



# DISCOVER A NEW WORLD OF ECO-EFFICIENCY

## DISCOVERY™

Eco-efficient Paper

### *Are you ready to challenge your notions of eco-efficient paper?*

We've come a long way, but the planet still needs us to change our attitudes towards resources. It's time for us to rethink our approach to sustainability. Here, find out how Discovery has taken further steps towards a bright new world and how businesses and the earth are benefitting from it.



# 1

### WE TAKE CARE OF FORESTS

Tree replanting, biodiversity protection, responsible management, carbon fixing, oxygen production.



# 2

### WE GO EASY ON THE PLANET

Less wood, less waste, less water, less CO<sub>2</sub>.



# 3

### THE FIRST STEP OF RECYCLING

100% recyclable, more recycling cycles.  
Virgin paper feeds recycling.

## IN A NEW WORLD, OUR ECO-AMBITIONS ARE GOING A STEP FURTHER:



1

### WE TAKE CARE OF FORESTS

- We renew forests by replanting trees (24 M saplings are born in our nurseries every year)
- Our forests host 800 plant species and 241 animal ones
- They are FSC certified and Discovery is Ecolabel awarded, FSC and Rainforest Alliance certified
- They have a stock equivalent to 6,1 M tonnes of CO<sub>2</sub>
- In one year, they produce sufficient oxygen for the needs of 2,6M people
- We are active partners of WWF New Generation Plantations/ Forests Forward



2

### WE GO EASY ON THE PLANET

- 40% less wood is needed vs pine
- As Discovery is lightweight it naturally uses less resources
- And causes up to 12% less waste
- It will save fuel as Discovery represents less 12% in transport weight
- We reduced specific consumption of water by 30% (2019 vs 2004)
- 1 Pallet of Discovery represents the equivalent of 878kg of CO<sub>2</sub> sequestration
- CDP recognise us as A list global leaders of Climate Change
- We're committed to bring forward carbon neutrality to 2035\*
- By then, we will cut sites' direct CO<sub>2</sub> emissions by 86%
- And use electricity from renewable sources only

\*Mill site direct emissions



3

### THE FIRST STEP OF RECYCLING

- Discovery fibres are 100% recyclable
- They improve paper recyclability by 60% to 150%\*\*
- Without virgin fibres there is no recycling

\*\*Globulus vs. Acacia and Birch respectively, Source: RAIZ



## IN A NEW WORLD, SUSTAINABILITY DOESN'T COMPROMISE PERFORMANCE:



THICKNESS/STIFFNESS



SMOOTHNESS



PERFORMANCE

**Thicker and stiffer paper translates into higher runnability, without paper jams**

A bulkier and more rigid paper is less likely to curl and jam.

**Higher smoothness improves toner adhesion and ink absorption**

Superior tactile sensation and optimises ink/toner consumption, extending office equipment lifetime.



OPACITY



WHITENESS



PRINTING QUALITY

**The more opaque the paper the more it is suitable for duplex printing**

Printing information, graphs and images will be easily readable on both sides.

**The whiter the paper, the better are printing results**

Higher whiteness and brightness allows more vivid colour and high definition contrasts.





## WE TAKE CARE OF FORESTS

1

**For Discovery, everything starts with the forests. We take great pride in them and in the sustainable management carried out daily. This is the way to make a more sustainable planet, with cleaner air to breathe.**

### WE ARE COMMITTED TO BIODIVERSITY AND PROTECTION OF NATURAL HABITATS.

- > We promote the renewal of forests by planting 24 million saplings a year in our forestry nurseries.
- > Our forests host 800 plant and 241 animal species. They are identified and monitored in our forestry nurseries, especially those with endangered status like the Bonelli's eagle.
- > 4,100 ha of our woodland holdings are protected habitats (Rede Natura 2000)

### WE ARE FURTHER PROMOTING CERTIFIED AND/OR SUSTAINABLE FOREST MANAGEMENT PRACTICES.

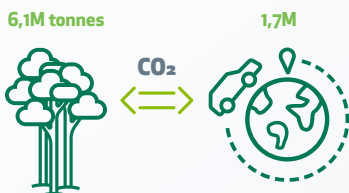
- > 107,310 ha of certified forests or forest area (11% of conservation interest).
- > 4.1 M€ invested in forest fire prevention and firefighting (+25% from 2018 to 2019)

### WE ARE LEADING THE FIGHT AGAINST CLIMATE CHANGE.

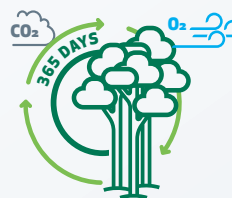
**Our forest and products are assets in mitigating the greenhouse effect:**



- > They stock the equivalent to **6,1M tonnes of CO<sub>2</sub> /year**  
<=> emissions of 1,7M car trips around the world.



- > The ***Eucalyptus globulus* tree's photosynthesis is especially efficient.** It captures CO<sub>2</sub> and releases oxygen all year round.



- > **1 ream of Discovery** is equivalent to the emissions of a car travelling for about 35 km.



- > **1 Pallet** <=> 761 kg CO<sub>2</sub> <=> 8,642 km <=> 1 trip by car from UK to India.





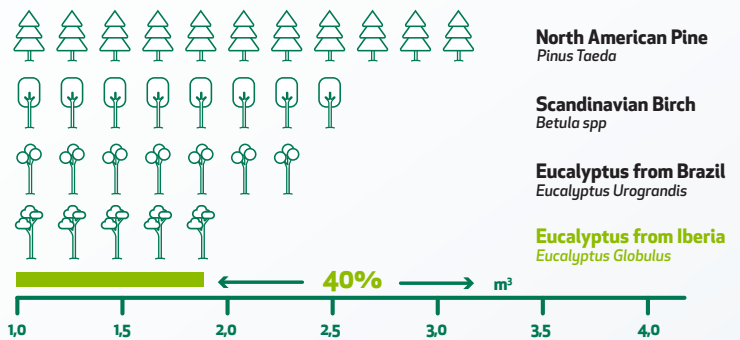
## WE GO EASY ON THE PLANET

# 2

**Making more from less isn't magic, it's science. The Navigator Company is redefining the role of paper businesses in the ecological dialogue, by using Eucalyptus globulus fibres. To do more with less is not only better for the environment, it is a smarter decision for any company.**

### WHY IS THE EUCALYPTUS GLOBULUS THE BEST RAW MATERIAL FOR PAPER MAKING?

For being denser, its fibres enable us to use up to **40% less wood volume** to produce the same amount of paper.



#### Discovery's wood savings.

70 g.m<sup>-2</sup> > -33% wood vs. Standard 80 g.m<sup>-2</sup>\*  
75 g.m<sup>-2</sup> > -28% wood vs. Standard 80 g.m<sup>-2</sup>\*

\*standard (25% pine, 25% birch, 25% urograndis, 25% globulus)

### ITS NATURALLY THICK, SHORT FIBRE RESULTS IN A BULKIER PAPER.

	AMOUNT AND LENGTH OF FIBRES	CELL WALL THICKNESS	DEFORMATION AFTER PAPER MAKING
<b>OTHER HARD WOODS</b>	LONGER FIBRE 		THINNER CELL WALL
<b>EUCALYPTUS GLOBULUS</b>	SHORTER FIBRE = HIGH NUMBER OF FIBRE PER UNIT WEIGHT 		THICKER CELL WALL

### DISCOVERY IS A LIGHTWEIGHT PAPER. IT NATURALLY USES LESS RESOURCES

- > It causes up to 12% less waste (70 g.m<sup>-2</sup> reams vs regular 80 g.m<sup>-2</sup>).
- > It will save fuel, as Discovery represents up to 12% less weight to transport.



#### We built a programme to accelerate change, based on four areas:

1. 100% electricity from renewable resources.
2. Reducing fossil CO<sub>2</sub> emissions by substituting technologies.
3. Reducing specific energy consumption by 15% (2025 vs 2015).
4. Offsetting emissions that cannot be eliminated.



#### We're committed to bring forward carbon neutrality to 2035:

- > We're reducing direct fossil CO<sub>2</sub> emissions by 86% at all industrial sites by 2035 – already -1/4 (2021 vs. 2018).
- > 100% of the energy will come from renewable sources, 70% so far.
- > This represents an investment of 154M€, 55M€ of which already invested in 2019/20.





## THE FIRST STEP OF RECYCLING

# 3

**Paper is one of the most recycled materials in the world. In one year time, virgin fibres can be recycled in cascade and used in 4 to 5 different products. Discovery virgin fibres are 100% recyclable and, as they are Eucalyptus globulus fibres, they improve paper recyclability by 60% to 150%.\***

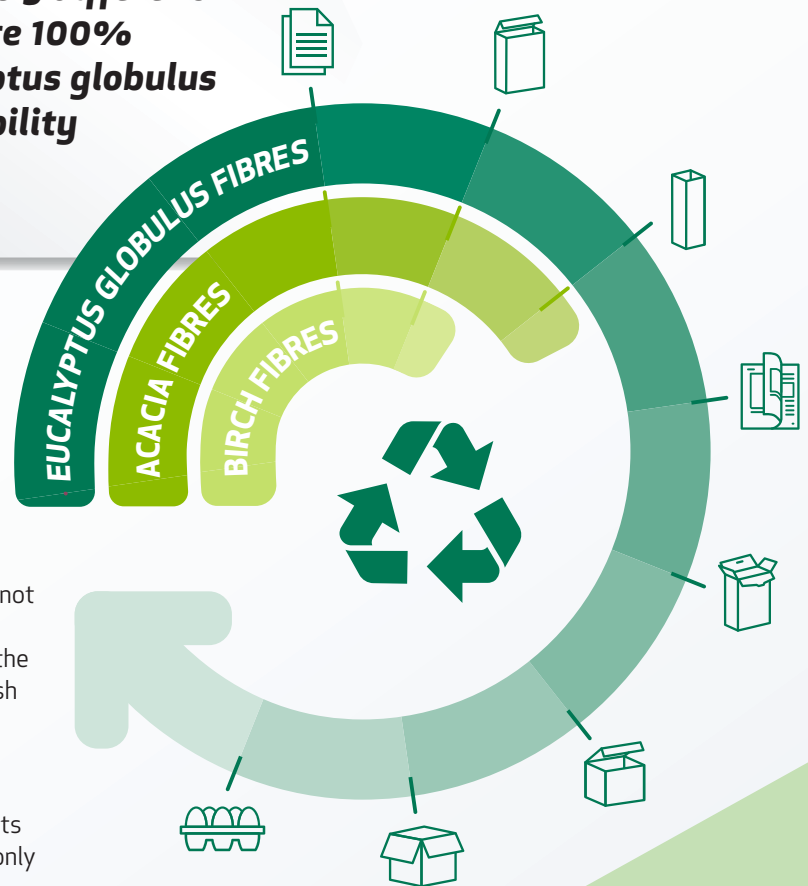
### WHY ARE VIRGIN FIBRES SO IMPORTANT IN THE RECYCLING PROCESS?

Without virgin fibres there is no recycling since fibres cannot be recycled eternally. Both virgin and recycled fibres are crucial assets of a single wood fibre flow that maximizes the value of each harvested tree. The key is to regularly refresh with quality virgin fibres.

Furthermore, although state of the art technological assets make it possible to get increased quality recycled paper, only virgin fibres assure top quality for printed works.

After being used, virgin fibre office paper is an essential source of fresh fibre in the European paper and board recycling cascade.

### 100% USEFUL, FROM THE FIRST TO THE LAST PHASE OF ITS LIFECYCLE



**At the end of the cascade, waste paper can be incinerated to produce energy, replacing fossil fuel, or be used in isolation for construction. It is the most eco-efficient way of generating value from fibres that can no longer be reused.**



\*Globulus vs. Acacia and Birch respectively, Source: RAIZ



## IN A NEW WORLD SUSTAINABILITY DOESN'T COMPROMISE RESULTS

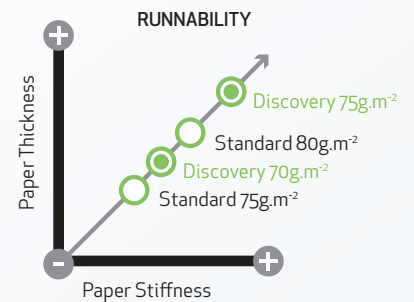
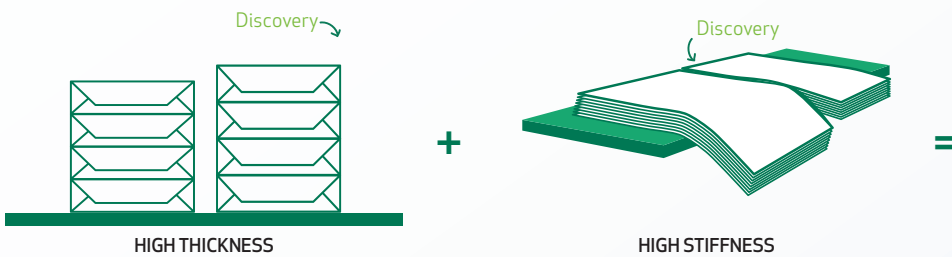
# PERFORMANCE

**Our eco-conscious choice of working with Eucalyptus globulus shows how intertwined sustainability and performance can be. Discovery is the living proof that high quality paper is both the best choice for the planet and the consumer: It delivers outstanding performance and environmental responsibility.**

### DISCOVERY PAPER OFFERS HIGH RUNNABILITY

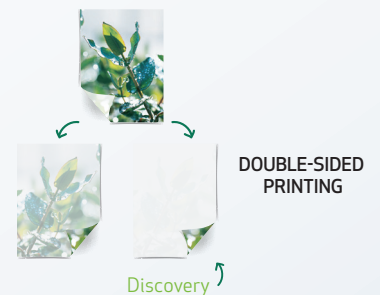
The main attributes influencing a good runnability are **thickness** and **stiffness**. Discovery combines both, making it highly **productive** in printing or copying machines: it is less likely to curl and to jam, avoiding **printer stoppages**.

> Discovery 75 g.m<sup>-2</sup> exceeds the main standard 80 g.m<sup>-2</sup>  
> Discovery 70 g.m<sup>-2</sup> overperforms standard 75 g.m<sup>-2</sup> and is the maximum exponent of sustainability



### DISCOVERY PAPER ALLOWS DOUBLE-SIDED PRINTING

Discovery's thickness and the special filler used in its manufacture make it more opaque, a critical property for double-sided printing. Printing on both sides reduces the number of sheets used, which is both economical and environmentally friendly.



### DISCOVERY PAPER PROVIDES HIGH QUALITY

The printing contrast and vivacity of colours are highly dependent on **whiteness** and **brightness**. Discovery paper offers a high degree of whiteness, which guarantees first-class aesthetics, sharp colours and intense blacks.

### CONSISTENT QUALITY

Discovery has high performance in any equipment and is constantly tested to ensure maximum quality and runnability in every printer.

