

Why is Circularity Important?

Going circular in the Food & Beverage sector: from Schneider Electric's story to yours



Schneider Electric Sustainability Business / Circularity Consulting Practice
9th of October 2023

Benefits of Today's Session



Understanding A Complex Landscape

Production, processing, transport, storage and waste

13,000 businesses across a diverse supply chain

Sustainability Credentials and Legislation

Continually evolving landscape

Compliance

Agility with energy procurement

Risk Avoidance

Future proofing your business

Supplier requirements

Get Ahead

Commercial advantage

Clearly demonstrable sustainability goals

Agenda

1. What is the Circular Economy?
2. Schneider Electric's circularity journey
3. How Schneider Electric can support your circularity journey
4. Q&A



Meet the Schneider Electric team



Sam Williams

Sustainability Sales
Manager
-Sustainability Business



Ling Jhang

Circularity consultant
-Sustainability Business



Camila Soares

Circularity consultant
-Sustainability Business

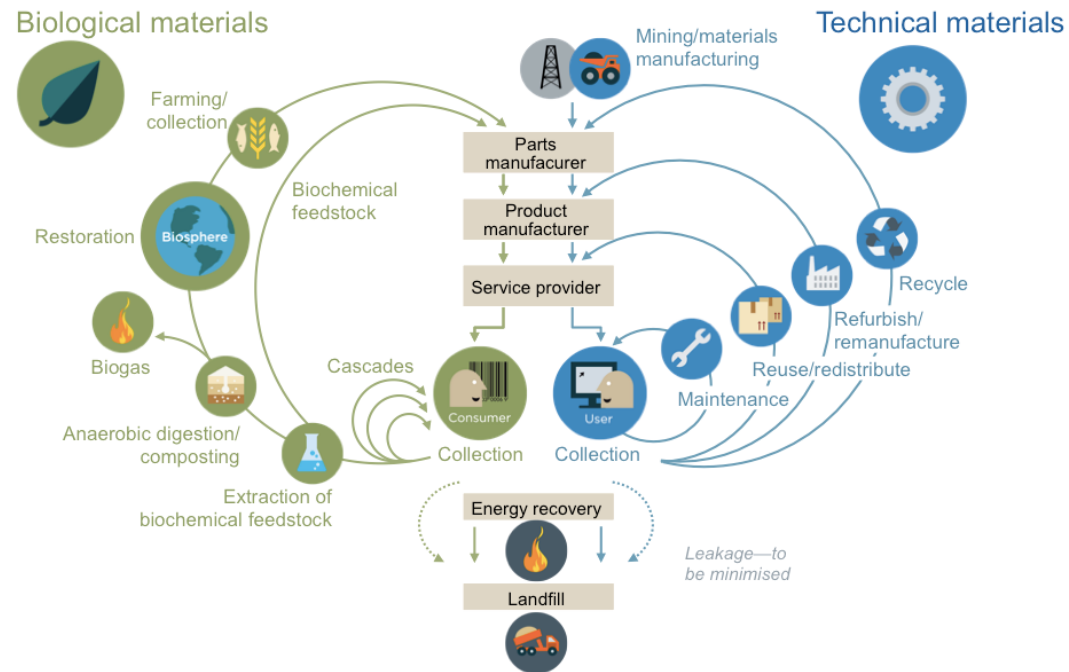
What is the Circular Economy?

Circularity covers the life cycle of a product

From source to design to end of life

“A framework for an economy that is restorative and regenerative by design”.

Globally accepted definition by the



Source: ellenmacarthurfoundation.org

The 10 R's

Refuse • Rethink • Reduce

Smarter material use and manufacture

Reuse • Repair • Refurbish • Remanufacture

Extend lifespan of product and its parts

Repurpose • Recycle • Recover

Useful application of materials and components

Circularity: a multi-driver approach

That meets the ambitions of multiple stakeholders



COMMODITIES

Resource access and supply chain resilience

Raw material commodity prices nearly 18% higher than a year ago, continue rising with amid stronger demand.

Worldbank, 2021

CUSTOMER

Growing consumer pressure

83% of interviewed customers are expecting solutions immediately
3 out of 5 European customers consider climate change when buying food.

Accenture, 2022. IPSOS market research

CLIMATE

Lever for climate & sustainability targets

Circular path could halve EU's carbon emissions by 2030 across mobility, food systems and the built environment.

Ellen MacArthur Foundation, 2021

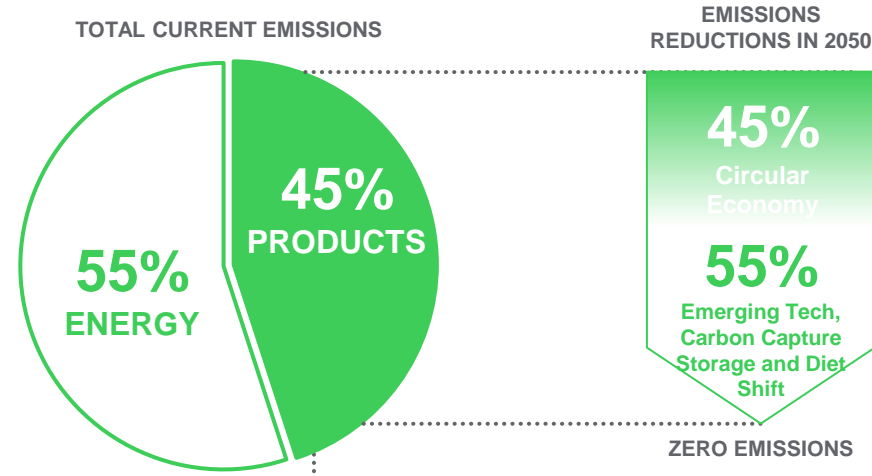
COMPLIANCE

Arising pressure from legislation




Around the globe, authorities release tighter environmental standards concerning circularity, e.g. the EU taxonomy, ISO standards, the UK Plastic Packaging Tax etc.



Circularity is a lever to save materials and to decarbonize

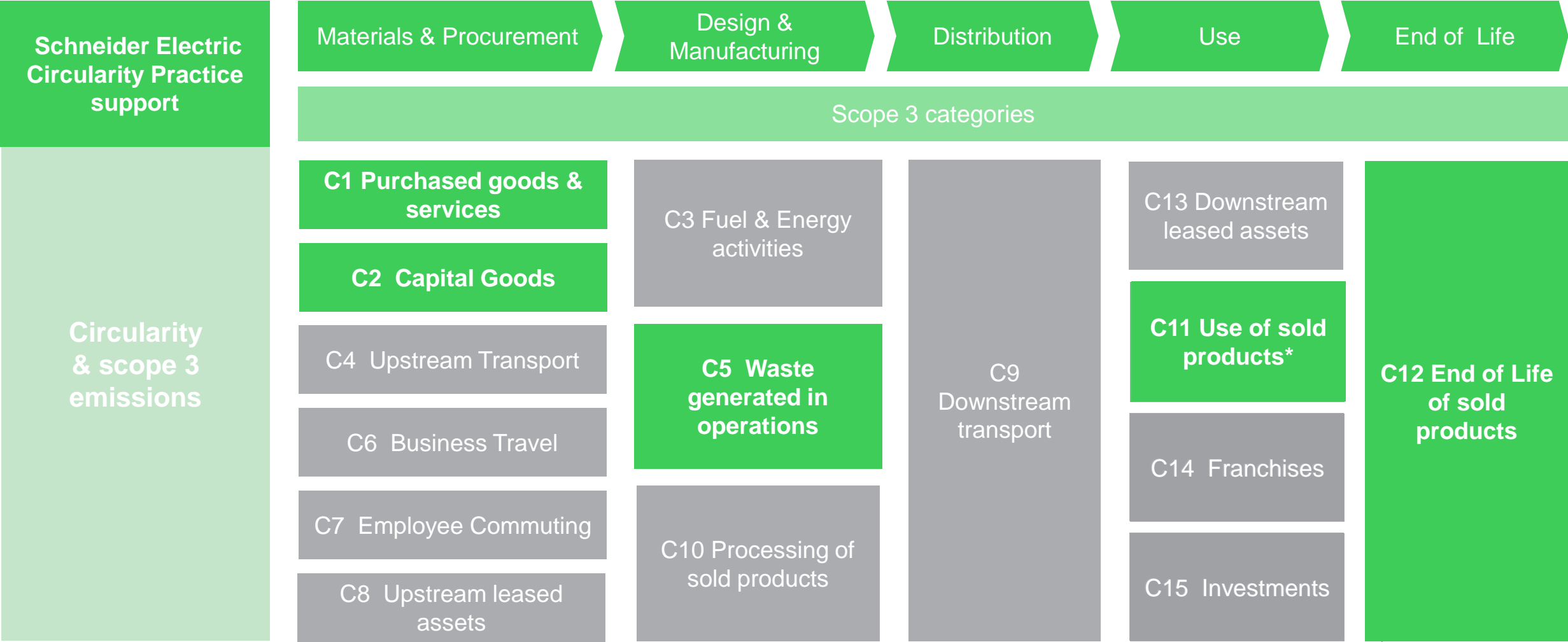


45%
PRODUCTION OF GOODS
AND MANAGEMENT OF
LAND

-  **ELIMINATE WASTE AND POLLUTION**
to reduce GHG emissions across the value chain
-  **CIRCULATE PRODUCTS AND MATERIALS**
To retain the energy embodied within them
-  **REGENERATE NATURAL SYSTEMS**
To circulate natural resources back to systems

Source: Ellen MacArthur Foundation, Schneider Electric Internal

Circularity practices help to reduce Scope 3 emissions from categories associated with materials



* Inspired on SE best practices

Schneider Electric's circularity journey

Schneider Electric Provides Energy and Automation Solutions

To enhance efficiency and sustainability

Key figures for 2022

5%

of revenues devoted to R&D

34,2 bn €

of revenues

3,5 bn €

of group net results

135 000+

employees in over 100 countries

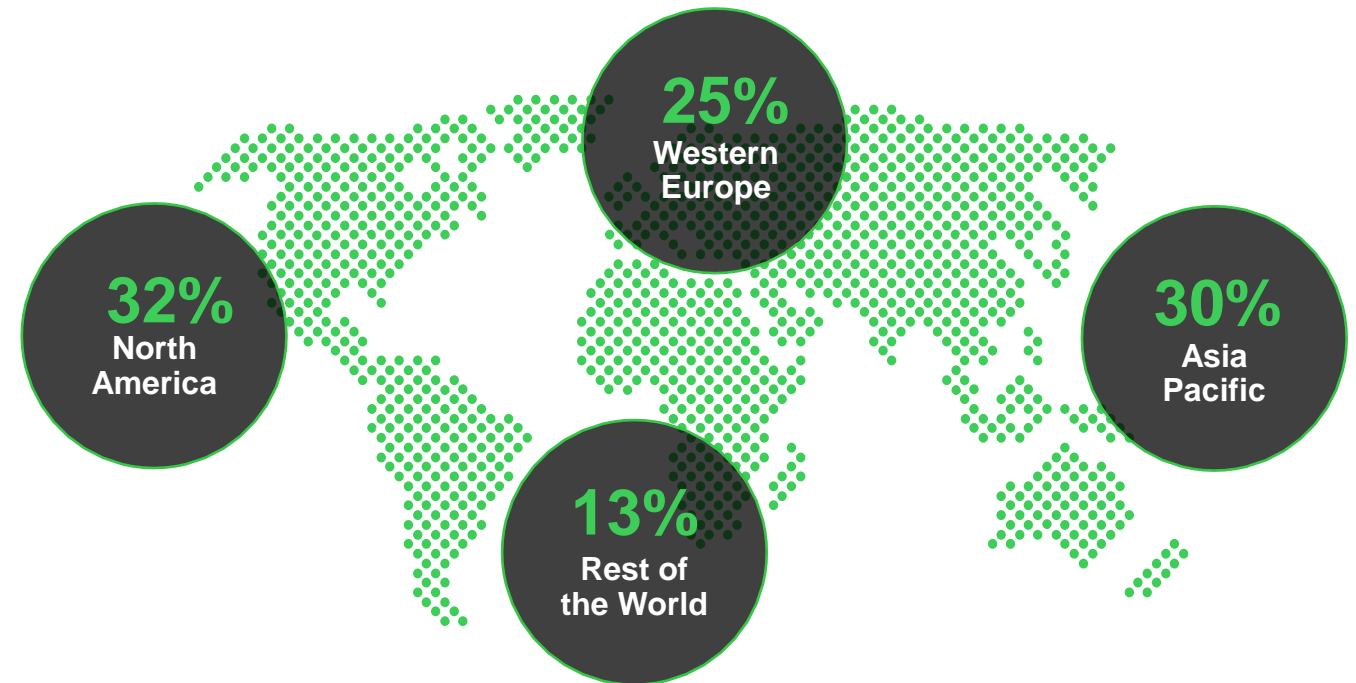
12 years



in the Corporate Knights ranking of the 100 most sustainable companies in the world

A well-balanced global presence

2022 Revenues breakdown




Life Is On



Circularity: scalable examples along Schneider Electric's value chain

Ecodesign & Circularity Profile




A white Schneider Electric circuit breaker is shown against a background of greenery. A green badge with a leaf icon and the text 'Green Premium' is overlaid on the right side of the breaker.

Recycled Materials



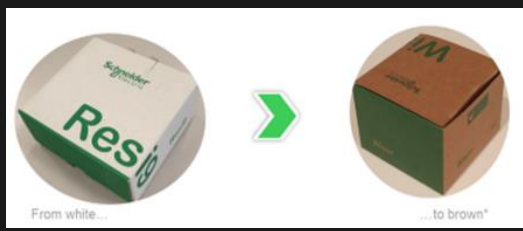
A black square circuit breaker component is shown in the foreground. The background is an underwater scene with colorful coral and fish, symbolizing the use of recycled materials.

Offer & Branding



A trade show booth for Schneider Electric is shown. A green badge with the Schneider Electric logo and the text 'Circular Certified' is overlaid on the booth.

Sustainable Packaging




A white box labeled 'Resis' is shown on the left, with a green arrow pointing to a brown cardboard box on the right. Below the white box is the text 'From white...' and below the brown box is '...to brown*'. The Schneider Electric logo is visible on the brown box.

Extending Lifetime



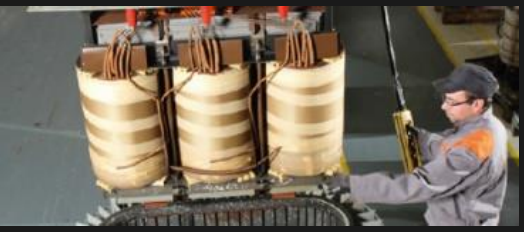
A worker wearing a white hard hat and a grey safety vest is working on an open electrical cabinet. A red fire extinguisher is visible in the foreground.

Giving a 2nd Life



A person's hands are shown holding a white circuit breaker component. The component is being held in front of a rack of other electrical components.

Handling End-of-Life



A worker wearing a grey hard hat and safety vest is working on large industrial coils. The coils are yellow and have copper wires attached.

Material Recycling



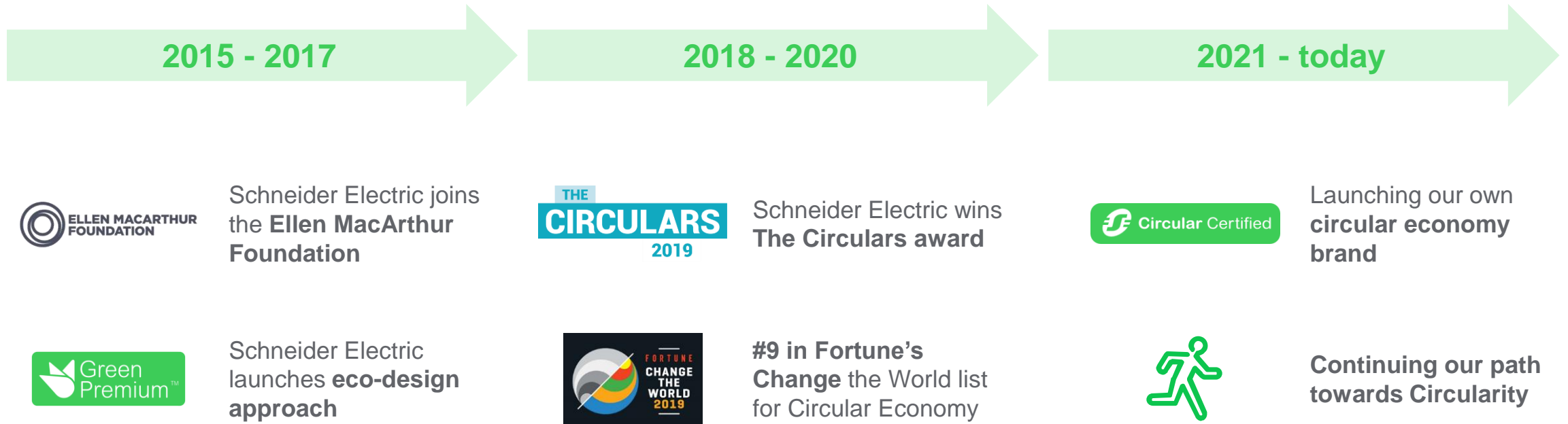
A close-up view of various electronic components, including circuit boards, capacitors, and other parts, illustrating the process of material recycling.

Schneider Electric's approach to circularity



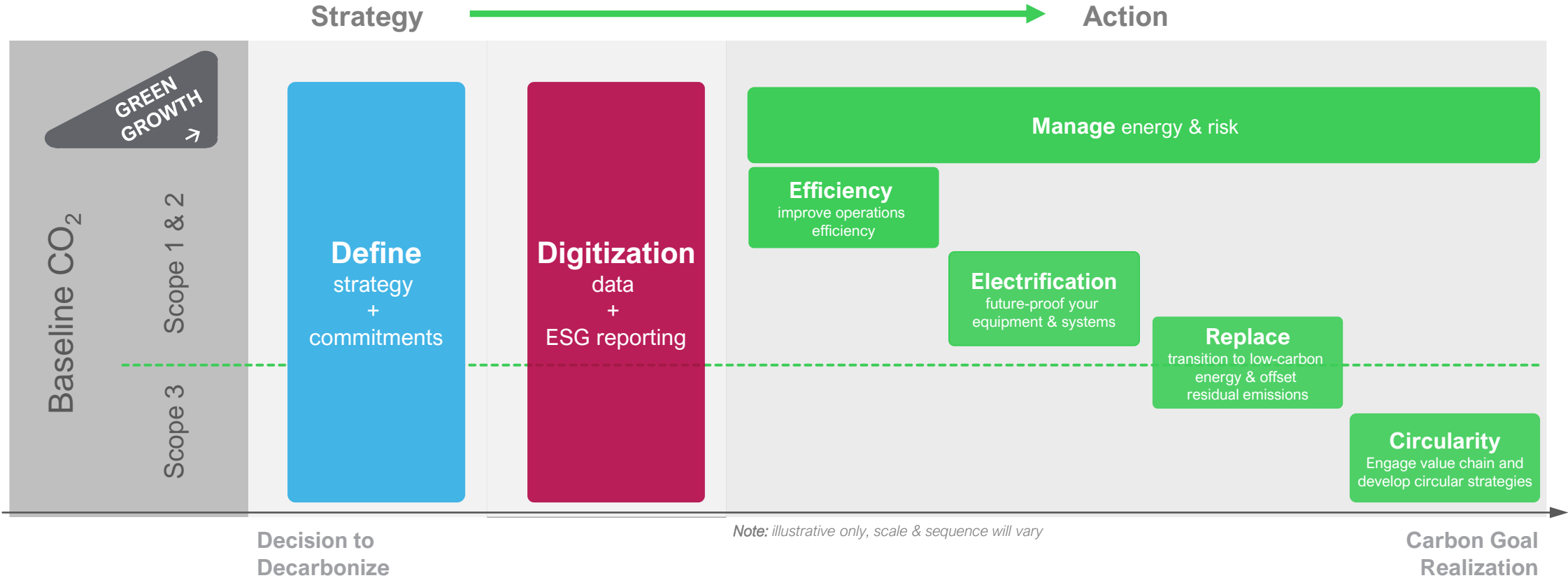
Schneider Electric's Circularity Journey: ramping up from 2015 onwards

Starting with measuring circularity KPIs on our sustainability index to global recognition



How SE can support your circularity and climate journey

How Schneider Electric supports clients to achieve climate goals



Our services support clients towards a Circularity transformation

SE's tailor-made agnostic consulting services

1. ASSESS

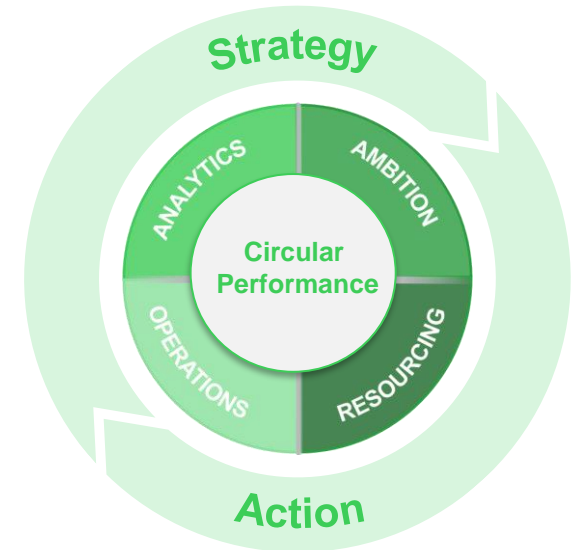
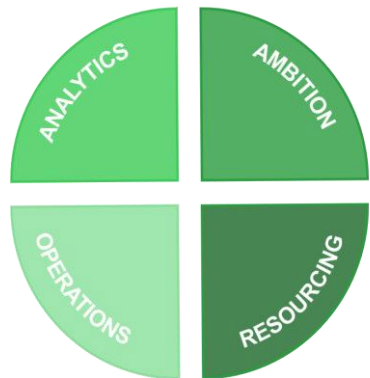
- Customized **circularity assessment** to map your priorities
- **Benchmark** against industry peers to understand the landscape
- Identification of partners for your projects, e.g., for **LCAs & EPDs**

2. DESIGN

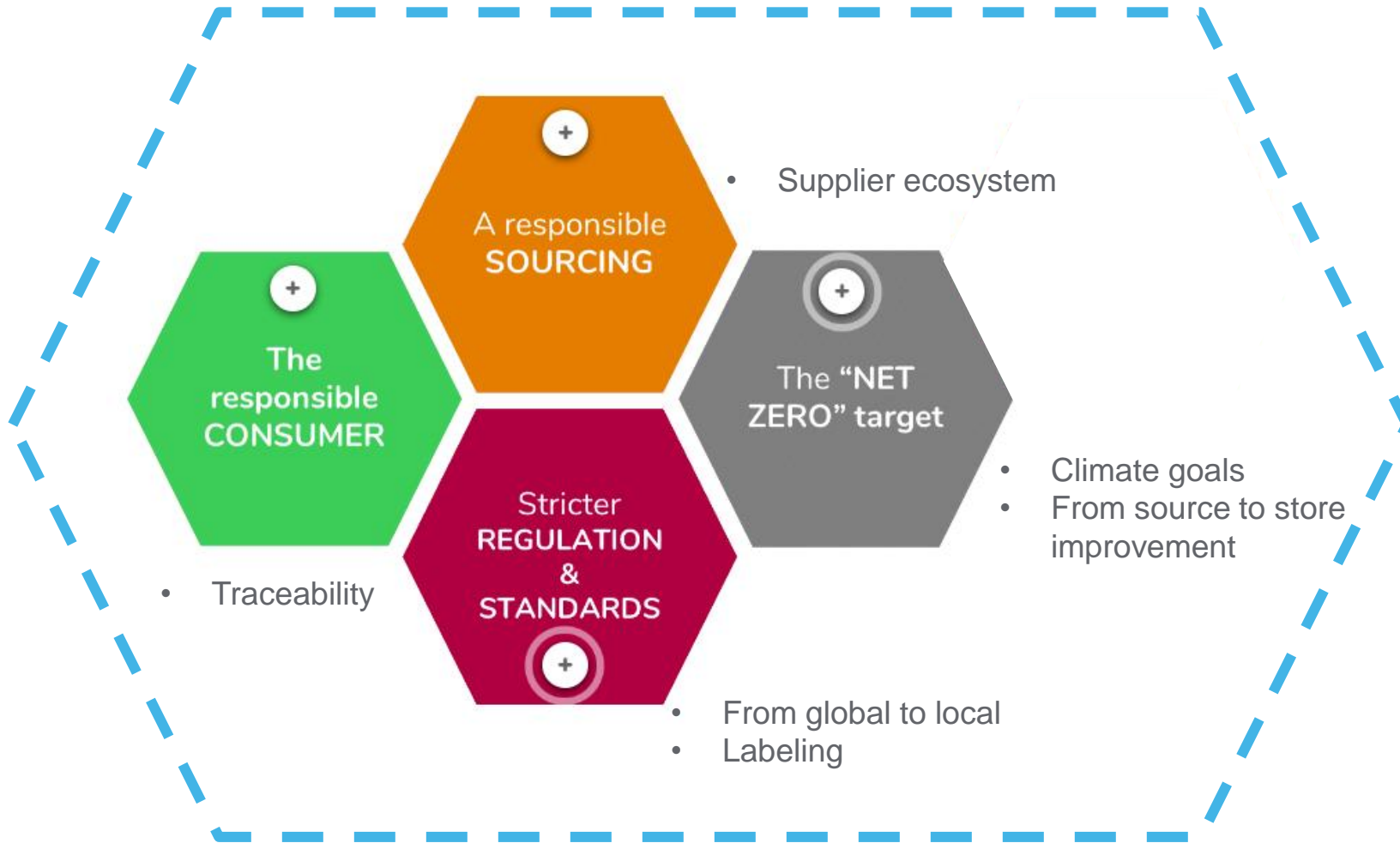
- Embedding **industrial symbiosis** principles in your industrial ecosystem
- Circularity as a lever to **reduce scopes 1&3** emissions
- End-to-end **circularity strategy** and roadmap

3. EXPAND

- Identification of **pilot projects** & feasibility studies
- Develop guidelines, playbooks & **digital tools**
- Articulate and communicate business impacts, e.g., **KPIs**, baseline, targets



Circularity as a systemic approach for sustainability solutions



Circularity

Key circularity topics for FDF:

- Packaging
- Food waste
- Waste treatment options
- Industrial symbiosis
- Decarbonization of scope 3

Circularity assessments helping to indentify risks and opportunities

Understanding the landscape is an essential first step

UK Circular Economy Policies

BloombergNEF

Dataset Circular Economy Policy Data
Units
Source BloombergNEF
[Subject to terms and conditions](#)

Country	Policy name	Level of government	Location	Policy area
United Kingdom	Single-use plastics ban (Scotland)	Province/State	Scotland	Material
United Kingdom	Scottish bottle deposit scheme	Province/State	Scotland	Deposit-return
United Kingdom	Scottish bottle deposit scheme	Province/State	Scotland	Deposit-return
United Kingdom	UK Plastics Pact	National/Federal		Recycling
United Kingdom	Resources and Waste Strategy	National/Federal		Recycling
United Kingdom	Resources and Waste Strategy	National/Federal		Recycling
United Kingdom	Resources and Waste Strategy	National/Federal		Recycling
United Kingdom	Resources and Waste Strategy	National/Federal		Recycling
United Kingdom	Resources and Waste Strategy	National/Federal		Recycling
United Kingdom	Resources and Waste Strategy	National/Federal		Recycling
United Kingdom	Packaging Waste Recovery Note	National/Federal		Extended producer responsibility
United Kingdom	Packaging Waste Recovery Note	National/Federal		Extended producer responsibility
United Kingdom	Packaging Waste Recovery Note	National/Federal		Extended producer responsibility
United Kingdom	Packaging Waste Recovery Note	National/Federal		Extended producer responsibility
United Kingdom	Bottle Deposit Return Scheme	National/Federal		Recycling
United Kingdom	Bottle Deposit Return Scheme	National/Federal		Recycling



UK's Plastic Packaging Tax rakes in £276m for Treasury during first year

Associated costs & supply risks

Circularity actions to reduce risks:

- Circular Sourcing + Supplier engagement
- Packaging design
- Recycling initiatives
- Close-loop systems
- Circular Business models
- Industrial symbiosis partnerships



Reassessing Packaging Strategy to meet climate targets

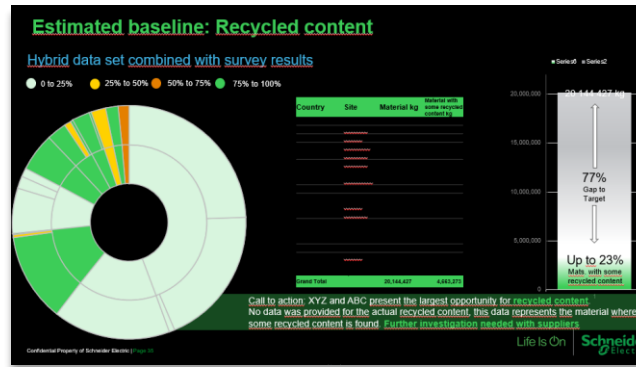
Purpose

- Analyze and establish a qualitative and quantitative **baseline for packaging** flows for tier-1 sites
- Identification and **assessment** of top **suppliers**
- **Improvement of packaging circularity** to meet packaging targets for recycled / recyclable / bio-degradable; removal of single-use plastic content

Path

- **Benchmarking** of circularity best practices for packaging in HVAC industry and peers
- Collection & **analysis of packaging data** across sources: sites, ERP, suppliers
- **Schneider Electric best practices** for packaging sustainability and circularity
- **Regulation landscape** assessment

Solution



- **Prioritization of strategic circularity actions** for packaging within the value chain, including pilot recommendations and supplier engagement
- Recommendations for better packaging **data control** and management
- Recommendations for **definitions, KPIs, baseline** and **governance**

Key takeaways and suggested next steps

1) Assess your circularity priorities

- ✓ **Packaging, Food waste, waste valorization**



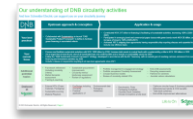
- ✓ Understand your **drivers** (4Cs)

- ✓ **Benchmark** best practices



2) Create a strategy

- ✓ **Baseline** your “as-is” initiatives and practices



- ✓ Define where you want to go - corporate and site-level specific **goals and resources**

- ✓ Monitor and **measure** – define appropriate KPIs and identify key stakeholders



3) Start your journey

- ✓ **Engage** with your supply chain – awareness to support suppliers to act



- ✓ Start somewhere, be an early adopter - identify priority **pilots** according to your main drivers

- ✓ **Partner** with decarbonization leaders to accelerate the process, adjust and adapt



Q&A: Get in touch with our experts



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Life Is On



Schneider
Electric