

Green House Gas (GHG) emissions: an industry perspective

CORESTA SSPT Conference - October 10th, 2019

D. Raverdy-Lambert

GHG emissions: an industry perspective

1

**SWM
Engineered
Papers & the
paper
Supply
Chain**

2

Some
examples of
GHG
emissions
avoidance or
reduction

3

Carbon
Disclosure
Project (CDP)

SWM in Brief



2 Business Units: EP & AMS

Engineered
Papers

Advanced
Materials &
Structures



~3,500
employees
world-wide



SWM Sites
**ISO 9001
Certified**



**Environment
and Safety
Certified**



External Growth

Acquisitions
in 2013 - 2017
to create and
expand SWM's
resin-based
technologies



Organic Growth

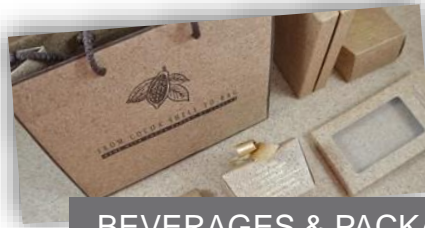
SWM's
Advanced
Materials &
Structures team
is dedicated to
cutting-edge
product
development

Our Markets

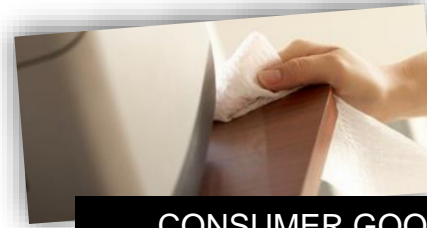
A Diversified Offering



AGRICULTURE



BEVERAGES & PACKAGING



CONSUMER GOODS



ENERGY



EROSION CONTROL



FILTRATION



HOME



INDUSTRIAL



INFRASTRUCTURE



MEDICAL



TOBACCO



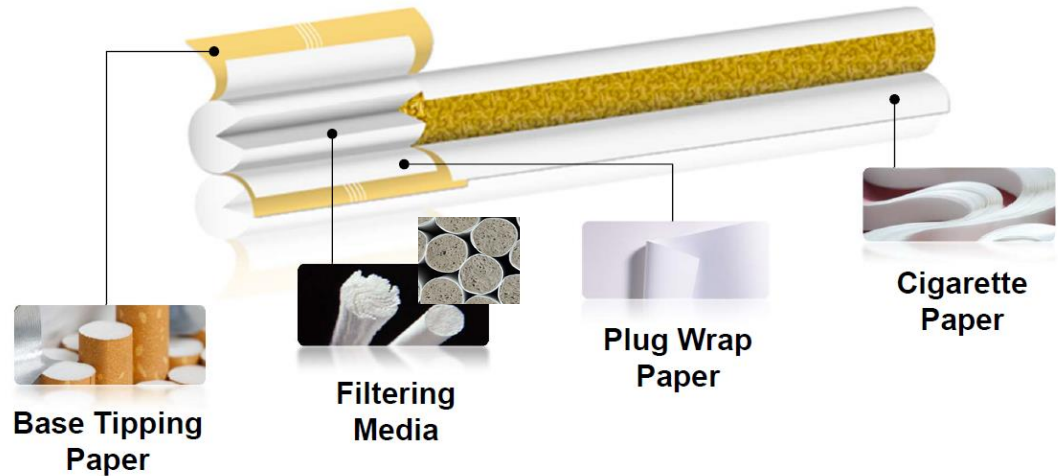
TRANSPORTATION

Engineered Papers



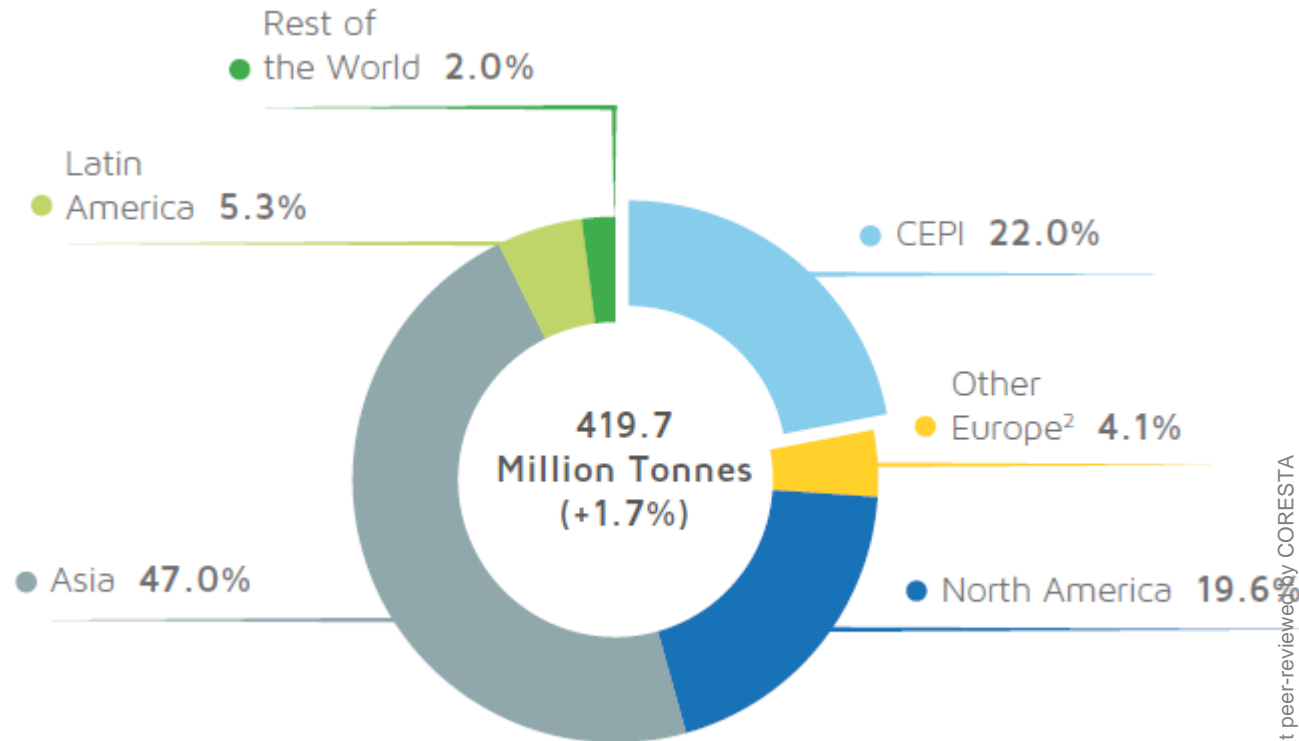
SWM in the paper supply chain

A major thin engineered papers manufacturer...



but...

Worldwide paper & Board Production in 2017



CEPI, CEPI Key statistics 2018, June 2019, p16

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The European Pulp, Paper & Board GHG reduction



Trends of production (t), energy consumption (TJ) and CO₂ emissions (per TJ) of the European paper Industry (2005-2015)

CEPI, To our roots & beyond, September 2017, p4

SWM European paper mills

ISO 50001:2018 certification

Certifications



ISO 50001:2018 – Energy Management System

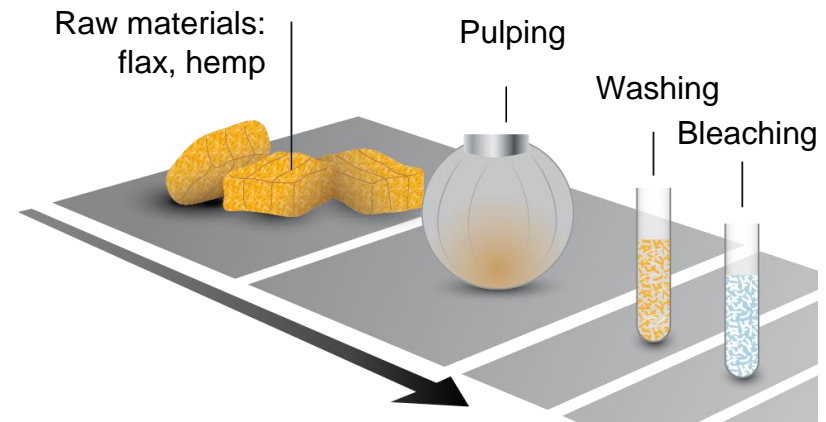
ISO 50001 is based on the management system model of continual improvement also used for other well-known standards such as ISO 9001 or ISO 14001. This makes it easier for organizations to integrate energy management into their overall efforts to improve quality and environmental management.

ISO 50001:2018 provides a framework of requirements for organizations to:

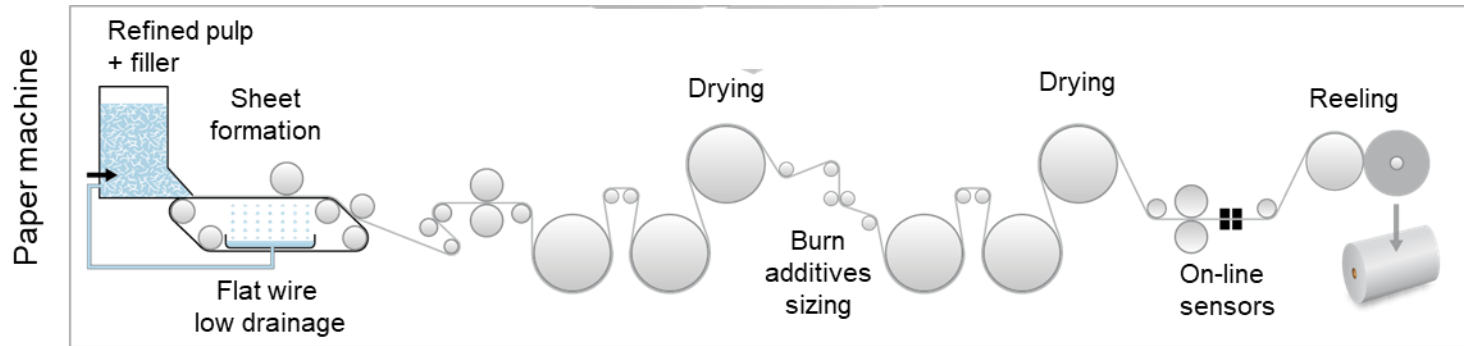
- Develop a policy for **more efficient use of energy**
- Fix targets and objectives to meet the policy
- Use data to better understand and make decisions about energy use
- Measure the results
- Review how well the policy works
- Continually improve energy management.

Textile fibers pulping by-products used as a biofuel

- Flax raw fibers are chemically pulped (high pH, high temperature, high pressure) to remove lignins & hemicellulose before bleaching
- Residue of pulping used as a biofuel for in house boiler on one paper site
- Two other sites deliver the by-product to third-party companies that will burn it to generate heat steam in place of natural gas and coal



GHG emission reduction



- Replacement of steam boxes on the hood of one of the paper machines to reduce steam losses.
- Reduced dilution of pulping by-product on one site to minimize energy required /steam consumption for evaporation prior to burning.
- Moved from manual to automatic settings on one paper machine, steam pressure and thereby natural gas usage were reduced. No capital required and in-house staffing performed all required investigation and modifications.

SWM Leaf Lab Cocoa Paper™

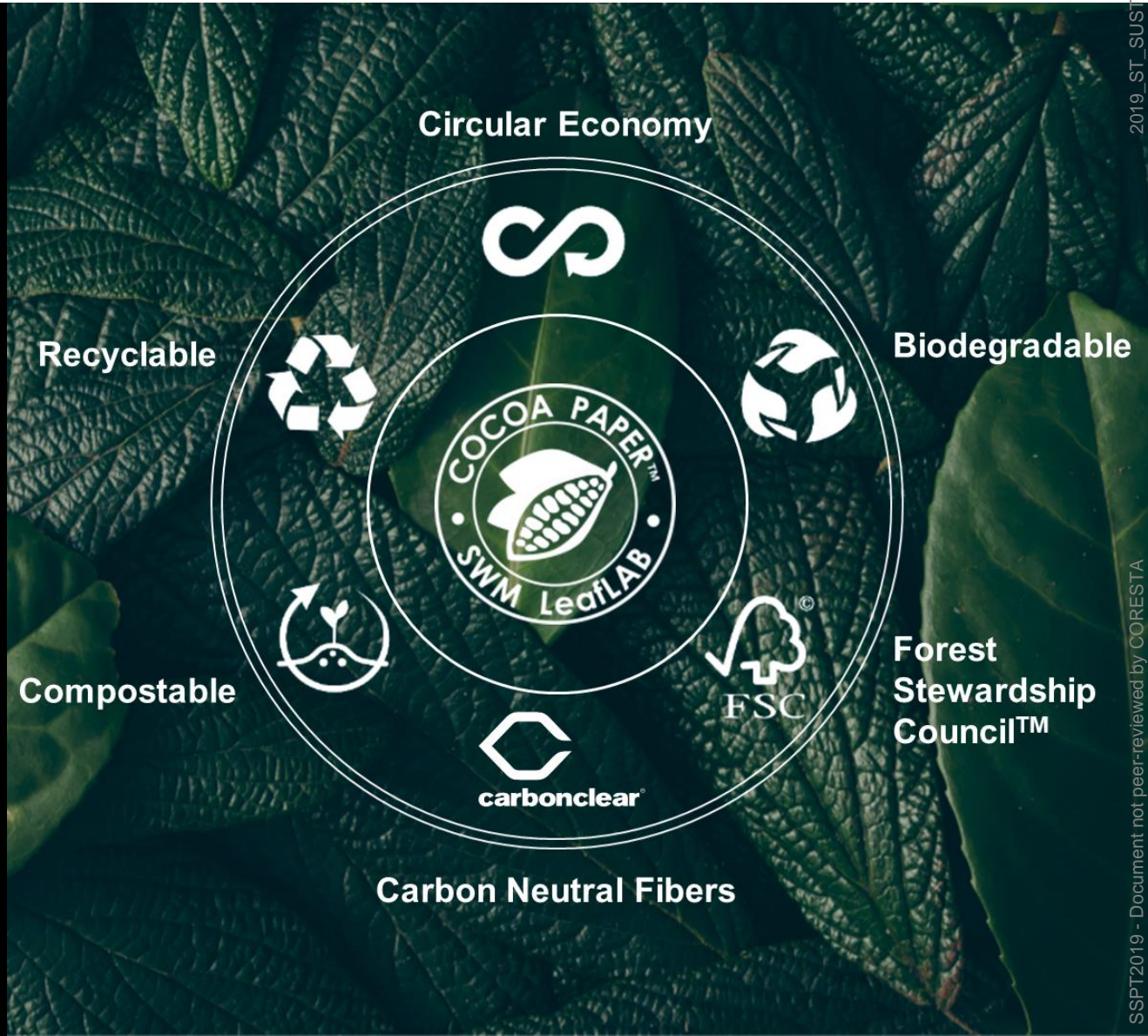


SWM Leaf Lab Cocoa Paper™

Cocoa paper™
is the embodiment
of the **Circular Economy**
as it is ...

Compostable
Biodegradable
Recyclable

Moreover as part of SWM's
environmental
commitment,
cocoa fibers are
100%
Carbon Neutral

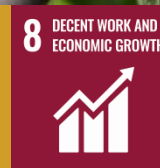


SWM Leaf Lab Cocoa Paper™

By including
Cocoa Paper™
in your packaging designs
you are **contributing**
to the **Jacunda Forestry
REDD+ Project** in Brazil.

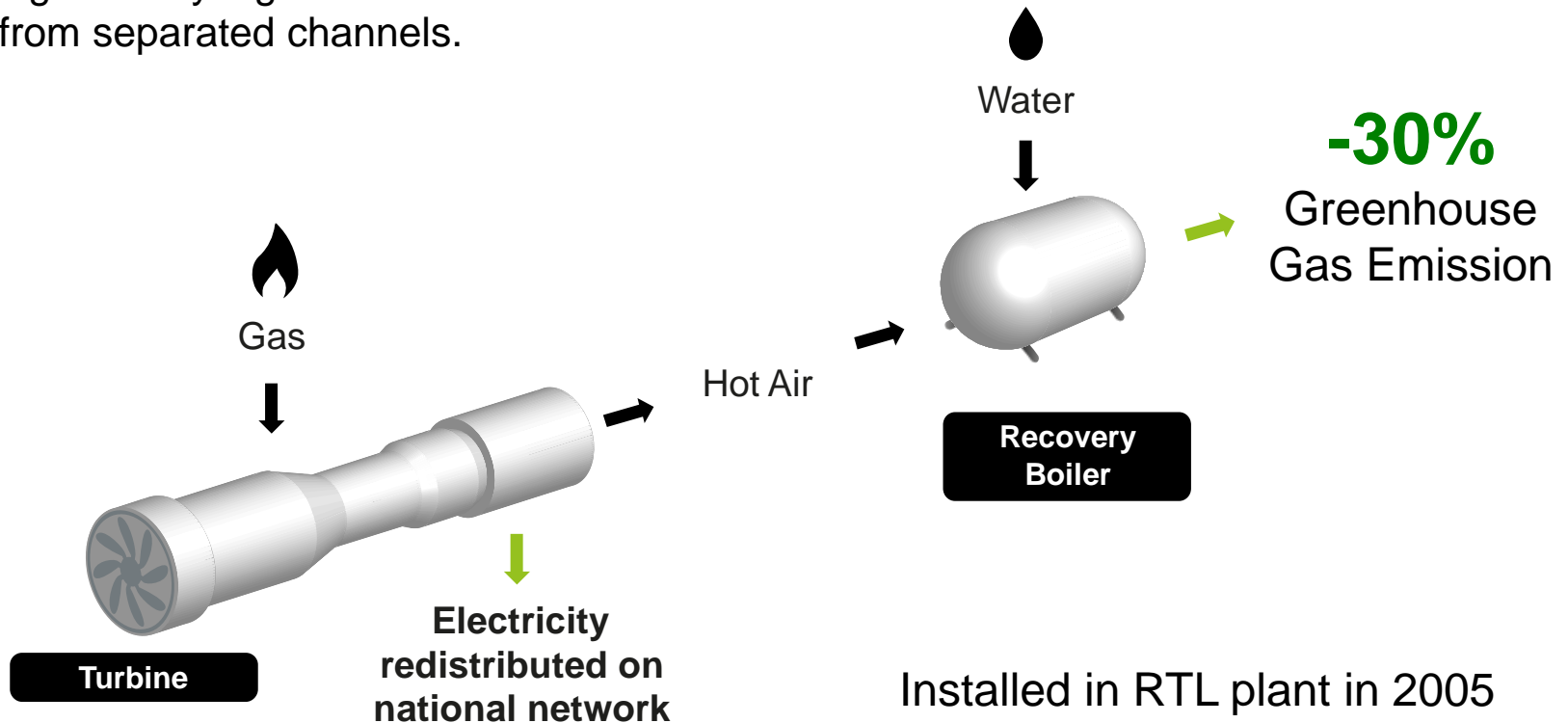
Intact tropical rainforests,
are the ecosystem with the
highest biodiversity and
one of the most significant
carbon sinks.

The Jacunda project aims
to **preserve** and **manage**
areas
**in a sustainable
and long-term manner.**



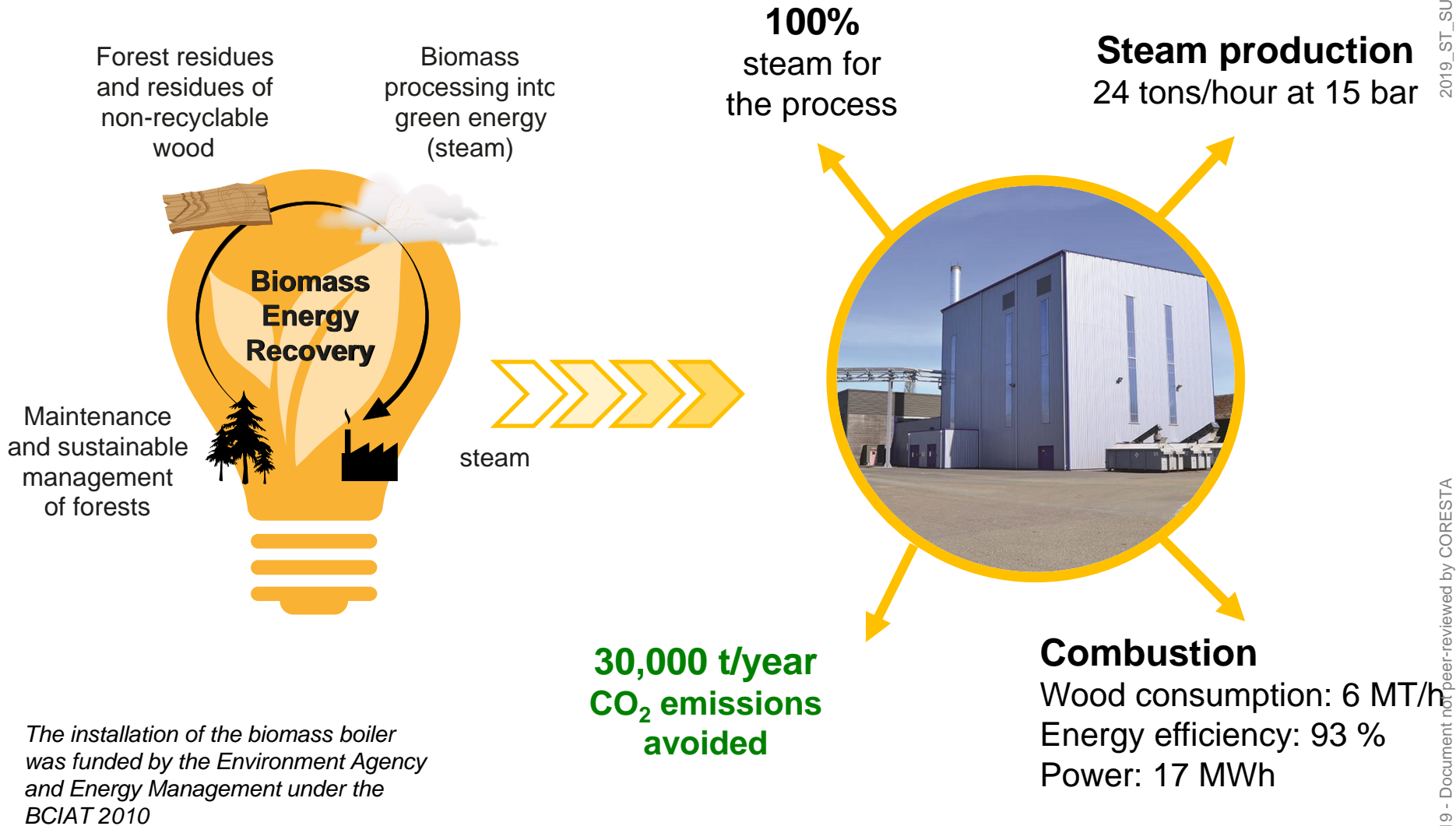
Co-Generation

Co-generation generates steam and electric energy with a global yield significantly higher than the one obtained from separated channels.

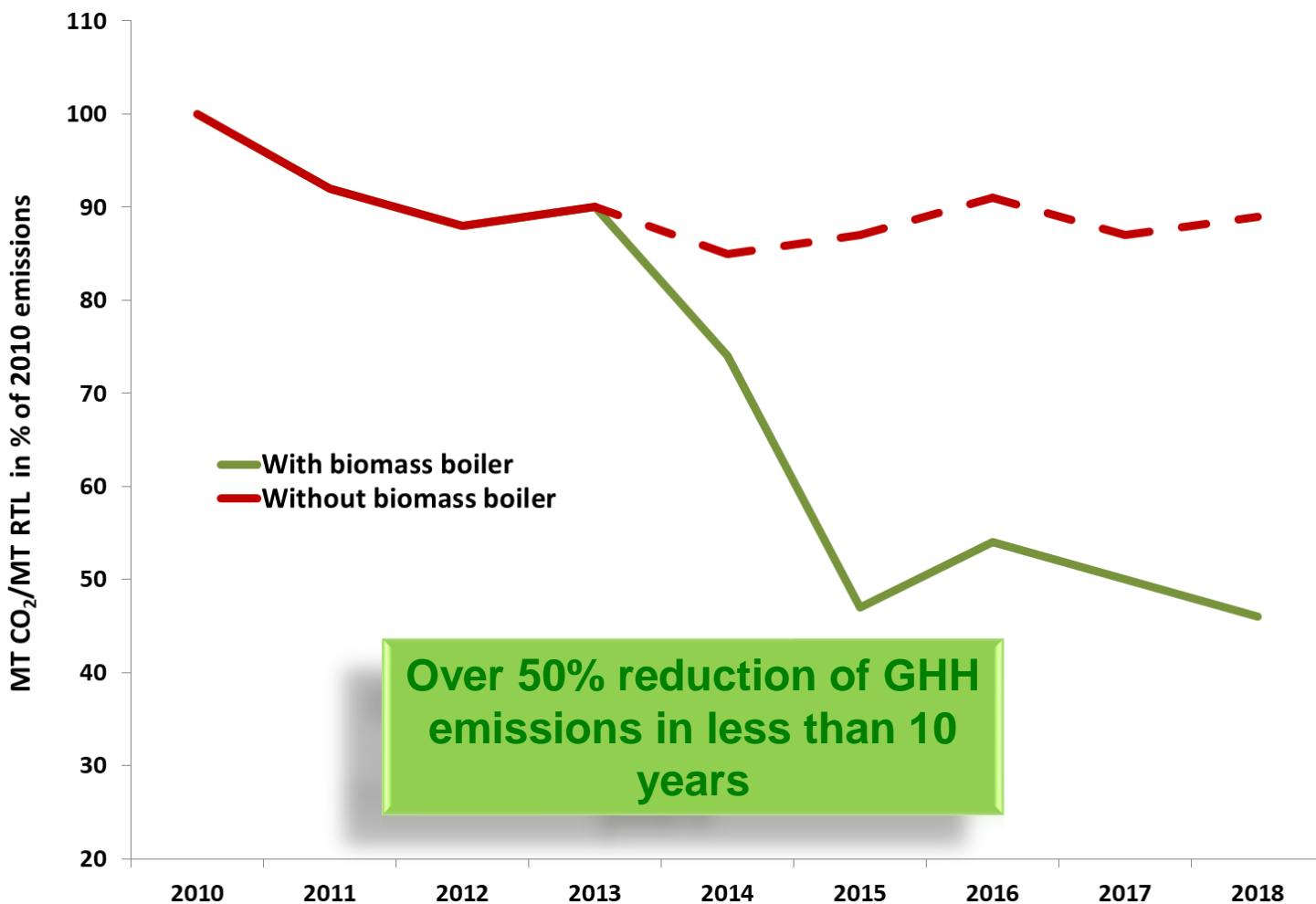


Installed in RTL plant in 2005

Biomass Boiler



Biomass Boiler Thermal energy



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What Is CDP?



CDP (Carbon Disclosure Project) runs the global disclosure system that enables companies, cities, states, and regions to measure and manage their environmental impacts. They have built the most comprehensive collection of self-reported environmental data in the world



Who requires disclosure or discloses?



7,000+

companies

Over 7,000+ companies responded to our climate change, water, forests and supply chain questionnaire this year.

120+

states and regions

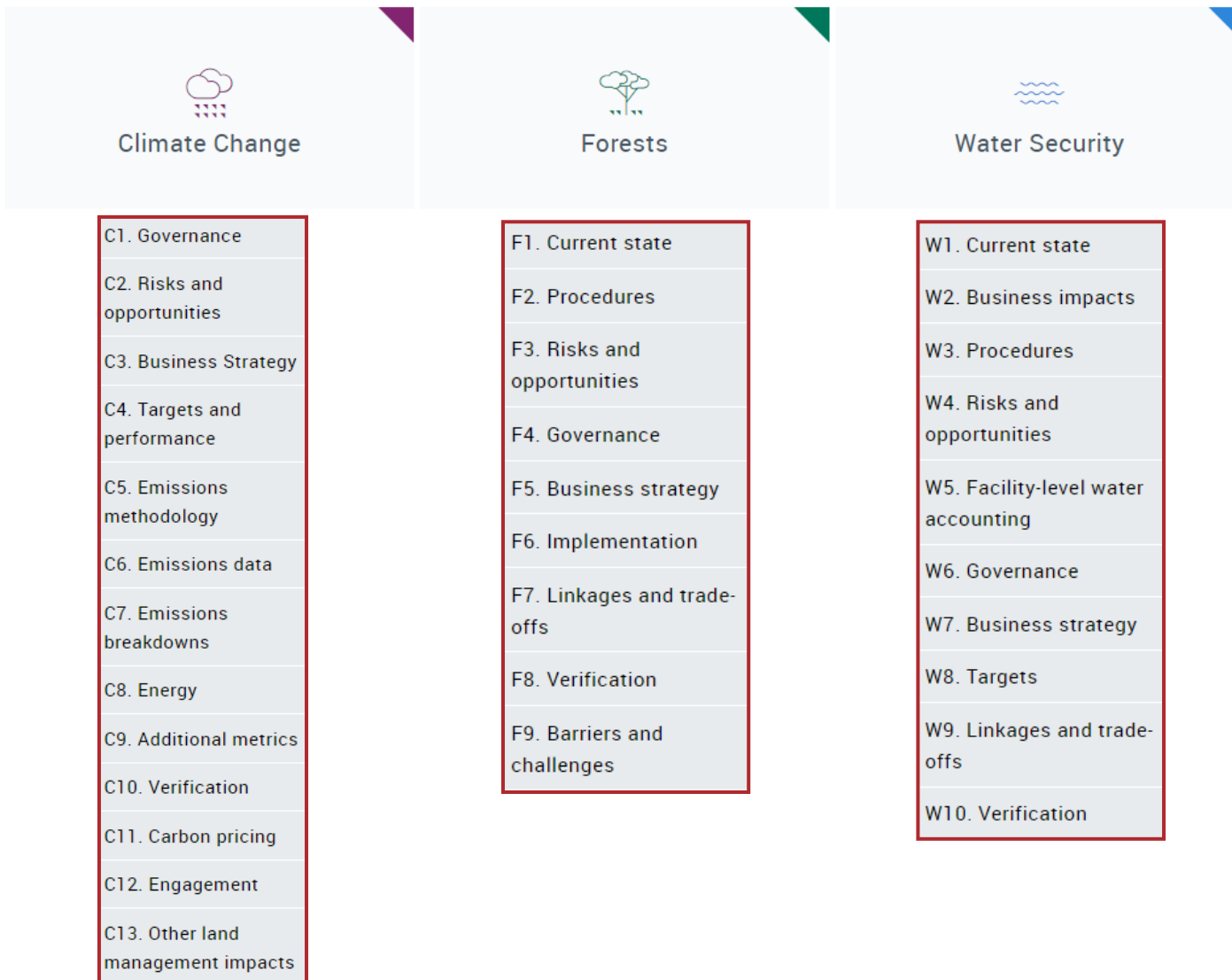
Over 120 of the world's states and regions now measure their environmental impacts through CDP.

620+

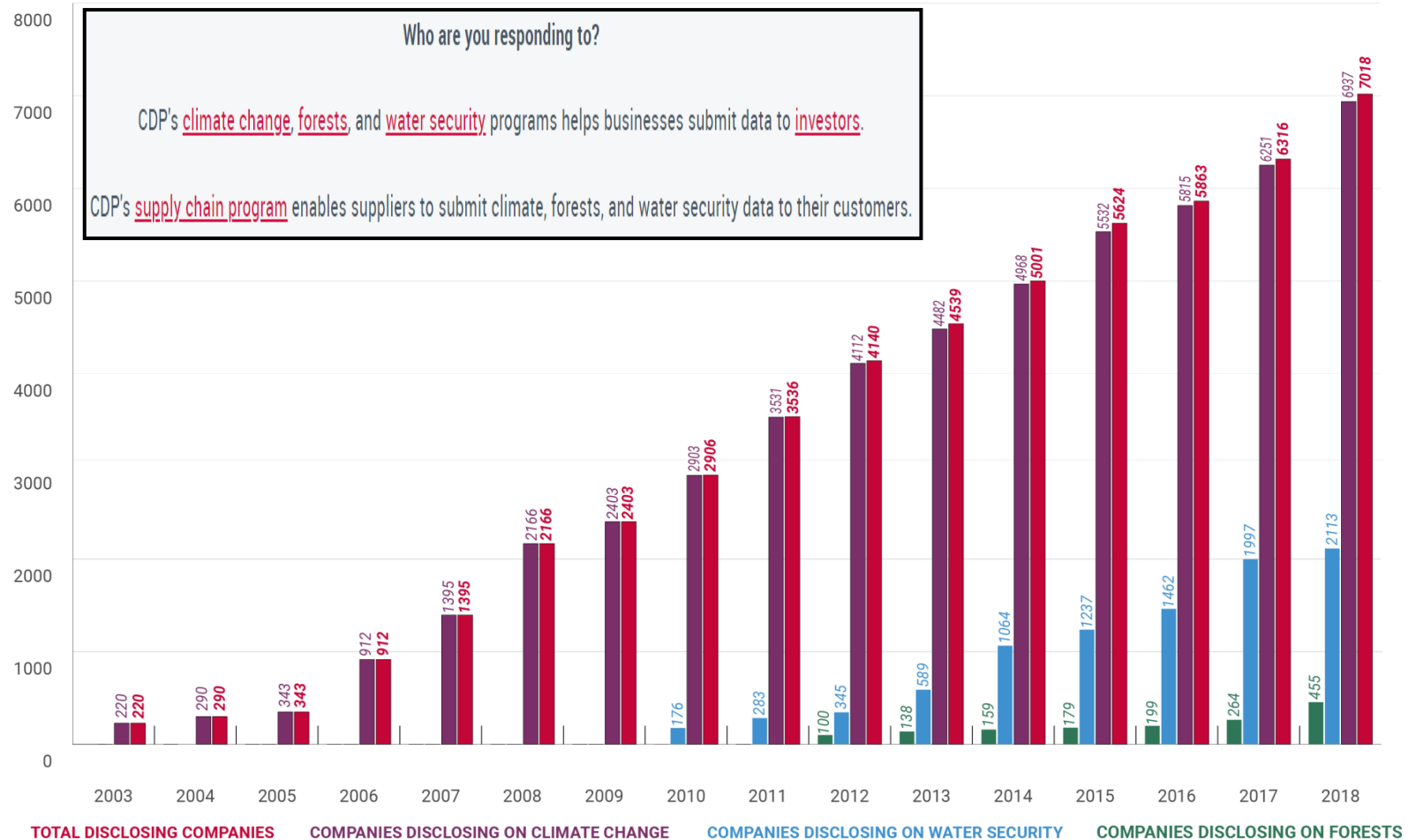
cities

disclosed environmental information through CDP this year.

Categories of Data Disclosed



Why Disclose?



Why Disclose?

- ▼ CDP's scoring methodologies incentivize and guide companies on a journey through disclosure to awareness, management and finally to leadership.
- ▼ Undertaken annually CDP's scores – and A List of leaders – are given to the investors and major purchasing companies requesting disclosure through CDP and are published publicly on the CDP website.
- ▼ CDP's scores and A List are used in the **STOXX Low Carbon Indices** and the **Euronext Index** licensed to Goldman Sachs.

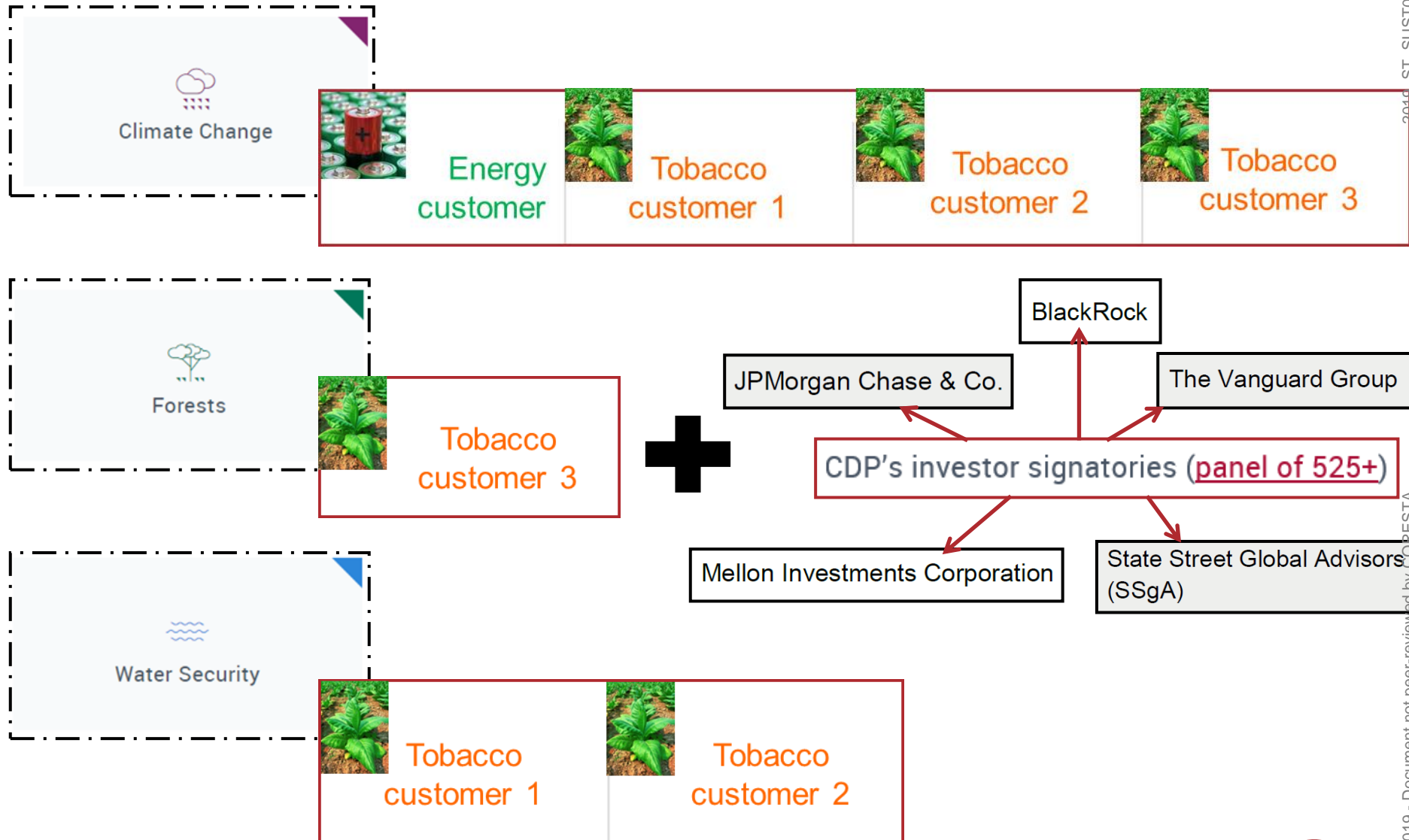


Why Disclose?

Sustainability is Important to Employees

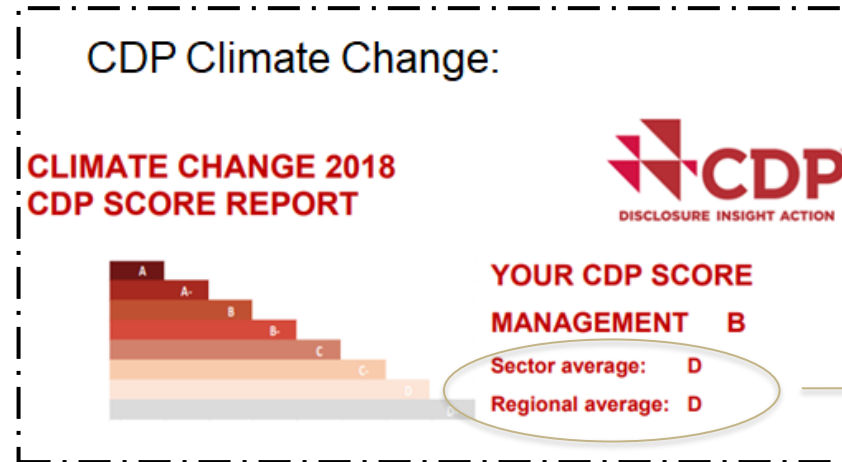
- 70% of adults ages 18-34 are worried about climate change
- Nearly 40% of millennials have chosen a job because of the company's sustainability performance
- 70% of millennials said that having a strong sustainability program would affect their decision to stay with the company long term
- Sustainability can be leveraged to improve employee engagement
 - A 2018 study found that 34% of employees are actively engaged
 - 13% are actively disengaged
 - Unilever has an employee engagement rate above 90% because of their Sustainable Living Plan, which gives employees a sense of purpose

Sustainability for SWM's Customers and Investors

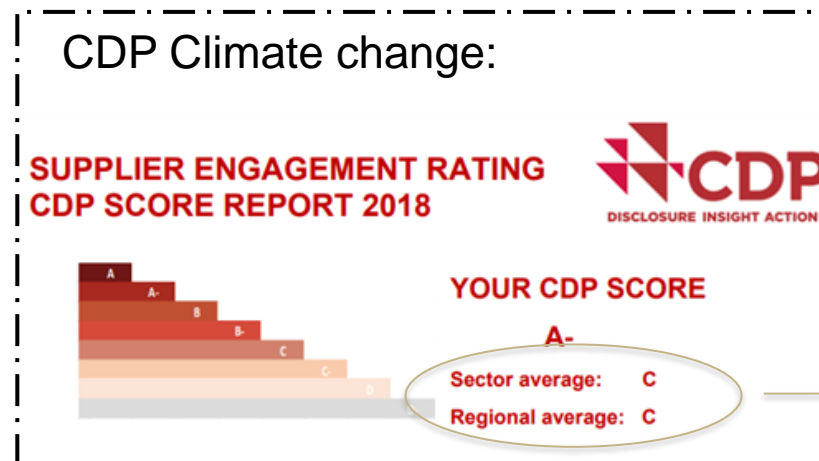


SWM's 2018 CDP results

Climate change



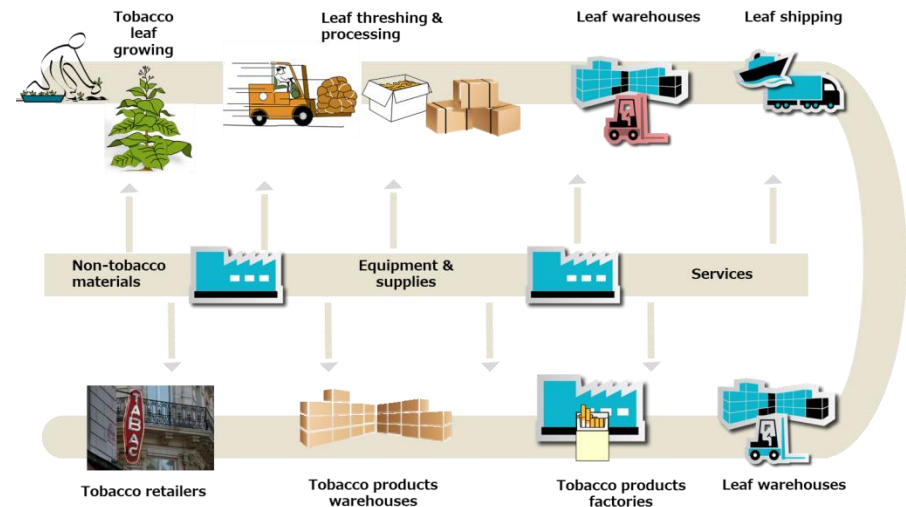
Pulp & paper
industry



Pulp & paper
industry

Conclusion

- Whatever the type or size of the business, GHG emissions reduction possible / needed
- Combine incremental / breakthrough actions and avoidance / reduction actions
- Consistent scientific measurement tools needed to favour efficiency and accurate benchmarking
- Alignment across the entire supply chain is key



Thanks

- SWM's sustainability team: Brian Cooley, Emily Nowell
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- Leaf Lab team: Cédric Rousseau, Laetitia Lecointre Leneveu