



EaPGREEN
Partnership for Environment and Growth



TOGETHER
for a sustainable future

1966 - 2016

UNEP's Eco-innovation approach

UNIDO/UNEP Responsible Production Seminar

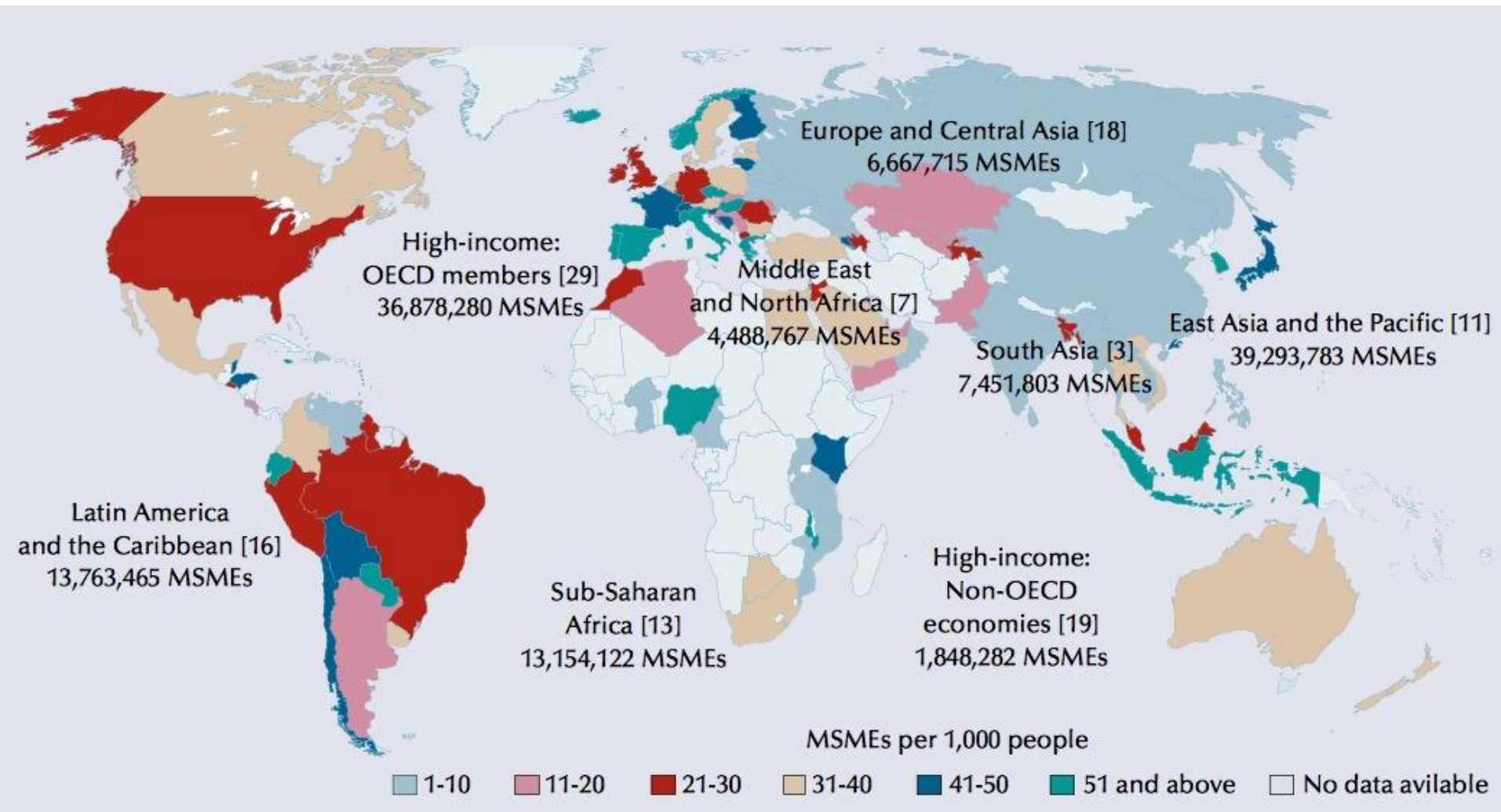
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UNEP, Head of the Responsible Industry and Value Chain Unit

July 14th, 2016

Minsk, Belarus

**Why is this important for
business, and what is its role
for SMEs?**

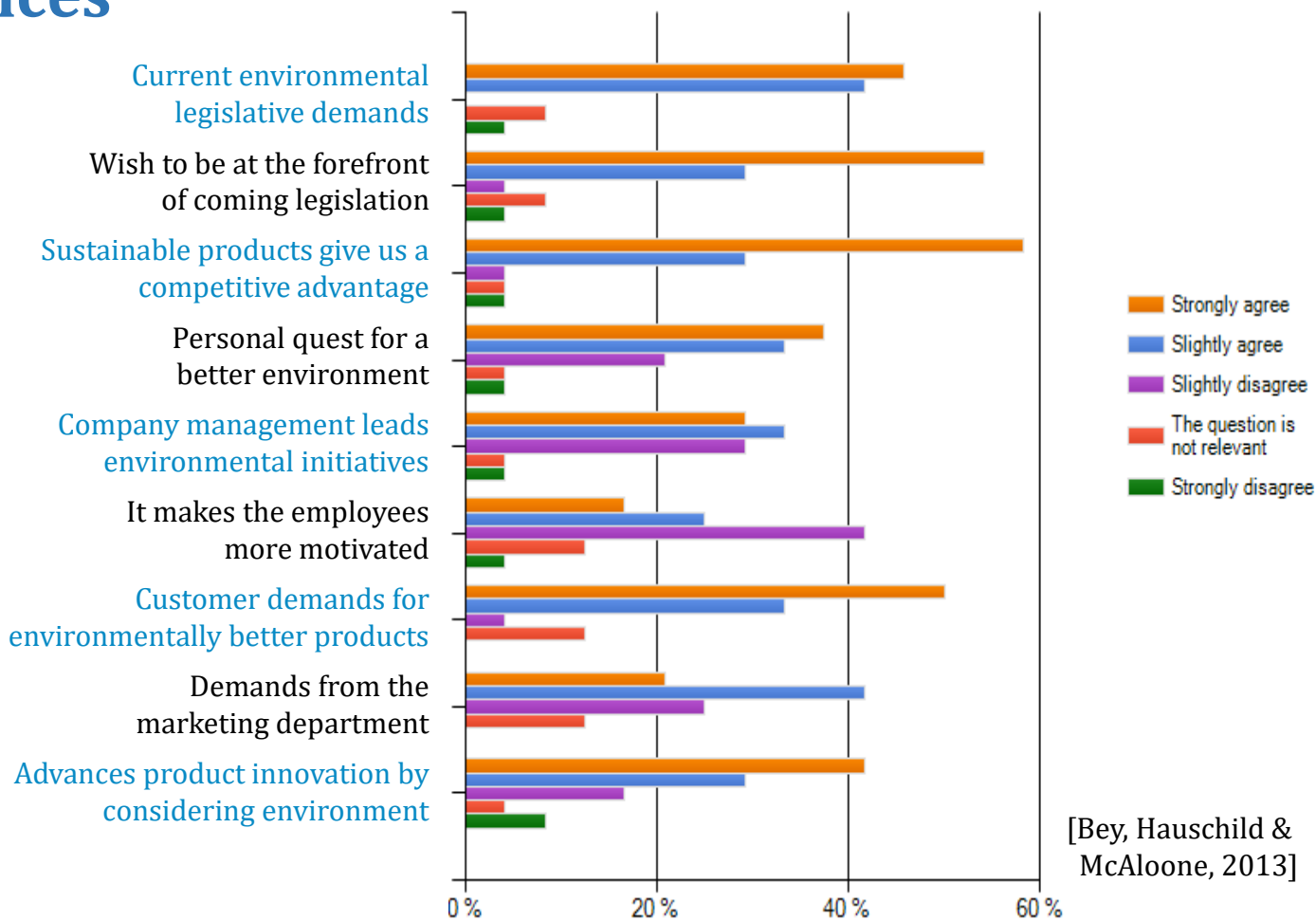


- Resources for production stressed at the source are creating risk factors of **price volatility** and **material availability**
- Large companies are adopting a holistic supply chain approach
- Sustainability criteria are major factors to ensure continuity and quality of supply

e.g. PUMA estimated the economic risk from environmental impact as €137 million from external suppliers, resulting in them integrating a sustainability strategy into the entire supply chain.



New markets are emerging for sustainable products and services





1) Sustainability: triple bottom line, mainstreaming of sustainability in business decision-making



2) Business models based on the principle of circular economy (closing the loop), sharing economy and collaborative consumption patterns



3) Focus on radical innovation through partnerships and collaboration



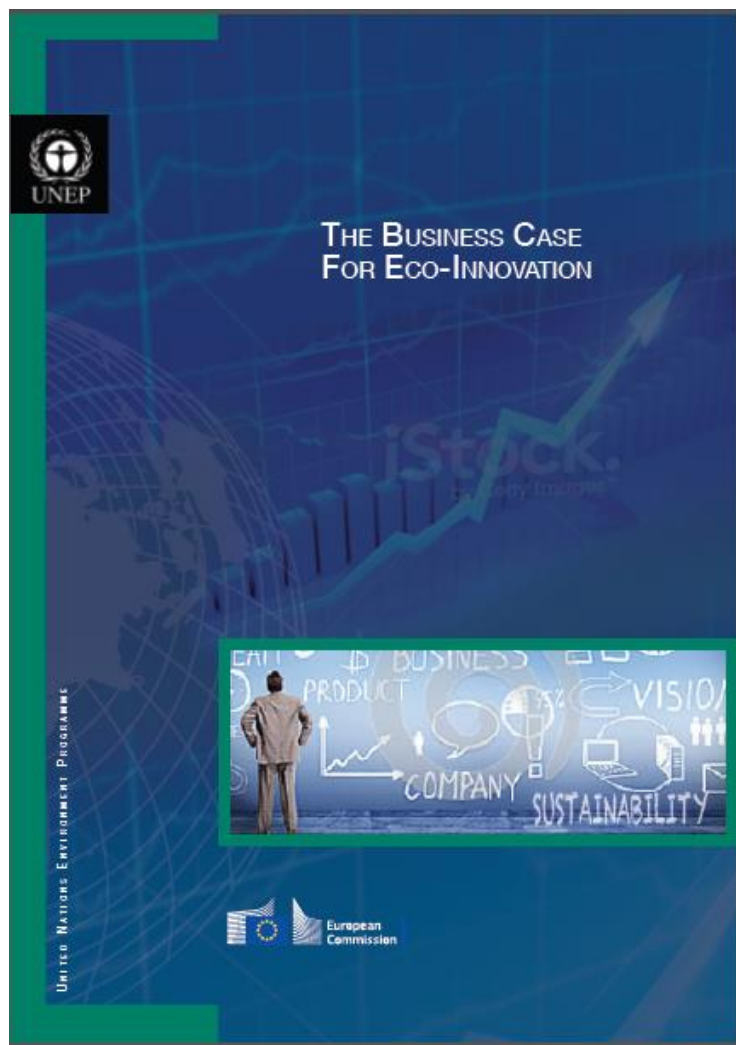
4) Democratization of production (maker movement and 3d printing)



5) Social/fragile innovation and inclusive economy: government engaging private sector in addressing societal issues and reaching out to 'the bottom of the pyramid'



Frugal innovation



- To make convincing case for eco-innovation
- Overview of trends and indicators
- Examines the examples of 7 different companies from large to SMEs and start-ups
- Clear benefits for eco-innovation: **av. annual growth around 15% in flat market**
- Primary research: interviews
- Target audience: businesses and service providers

Available for download:

www.unep.org/BCforEI

Eco-innovation approach

- Eco-innovation is a **strategic business approach** to promote sustainable practices along company's value chain
- Eco-innovation operates at the level of **a company strategy** aiming to embed sustainability into the DNA of a company.
- Promotes **systemic innovation** based on **holistic life-cycle approach** throughout company's operations - products (goods / services), processes, market approach and organizational structure
- It aims at **influencing and involving stakeholders along the entire value chain**
- Resulting in enhancing a company's performance: **positive sustainability impacts** and **increased competitiveness**

Value chain collaboration in Eco-innovation

- A company cannot solve its own problems, need to work in partnership to create a shared value along the value chain



Enabling and conducive environment

- Eco-innovation is implemented across the value chain
 - The company identifies other stakeholders and collaborate to have a more sustainable value chain
- A conducive environment is needed:
 - To connect with new partners, potential costumers and value chain
 - Support and incentive to have eco-innovation integrated into innovation policies. Access to innovation funds
 - Support from Academia and R&D centers

Enabling policy framework

- Market is not always conducive to eco-innovation adoption and diffusion due to a number of barriers
 - ⇒ **Role of policy to remove barriers and create incentives and create context condition**
- ✓ National and local level:
 - ✓ Focus creating enabling conditions at both production and consumption side
- ✓ Global level:
 - ✓ Focus on creating level playing field and addressing asymmetries between the countries

Barrier

Policy objective

Policy mix

Insufficient incentives

Reward innovative companies invest into R&D

Regulatory: ban of certain substances and set standards
Voluntary: grants and subsidies
Information: eco-labelling
Innovation platforms



Interest of policy makers in Eco-innovation

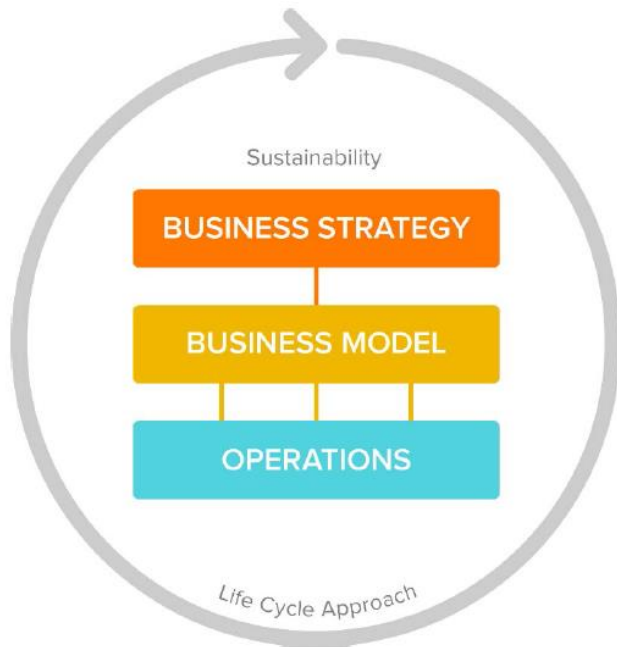
- Providing assistance in scaling up sustainable solutions
- Helping industries stay competitive and contribute to overall market competitiveness of the economy
- Contribute to economic development of the country
- Contribute to the achievement of sustainability and development goals
- Overcome resource constraints and environmental degradation
- Create new jobs

How is Eco-Innovation Implemented?



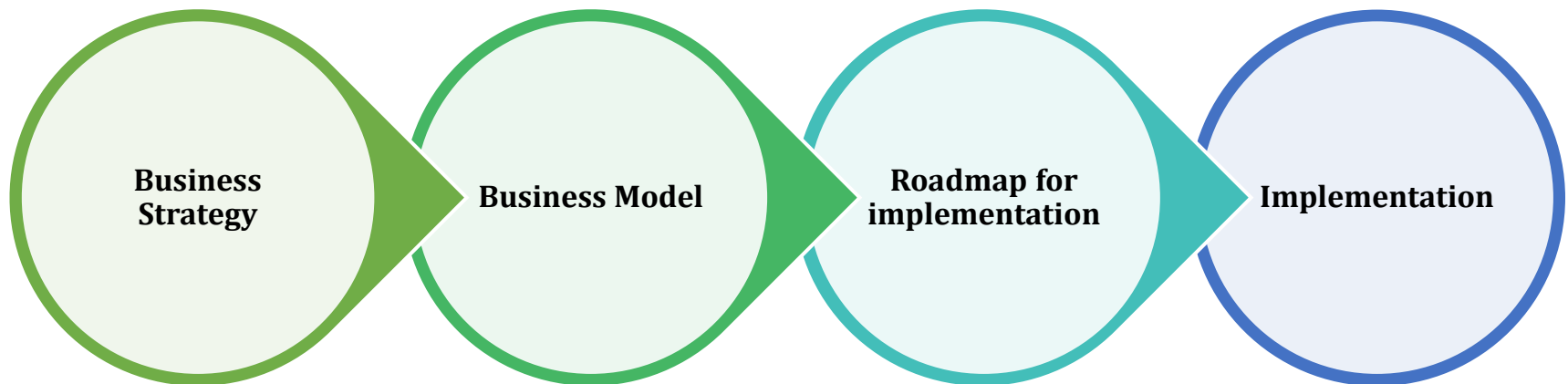
Eco-innovation Manual

A step-by-step guidance to service providers and companies on how to implement eco-innovation



Sustainability as a inspiration for innovation

Eco-innovation – Overview of the implementation process



Implementation process in detail

PREPARE

Identify the sectors, markets and companies that you will target and demonstrate to them how your eco-innovation services will help to address the key sustainability challenges and opportunities they face.

SET STRATEGY

Engage with the COMPANY to build a better understanding of how it operates today, refine your understanding of the sustainability challenges and opportunities, and formulate a new business strategy.

SET BUSINESS MODEL

Generate new business model options and operational innovation ideas that are aligned with the business strategy and the capabilities of the COMPANY, then select the best option to take forward.

BUILD ROADMAP

Define a roadmap of operational projects towards implementation of the selected strategy and business model and define the scope and requirements of the first project.

IMPLEMENT

Execute the first project with regular reviews to ensure successful delivery and flexibility.

REVIEW

Reflect on the performance on the first project, capture lessons learnt, and revise the strategy and business model as necessary in readiness for the next iteration of implementation activities.

A Identify potential companies

A Build understanding of market

A Secure commitment from COMPANY

T Eco Innovation Target Identification

T PESTEL

T Life Cycle Stakeholders

D Target market selected

A Conduct Preliminary Assessment

A Perform SWOT analysis

A Set new business strategy

T Walk through Audit

T Business Model Canvas

T Life Cycle Thinking

T Value Chain Pressures

A Conduct In-depth Assessment

A Generate ideas

A Evaluate and select

T In-depth Assessment

T Life Cycle Thinking

T Business Model Canvas

T 9 Windows on the World

A Build Roadmap

A Scope first project

A Detail and prioritize technical requirements

T Roadmap

T Requirements Specification

D Strategic eco-innovation roadmap of project ideas

A Create project plan

A Implement project

T Risk Register

T 9 Windows on the World

D Project plan detailing key activities, work schedule and risk mitigation actions for the project

D Project plan presented to Senior Management Team and approved

A Review

A Identify next steps

D Completed project review workshop

D Report summarizing the outcomes of the project review workshop

D Reviewed your own performance and learning and identified ways to improve



- **Vietnam:** Joint Policy Mainstreaming & Pilot SME Application (Agri-food)
- **Sri Lanka:** Pilot SME Application (Agri-food)
- **Malaysia:** Pilot SME Application (Chemicals)
- **South Africa:** Pilot SME Application (Metals)
- **Uganda:** Pilot SME Application (Agri-food)
- **Kenya:** Policy Mainstreaming
- **Egypt:** Pilot SME Application (Chemicals)
- **Colombia:** Joint policy mainstreaming & pilot SMEs Application (Chemicals and Metals)
- **Peru:** Joint policy mainstreaming & pilot SMEs application (Chemicals and Metals)

Eco-innovation at the core of their business strategy considering entire value chain

Open innovation model - Work across the value chain:

Philips (maker of washing machines) BASF (chemicals) and retailers for refill through dispensers = strategic positioning

• **Innovations in all dimensions:**

- Product: Elimination of harmful chemicals and 100% biodegradable
- Packaging: 100% use of bio-based plastics, 100% recyclable
- Process: manufacturing & distribution channels
- Organizational structure – long term innovation manager



Business Benefits

Added value – a sustainable product reduced risk of harmful chemicals that meets client needs

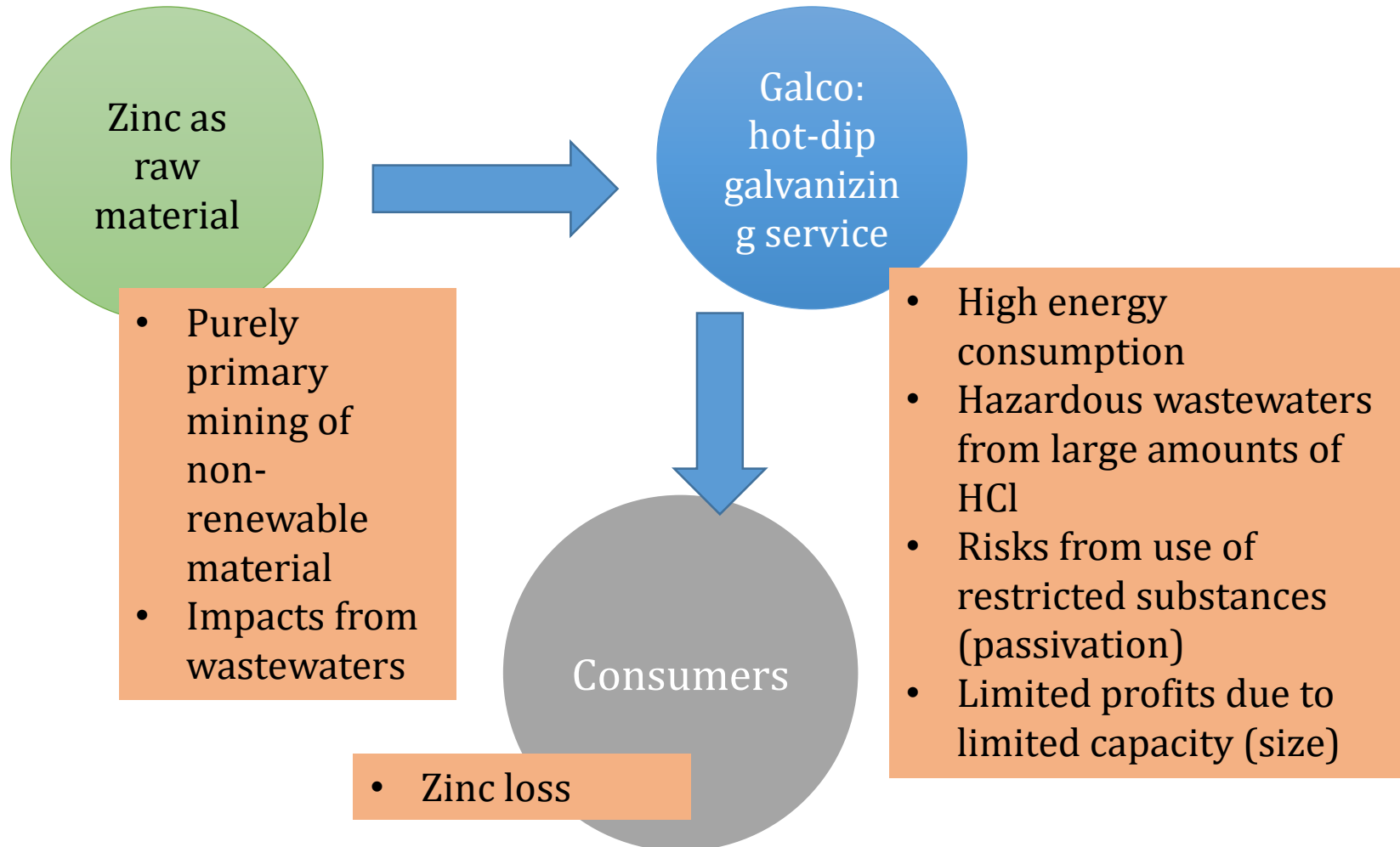
- Average annual revenue **growth of 10-20 %** in a flat market
- **Annual sales exceeding \$200 Million**
- Expansion to large retail stores (**market access**)
- Innovations through open innovation enables them **access to funding and resources**
- Benefited from **Sustainable Public Procurement (city of ghent)** Ecover will be used in **340 public buildings** in the city of Ghent by the end of 2014

Case study

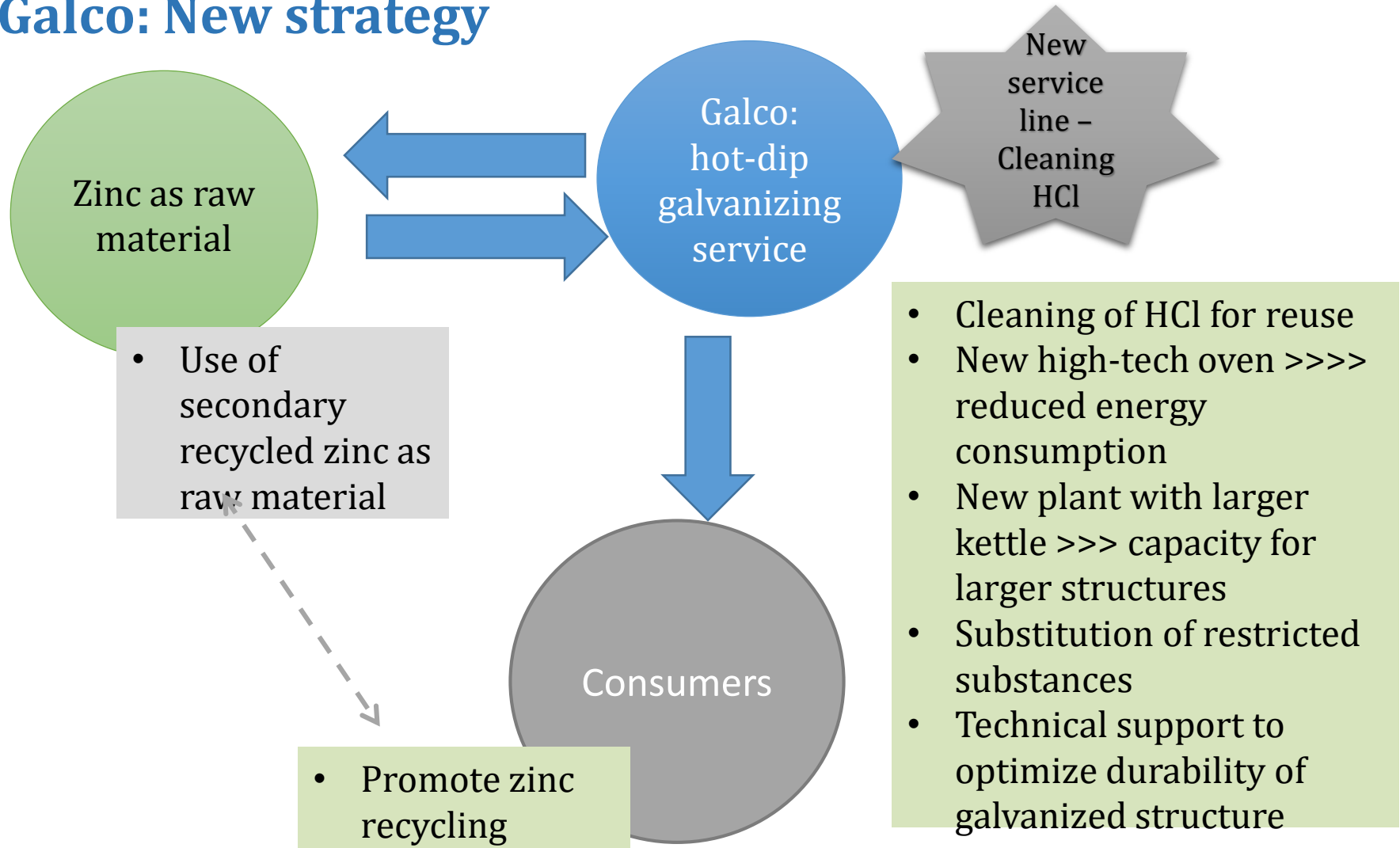
Galco S.A.S, Colombia



Galco: Original strategy



Galco: New strategy



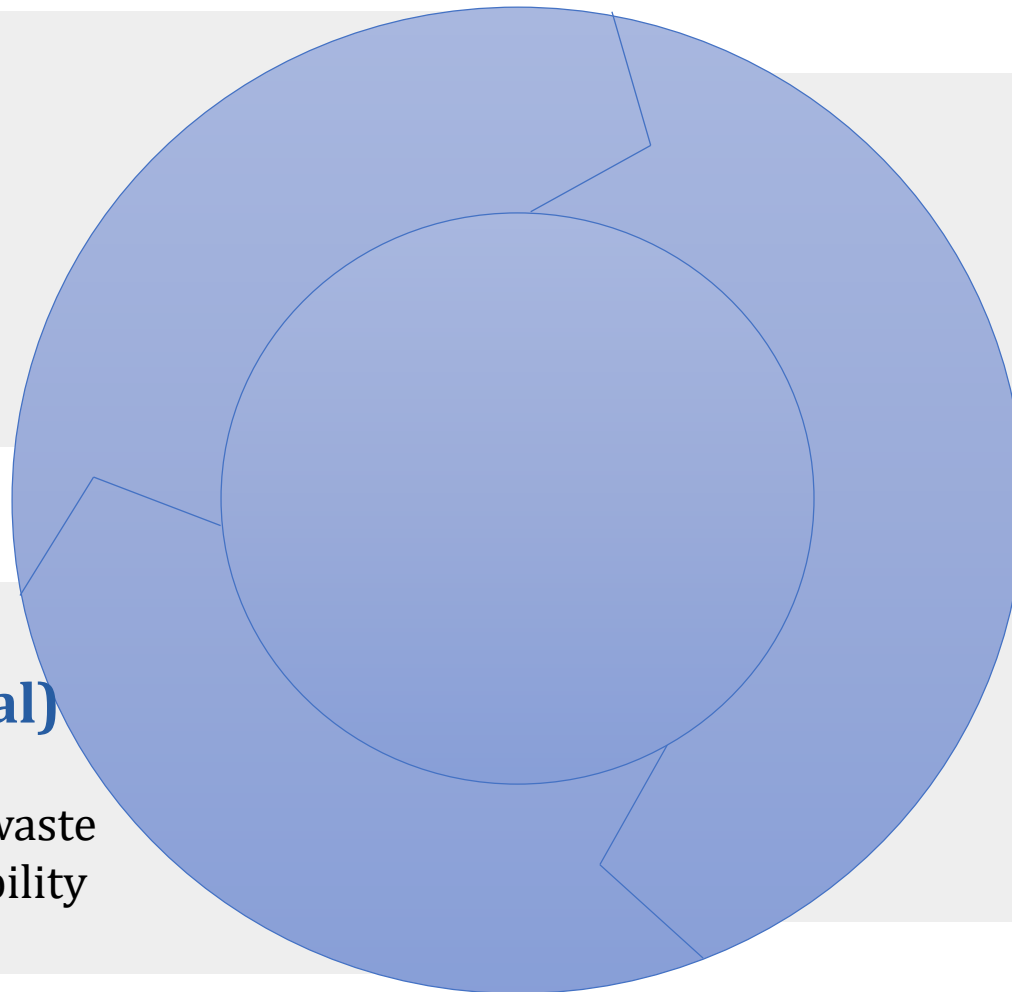
Galco: Key impacts from Eco-innovation

Upstream (raw materials)

Resource efficiency
from recycling zinc

Downstream (use and disposal)

Reduced end-of-life waste
from improved durability



Production

Reduced hazardous
substances at Galco
and other SMEs

Reduced emissions

Increased profits
from resource
efficiency and
expansion to new
markets

Case study

Accel Graphic Systems, Malaysia



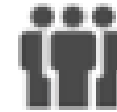
Accel: Business Model

Value Proposition



High quality heat and cold set inks for magazine and newspaper production with competitive price and aftersales technical support

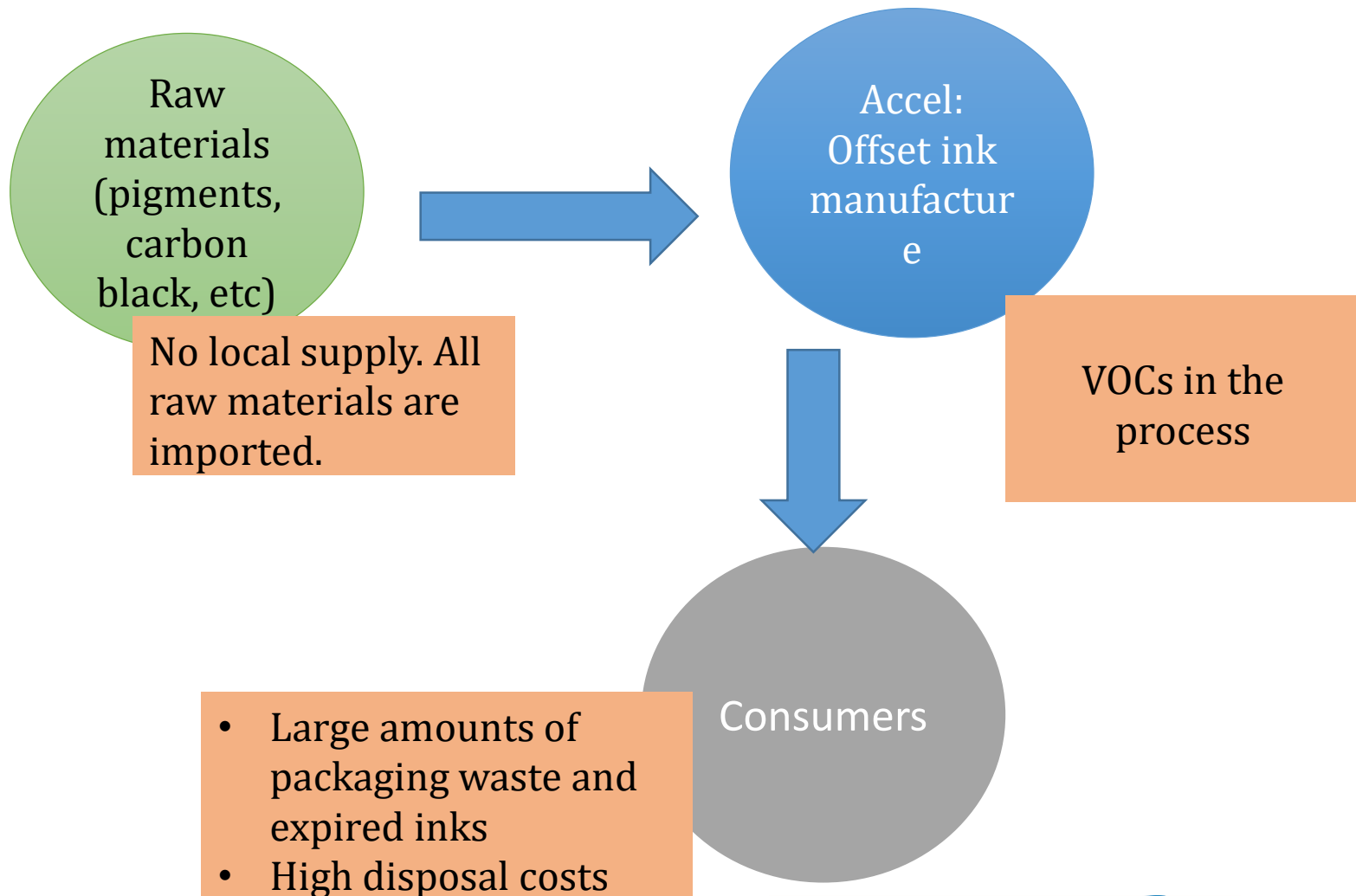
Customer Segments



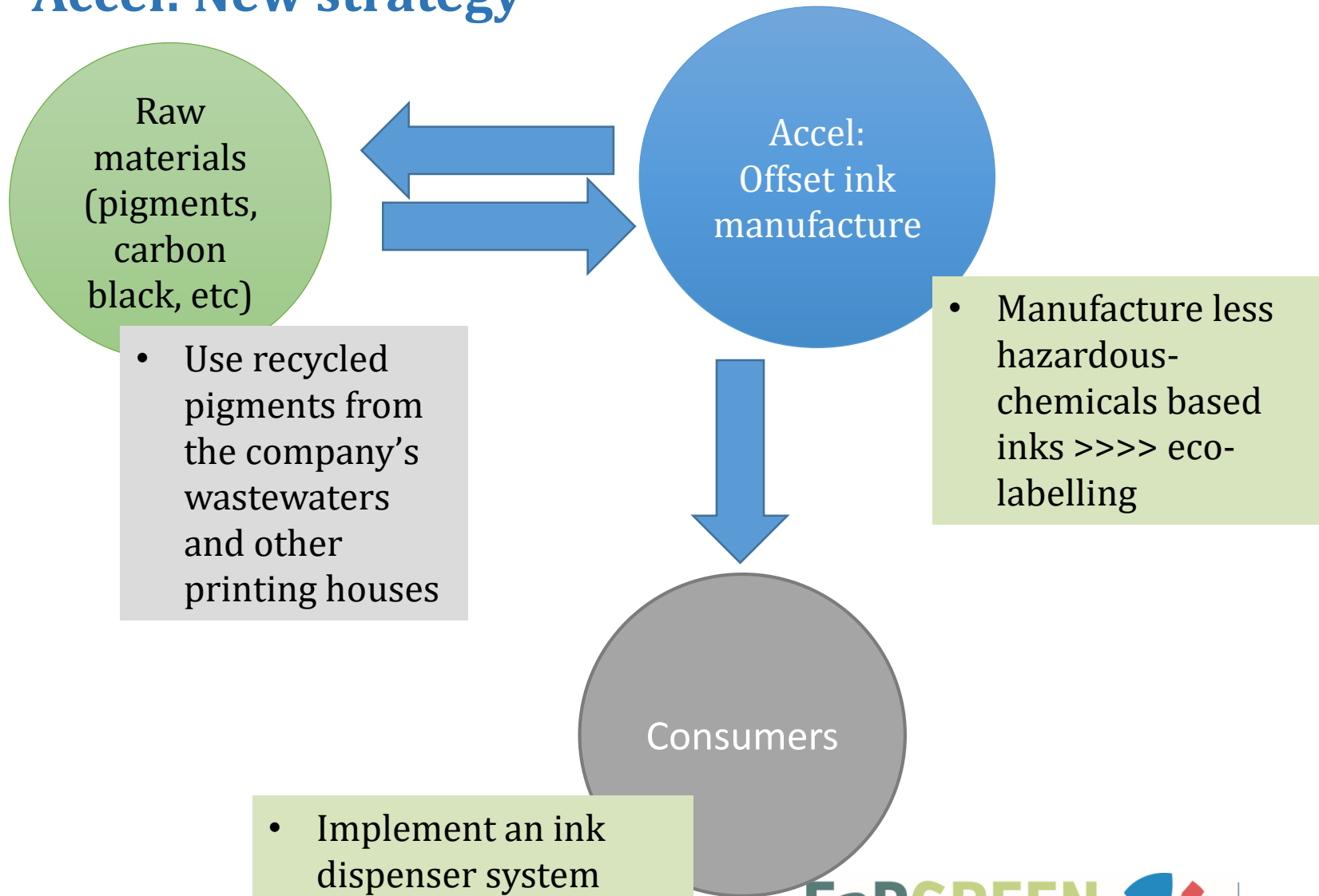
Newspaper printers and publishers

Magazine printers and publishers

Accel: Original strategy



Accel: New strategy



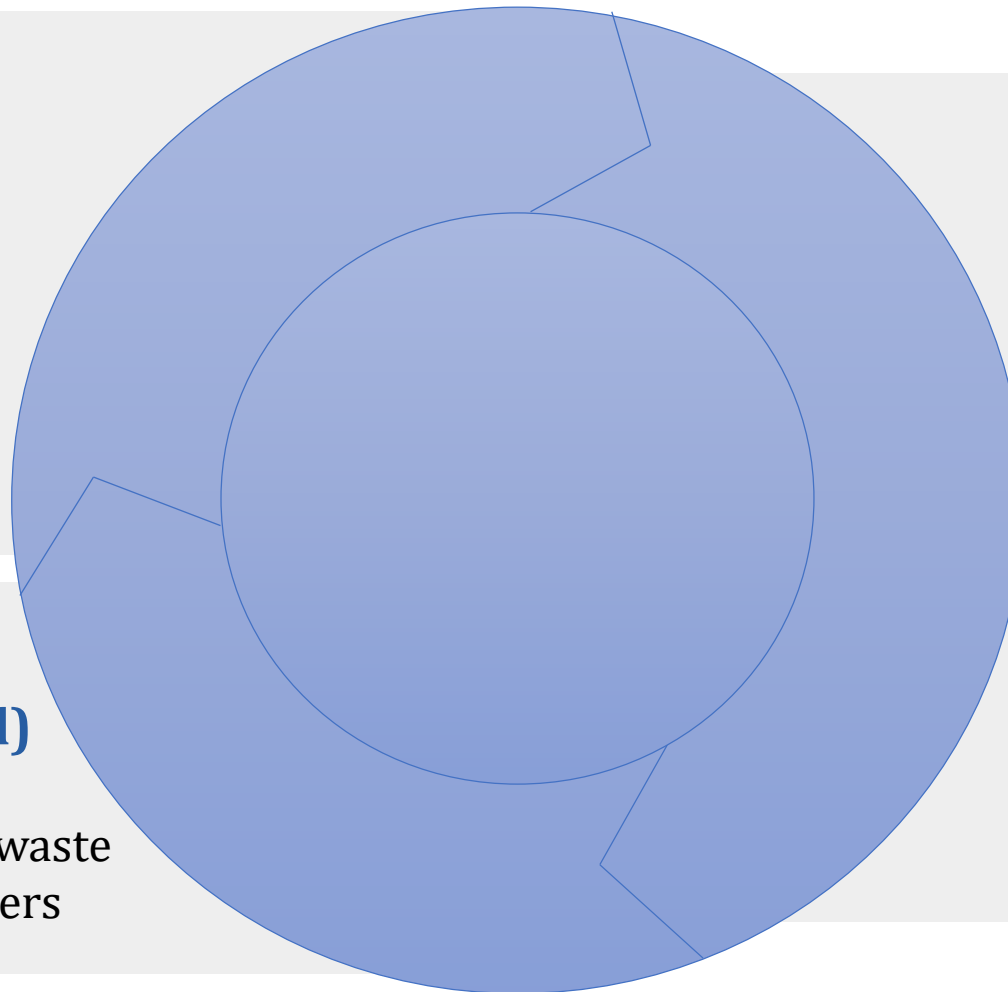
Accel: Key impacts from Eco-innovation

Upstream (raw materials)

Resource efficiency and engagement of local providers by recycling black pigments

Downstream (use and disposal)

Reduced end-of-life waste by using ink dispensers



Production

Reduced hazardous substances and VOCs

Increased profits and expansion to new markets with a green product

Thank you