



We create chemistry

# Economía Circular: desvincular el crecimiento del consumo de recursos

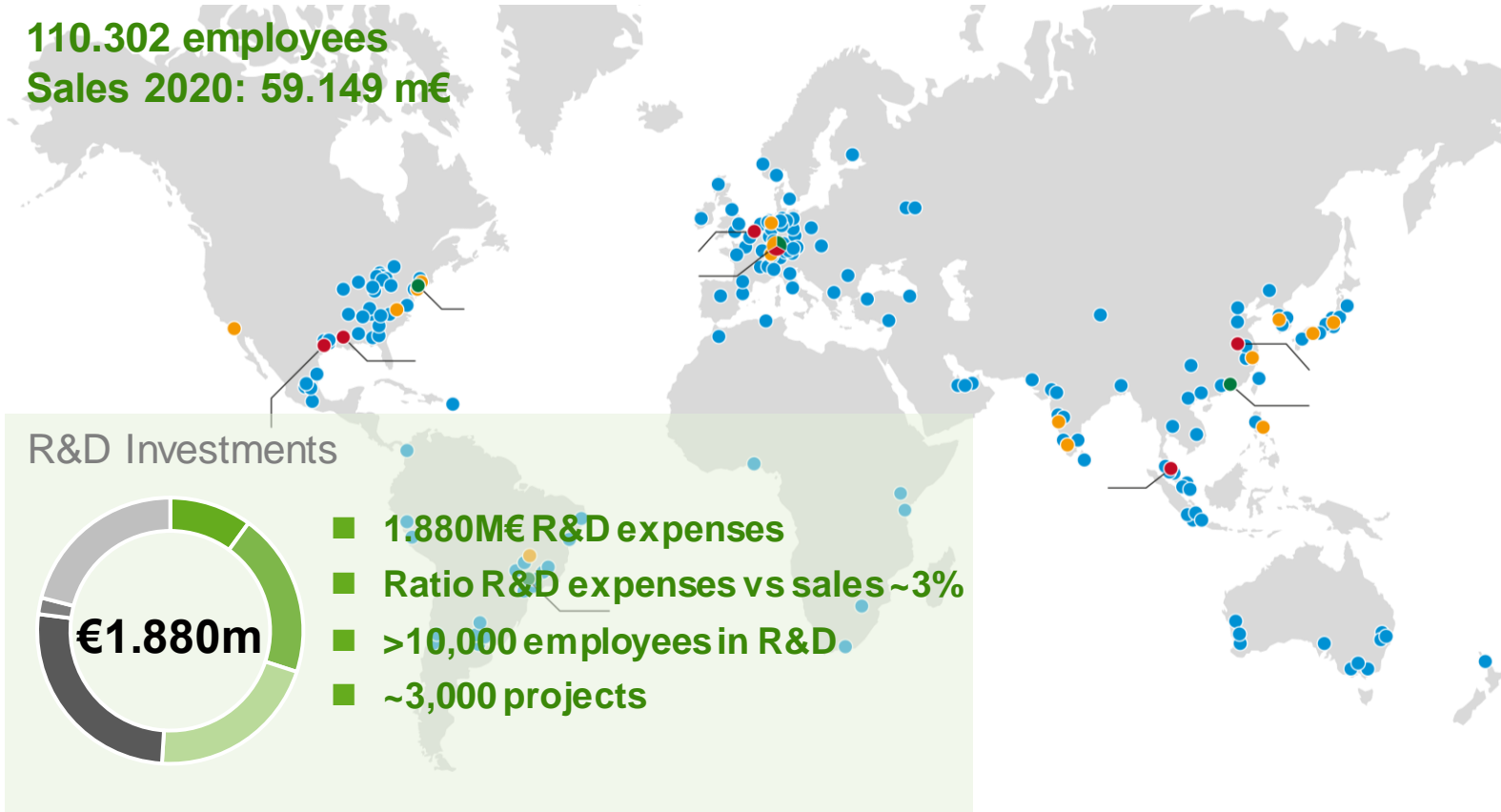
BASF ESPAÑOLA S.L.  
Product Stewardship  
Daniela Brunsó Welker  
14.10.2021



# BASF – We create chemistry for a sustainable future

## Global figures

110.302 employees  
Sales 2020: 59.149 m€



**Chemicals**

Petrochemicals  
Intermediates

**Materials**

Performance Materials  
Monomers

**Industrial Solutions**

Dispersions & Pigments  
Performance Chemicals

**Surface Technologies**

Catalysts  
Coatings  
Construction Chemicals\*

**Nutrition & Care**

Nutrition & Health  
Care Chemicals

**Agricultural Solutions**



## Verbund Site Ludwigshafen

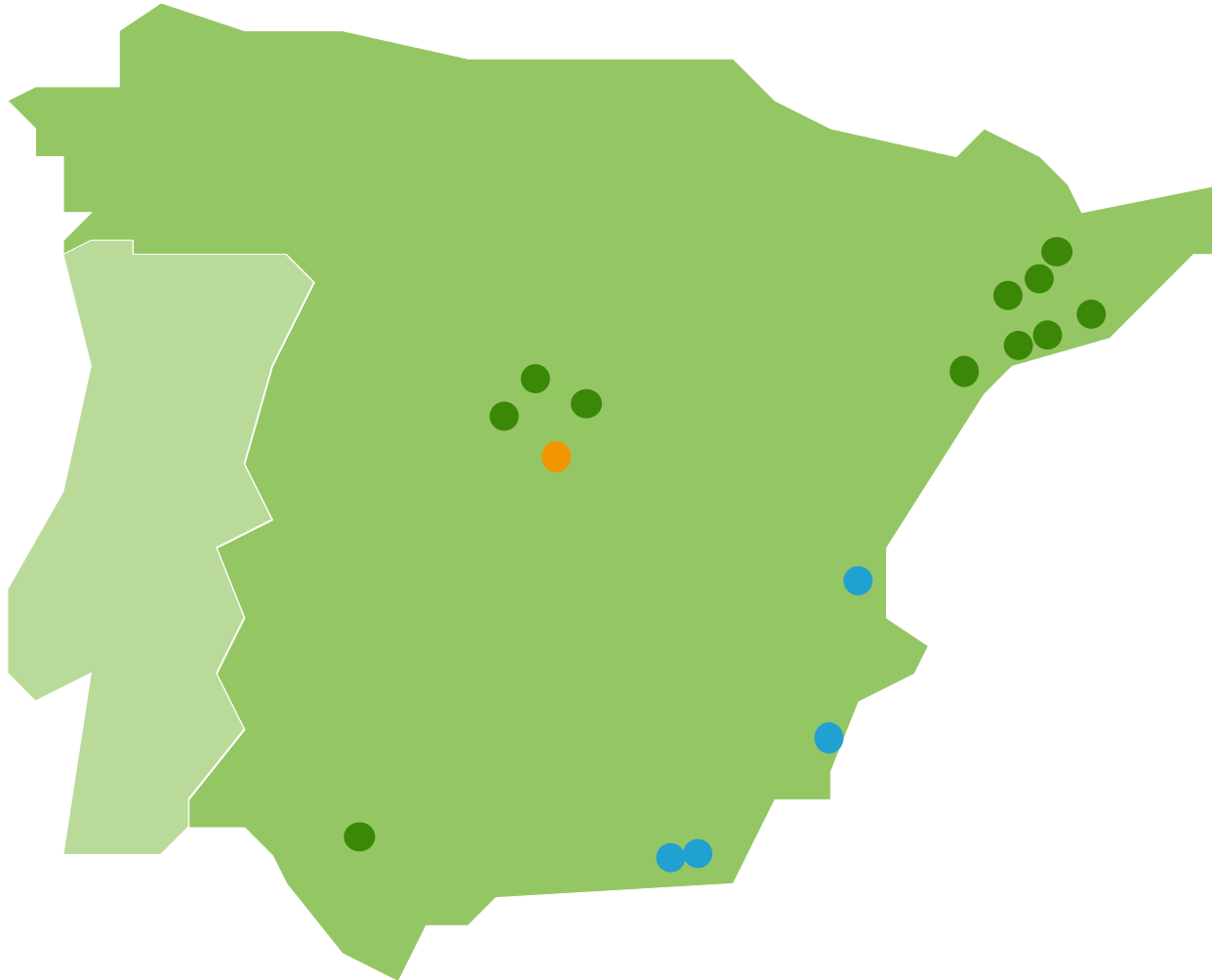
### El complejo químico integrado más grande del mundo



- Fábrica más grande del mundo (Alemania)
- Superficie 10 km<sup>2</sup>
- > 2000 edificios
- > 2800 km tuberías
- > 35.00 trabajadores
- > 100 km carreteras
- > 200 km vías de ferrocarril
- > 2.000 camiones diarios
- > 400 vagones diarios
- > 20 barcos diarios

# BASF – We create chemistry for a sustainable future

## Spanish figures



### Major sites



### Key industries



### Figures



2019 sales  
**1.078M€**



Production sites  
**8**



Work centers  
**16**



Employees  
**2.211**



# Creamos química para un futuro sostenible

## Introducción a los ODS de BASF

- 1994: Se crea la primera **estrategia de sostenibilidad** global de la empresa (la visión 2010)
- 2011: De 'The Chemical company' en '**We create chemistry for a sustainable future**'
- 2013: Creación del **Sustainable Solution Steering** (clasificación de productos)
- 2015: Formamos parte de los **working groups de la ONU** para la redacción de los ODS
- 2018: Reconocimiento como **empresa líder en ODS** por el Pacto Global de Naciones Unidas
- 2021: **Nuevos objetivos no financieros** de la compañía: NEUTRALIDAD CLIMÁTICA 2050

# Circular Economy at BASF

# OBJETIVOS DE BASF EN ECONOMÍA CIRCULAR



Nuestro objetivo es **duplicar nuestras ventas circulares** para alcanzar los **17.000 millones de euros en 2030**.



Nos comprometemos a utilizar **250.000 toneladas de materia prima reciclada** para **2025** a nivel mundial.



Ejecutamos un **Programa de Economía Circular** para acelerar la transición.



# We aim to achieve our circular sales target based on two portfolio concepts



We aim at **doubling** our circular sales to reach **€17 billion** by 2030.

## Close the loops

Products which enable the closing of the recycling loop and/or are based on recycled or renewable feedstocks



Renewable-based feedstocks



Recycled-based feedstocks



Enable recyclability and/or biodegradability

## Extend the loops

Products that perform best with less, and thus help to decouple growth from material consumption



Save resources and reduce waste along the value chain



Higher durability to enable product sharing and reduce maintenance

# 12 PRODUCCIÓN Y CONSUMO RESPONSABLES



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## EL CÓMO

The background image shows two hikers on a rocky mountain peak. One hiker is standing on a higher rock, while the other is climbing up. They are both wearing backpacks and using trekking poles. The scene is set against a clear blue sky with a hint of sunset or sunrise. Overlaid on the image are several thick, colorful circular lines in shades of blue, green, yellow, red, and light green, arranged in a circular pattern around the hikers.

# Closing the loop for plastics with the ChemCycling™ project

# BASF's ChemCycling™ project

## Breaking new ground in plastics waste recycling



# Benefits of ChemCycling™ – Overview

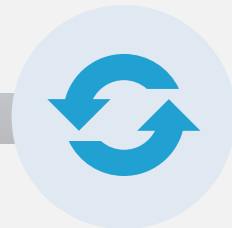
Why BASF is developing chemical recycling for use on industrial scale

**Complementary approach** to existing recycling methods, thus overall recycling rates of plastic waste will be increased



**Solution oriented** end-of-life option for high-performance plastics, e.g., multi-layer packaging

**Contributing to a circular economy** as plastic waste is turned into feedstock for the chemical industry



**Replacing fossil resources** and **saving CO<sub>2</sub> emissions** against conventional plastics production

**Virgin quality** products for demanding applications can be manufactured, e.g., food packaging or automotive parts



**Supporting our customers** in achieving their recycling targets

# The Biomass Balance approach

# BASF's Biomass Balance Approach

- Requires **no reformulation** – identical product performance
- **Available** easy and fast for nearly all our products
- Saves fossil resources and **reduces greenhouse gas** emissions
- Drives the use of sustainable **renewable feedstock**



# The mass balance approach



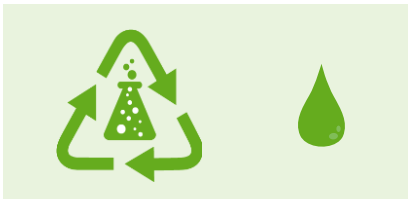
# Allocation of recycled feedstock with the mass balance approach

## How it works

### Feedstock

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Fossil



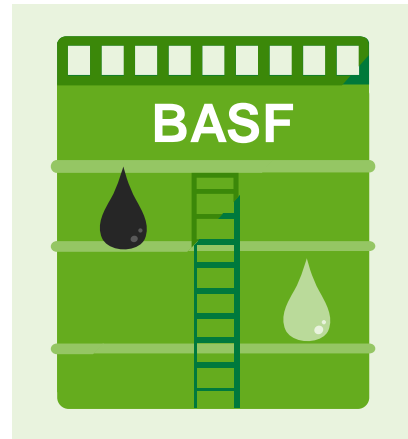
Recycled/Renewable

Use of recycled or biobased feedstock in very first steps of chemical production (e.g., steam cracker)



### BASF Production Verbund

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Utilization of existing Production Verbund for all production steps



### Products

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Conventional product



Mass balance product

Allocation of recycled feedstock to selected products

# Challenge: Recycled materials cannot be directed to one specific product

## Feedstock

Fossil



Recycled/Renewable

## BASF Production Verbund

Therefore,  
**an external certification system is needed**



## Products



Conventional



Allocated

# Our solution: Certification and standardization

## Feedstock

Fossil



Recycled/Renewable

## BASF Production Verbund



## Products



Conventional



Allocated

RedCert<sup>2</sup> ensures the correct allocation of recycled/renewable resources in BASF's value chain.

# SCOTT:

## Product Carbon footprint for BASF portfolio

# Product Carbon Footprints for the BASF portfolio



- Transparency for our customers
- Digital solution SCOTT calculates cradle-to-gate Product Carbon Footprints automatically
- Consistent carbon footprints for the global portfolio in the course of 2021
- BASF calculates the Product Carbon Footprint based on the ISO standards 14040:2006 and 14044:2006 for life cycle assessment BASF supports establishing global standards



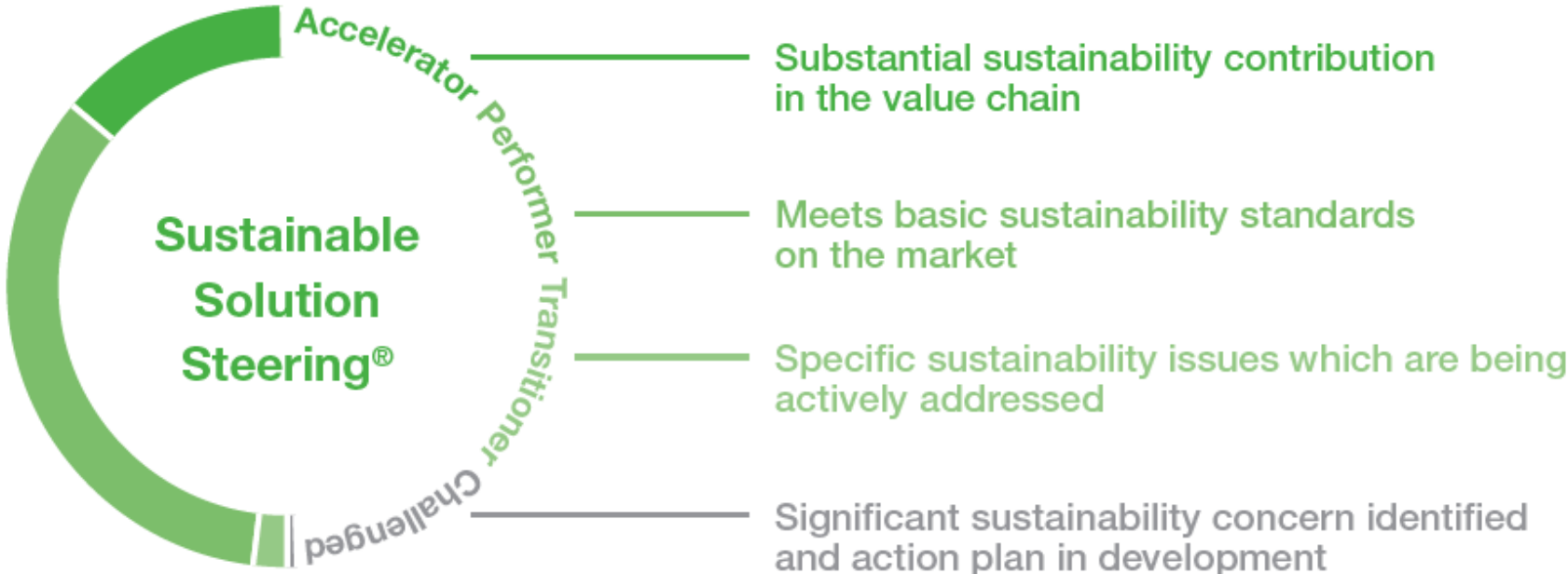
# Sustainable Solution Steering:

Accelerator products

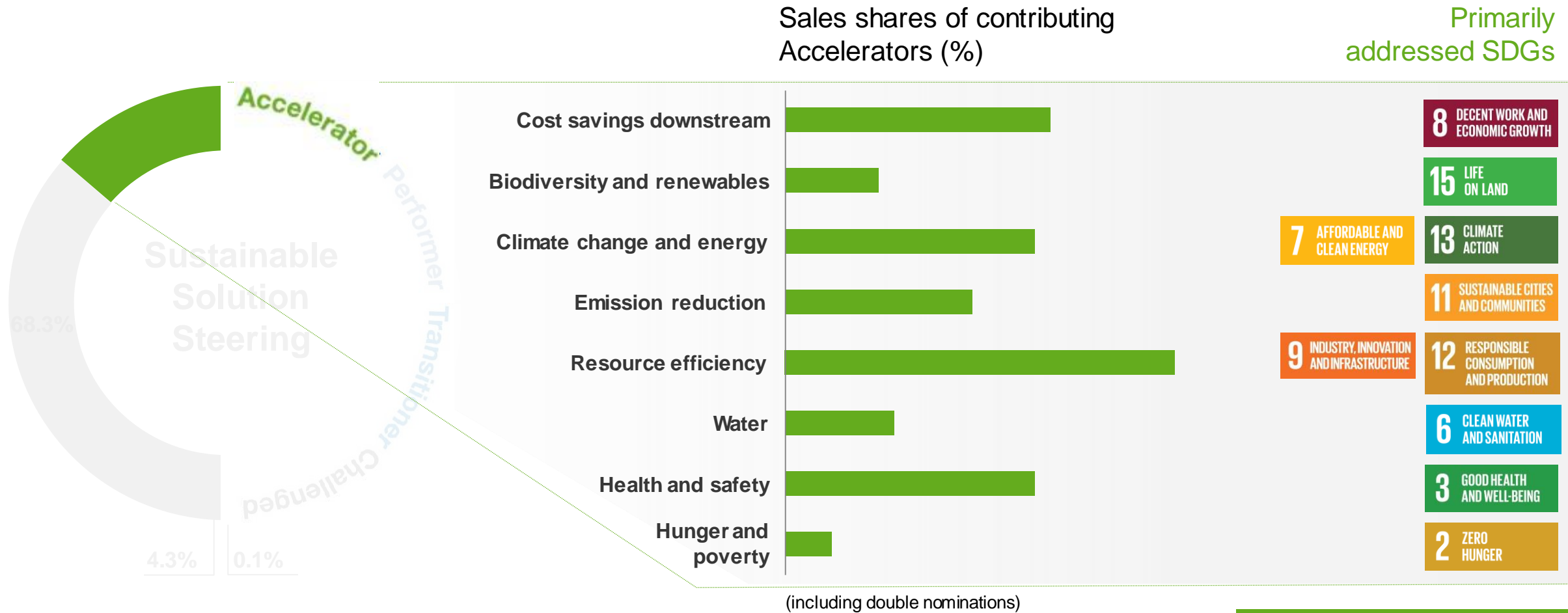
# We drive Sustainable Solutions

Analyze our products' contributions to the sustainability needs of our customers' value chains

- 1. Analyze sustainability needs and trends of value chains
- 2. Check product sustainability performance in the market segments
- 3. Develop action plans for strategies, R&D and market approach, define concrete goals



# BASF's Accelerators contribute to a wide range of the UN Sustainable Development Goals





# 12 PRODUCCIÓN Y CONSUMO RESPONSABLES



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## EL QUÉ

# Cataluña CERES Project



**EN UNA SEGONA VIDA...  
M'AGRADARIA SER COMPOST.**

Agència de Qualitat de Catalunya | Generalitat de Catalunya | BASF | Mancomunitat d'Escombraries de l'Urgell | NOVAMONT

egua Compostable  
UTILITZAM PER RECICLAR L'ORGÀNICA  
L'orgànica al març

#projecteCERES



# Biopolímero certificado compostable ECOVIO

## Beneficios:

- Consiste en ácido poliláctico renovable (PLA), lo que reduce la huella de carbono general de un producto
- Totalmente compostable junto con desechos orgánicos y se convierte en compost cumpliendo con los estándares internacionales, EN 13432
- Material transpirable
- Aprobado para contacto alimentario en la UE

**Aplicaciones:** aplicaciones de alimentos (por ejemplo, bolsas, cajas de pescado y helado, bandejas de carne y fruta), envases protectores, aplicaciones para la agricultura, etc.



# Productos para hacer un mundo más sostenible

## Cápsulas de café compostables y biodegradables



[Cafès Novell - I Premios BASF Economía Circular - YouTube](#)

Internal

**BASF**  
We create chemistry

# Productos para hacer un mundo más sostenible

## La alianza con Adidas y el calzado circular



[BASF y Adidas se alían para desarrollar un modelo de zapatillas 100% reciclable | Centro Español de Plásticos \(cep-plasticos.com\)](https://www.cep-plasticos.com/)

# Productos para hacer un mundo más sostenible

## Nuevos colchones de residuos de espuma



[PU recycling \(basf.com\)](https://www.basf.com)

# Prototipo Styropor® P Ccycled® con material procedente de reciclado químico

12 PRODUCCIÓN  
Y CONSUMO  
RESPONSABLES



**17** ALIANZAS PARA  
LOGRAR  
LOS OBJETIVOS



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**IMPRESCINDIBLES**



# Compartir para alcanzar los objetivos

Premios BASF a la mejor práctica de economía circular en España



# BASF Podcast: Conversaciones para un futuro sostenible



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17 ALIANZAS PARA  
LOGRAR  
LOS OBJETIVOS

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