

***Incentivizing Decarbonization through the  
Circular Economy in the Fashion Industry***

***Monitor For Circular Fashion***

SDA Bocconi, Milano

21 September 2021

# EU TARGETS AND FASHION INDUSTRY IMPACT



TARGETS



## EU TARGETS

GHG emissions:

**-55%** by **2030**

**Climate Neutral** by **2050**



## EU STRATEGY FOR SUSTAINABLE TEXTILES

The EU is developing a strategy to shift to a **climate-neutral, circular economy** where products are designed to be more **durable, reusable, repairable, recyclable & energy-efficient**

FOOTPRINT

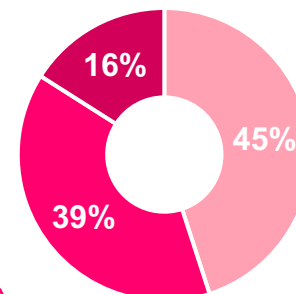
**2,1Bln**

Tonnes of CO<sub>2</sub>eq/year produced by the fashion industry, equal to **4% of global GHG emissions**

**63%**

Of emissions (~1Bln tons) can be saved by operating on **energy efficiency & energy transition** in the fashion industry\*

**Energy mix transition** from coal to electric in material processing



**Energy efficiency improvements**

**Energy mix transition to 100% renewables** in manufacturing

Energy has a fundamental role in the «sustainable inputs» pillar of the Circular Economy



# HOW CAN COMPANIES ACHIEVE THESE CHALLENGING TARGETS?



## THE IMPORTANCE OF MEASUREMENT

«What gets measured gets managed»

AS-IS → TARGET  
ROADMAP

Measurement is fundamental to:

- ✓ Identify the starting point
- ✓ Plan a detailed roadmap
- ✓ Make the right decisions
- ✓ Communicate the correct impact (avoiding cases of green washing)

## KEY TOOLS



### GHG REPORT

Analysis & quantification of the Carbon Footprint at Organization level in terms of CO<sub>2</sub>eq (scope 1,2 & 3)



### SUSTAINABILITY REPORT

Analysis and description of organization's **commitment to sustainable development** for internal & external stakeholders with CO<sub>2</sub> impact estimation

### DEVELOPED BY ENEL X



### CIRCULAR ECONOMY REPORT

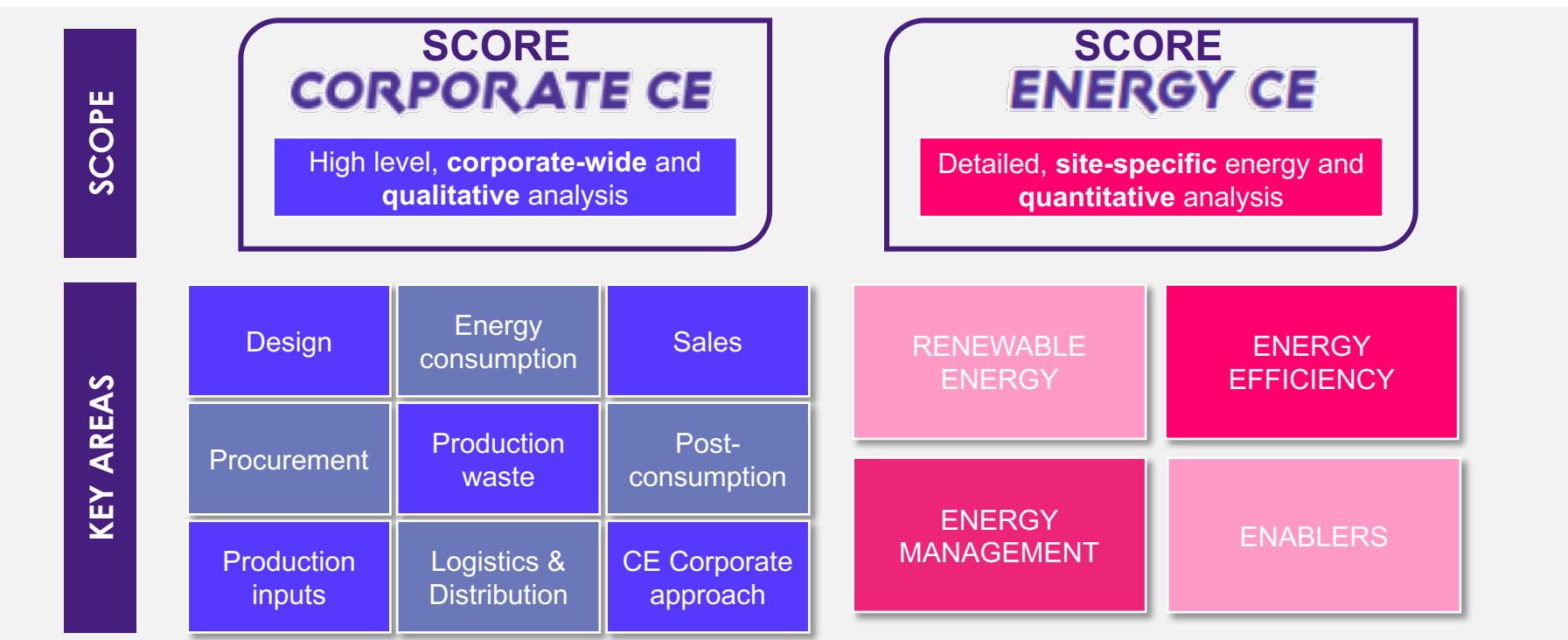
Analysis of the **level of circularity** at organization and **site energy level** which includes sensitivities and improvement **roadmap with CO<sub>2</sub>, cost and energy savings**

DEFINITION OF A SUSTAINABILITY ROADMAP

# FOCUS ON THE CIRCULAR ECONOMY SCORES WITHIN CE REPORT



A VERTICAL WHICH IMPACTS THE 63%



## KEY BENEFITS



Sustainability plan



Prioritization of actions



Competitive advantage



Credible communication

## KEY STEPS

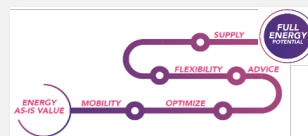
1

MEASURING OF AS-IS CIRCULARITY



2

ROADMAP OF SOLUTIONS



CO2 Saving  
Cost Savings  
Energy savings

3

EXECUTION AND OPTIMIZATION



# MONITOR FOR CIRCULAR FASHION 2021

## KEY OUTCOMES from Enel X CE Report application



AVERAGE RESULTS MFCF

AVERAGE CROSS-SECTOR REPORTS  
2020-2021 (ENELX SOURCE)

CE  
CORPORATE  
SCORE

52.5%



37.9%

Higher level of Corporate Circularity due to use of **circular business models**, **stakeholder engagement** and **recycling** of production waste.

CE ENERGY  
SCORE

28.6%



31.1%

Lower average score in energy circularity due to **lack of self-generation of renewable energy**.

CO<sub>2</sub>  
SAVINGS

1k

tons CO<sub>2</sub>/year  
avrg/per company



0,5k

tons CO<sub>2</sub>/year  
per company

Almost the double of potential in terms of CO<sub>2</sub> saving due to **high untapped potential of renewable energy auto-generation plants**.

ENERGY  
SAVINGS

8,3k

MWh/year  
avrg per company



2,1k

MWh/year  
per company

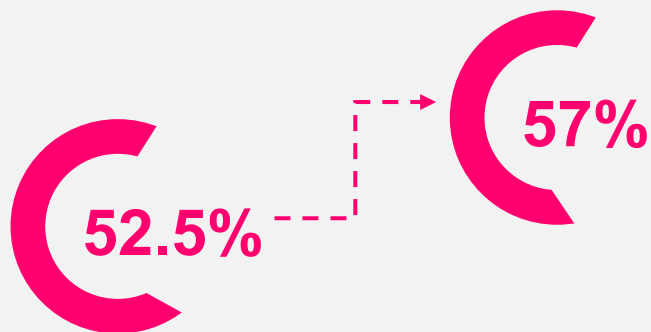
Higher potential in terms of **energy saving** due to multiple opportunities for improvement in **energy flows** and **energy management**.

# OPPORTUNITIES TO IMPROVE SECTOR CIRCULARITY



## CE CORPORATE SCORE

Avg. Potential increase



## CE ENERGY SCORE

Avg. Potential increase



### MONITOR RESULTS

12.5%

OF FIRMS AUTO-PRODUCE RENEWABLE ENERGY ON SITE

50.1%

OF TOT. ENERGY CONSUMP- IS MONITORED BY AD-HOC SYSTEMS

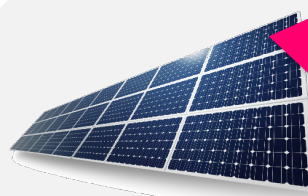
13.1%

OF FIRMS HAS EV RECHARGE INFRASTRUCTURES ON SITE

41.3%

OF MATERIAL INPUTS ARE RECYCLED AND 16% REGENERATED OR SECOND-HAND

### IMPROVEMENT OPPORTUNITIES



2,2k tons of CO<sub>2</sub>/year could be saved by the M4F firms by PV installation

INSTALLATION OF PV-SYSTEM ON SITE



APPLY IoT AND AI SYSTEMS FOR ENERGY REMOTE CONTROL



INSTALLATION OF RECHARGE INFRASTRUCTURES EV ON SITE



MAXIMISE USE OF RECYCLED, RECYCLABLE & REGENERATED INPUTS



# 2021 MFCF CONCLUSION



1. Research on **decarbonization** is developing **new technologies** which will become available at reasonable costs in the future;
2. **Energy**, for which **concrete decarbonization solutions** already exist, is indisputably the main pillar to decarbonization that leverages on the first business model of the CE: **Sustainable Inputs**;
3. Let's work concretely on **energy circularity** starting from **PV, electric mobility, efficiency**, able to reduce our environmental impacts, generate cost savings and meet global targets.

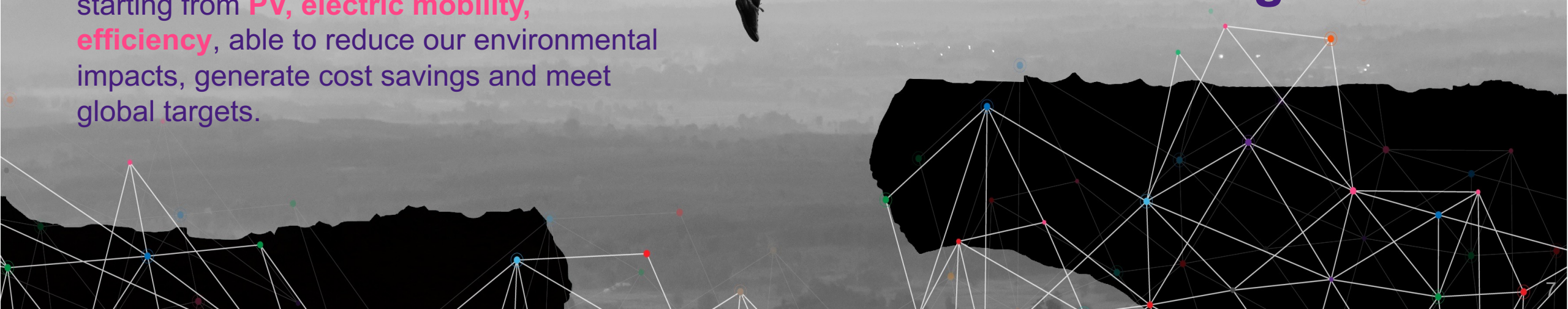


Sustainable  
inputs



- 63% of CO<sub>2</sub>

What are we  
waiting for?



**THANK YOU**