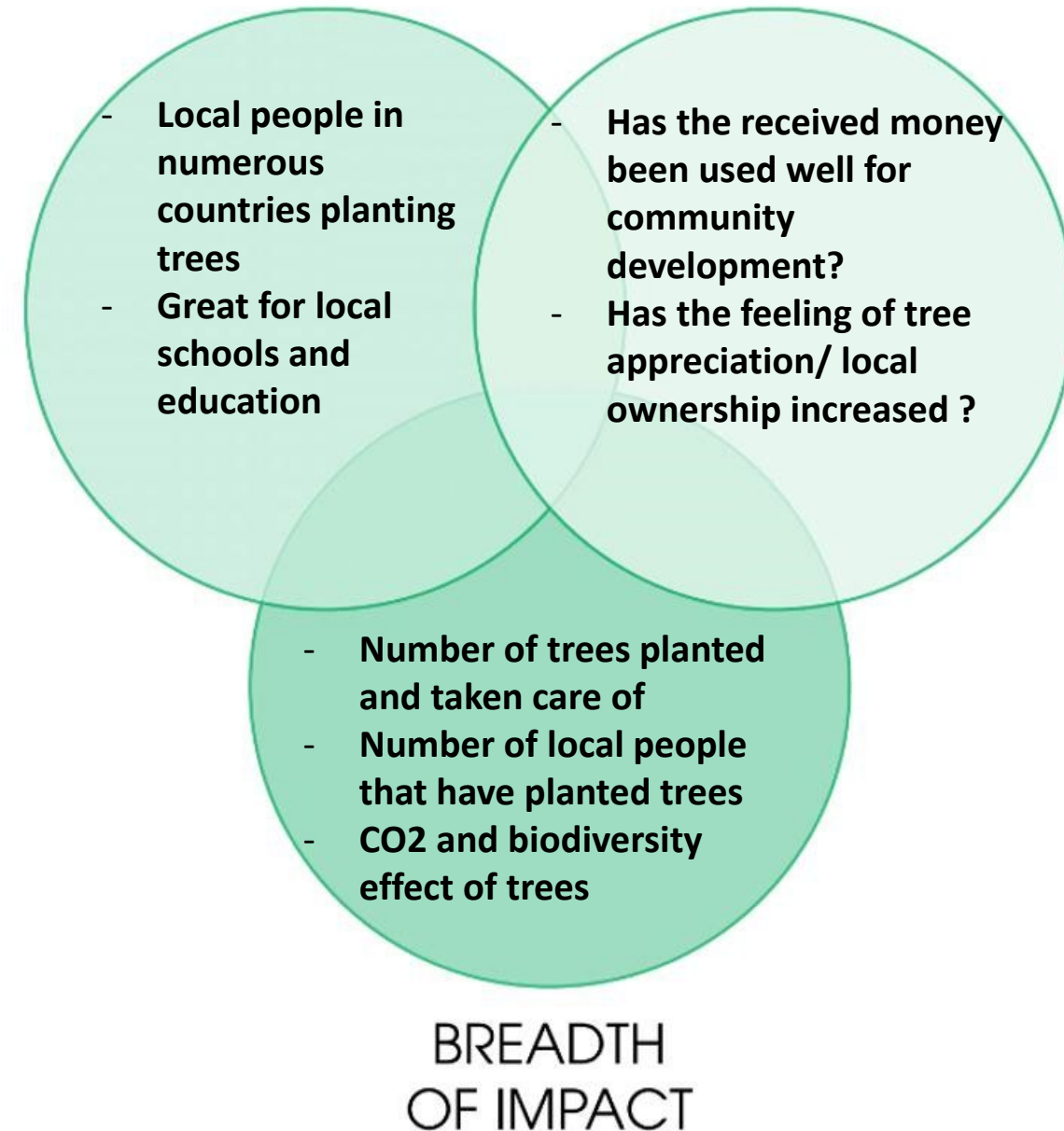
NEW STRATEGIC AREAS



- Trees as NFTs
- Trees to a blockchain
- Carbon credits
- Biodiversity credits

TREEBUDDY GROWTH ESTIMATES AND IMPACT TO LOCAL PEOPLE

| Performance metrics | Current value | < 2 years | 2030 |
|---|---------------|------------|--------------|
| Trees in care | 50 000 | 600 000 | 50 000 000 |
| Revenue | 120 000€ | 1 000 000€ | 75 000 000€ |
| CO ₂ sequestration in 20 years | 65 000 t | 800 000 t | 65 000 000 t |



Need to tackle holistically the global environmental “Triple challenge”:

Climate change, biodiversity loss, and environmental pollution

Planting lot of trees - especially Mangroves - is one of the best solutions

Green transition: massive innovation and capital re-allocation

TreebuddyEarth = Digital platform to preserve biodiversity

Consumers become increasingly conscious of their goods' environmental impacts

Giving trees can be integrated to various consumer goods

Need for solutions that have all the three: People & Planet & Profit

We bring the local people to the front, giving long term economic profit

Dominance of capitalistic language throughout the World: Need to include the services of nature to the capitalistic language

TB is a tech platform transforming natural capital of trees to B2B clients

TREEBUDDY MEGATRENDS ON DIGITALIZATION

Conversion of almost everything into **services** rather than ownership: SaaS, cars as a service, gadgets, real estate etc.

Trees as a service (TaaS) puts every single tree on our global map.

It helps B2B clients meet their core sustainability goals

Personalization of the majority of goods offered: consumers' choices are exploding. Improved functionalities, designs, sharing etc. Higher ROI and more enjoyment for consumers

TB makes owning a tree a very personal thing. Trees can easily be shared, and they can be seamlessly integrated to gaming

Investment in **employees**, the individual success driver is the key. Work Environment > Flexibility, on demand, lifelong learning, learning to learn, intrinsic work motivation

Companies can give climate positivity to their workers

Trees as event gifts. Non-material sustainable Xmas gifts

Hey you! Trees are not just CO2 machines. They are our homes. Plus for a big bunch of other species - well, you call it biodiversity. Naturally we want a lot of trees to keep us well alive! (Kekah Natuna, vulnerable, IUCN Red List)

Mangrove forests are natural living places for the Kekah monkeys. Unfortunately, for years, their population has continued to decline as their habitats are destroyed which may soon lead to extinction and they are included in the International Union for Conservation of Nature's (IUCN) Red List of Threatened Species.

Treebuddy will be saving endangered Kekah monkey in the remote Natuna island in Indonesia by planting there 200 000 mangrove trees in the next 3 years.



Panel discussion

Host



Dr. Jan Feller
AHK Finland

Panelists



Linda Tissen
Ecobio



Michael Hanf
Taival



Marina Basso Michael
Port of Hamburg
Marketing



René Graichen
Cargotec / HIAB



Christian Hoffmann
UPM

#DFBF22

DANKE SCHÖN!
KIITOS!

DEUTSCH-FINNISCHES BUSINESSFORUM
Twin Transition



Premium Partners



nordic
minds



berg:mann



SIEMENS
Ingenuity for life



*m*brain
Informed Leadership