

B/S/H/

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SmartGrow as an example
of eco-friendly products
across the value stream

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Agenda

- ▶ 1. What is Bosch SmartGrow

- ▶ 2. Why is Sustainability a CORE value proposition

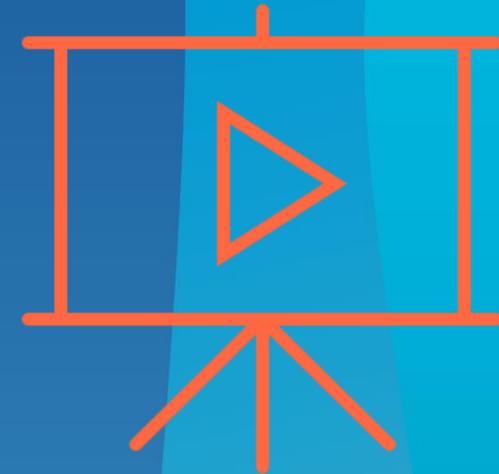
- 3. Our approach, journey and achievements

- 4. Two cases: Packaging and CE

- 5. Challenges and Outlook



WHAT IS
BOSCH SMARTGROW LIFE



Why is Sustainability a core value proposition for Bosch SmartGrow?

Target Consumer DEMANDS: "If I don't perceive it to be sustainable, I will not buy!"

CONSUMER Carla Creative



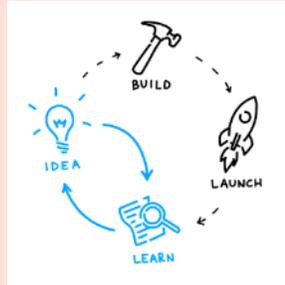
Agile, Lean Startup TEAM



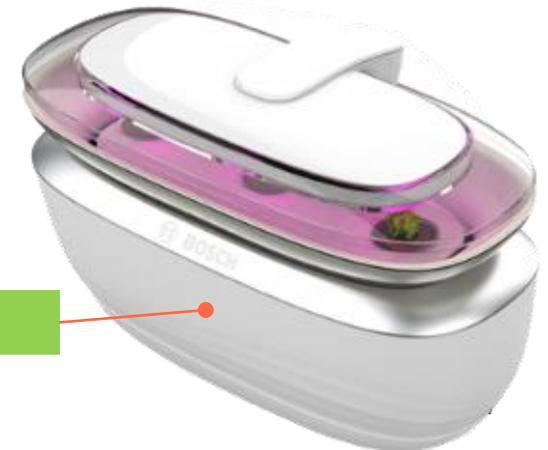
Solution



- Food = Joy
- Eat healthy = Fresh
- Home = who I am = my Sanctuary
- Durable, easy to use and maintain
- Responsible (Social and Planet)



- Design Sprints
- Consumer interviews
- UX tests



Consumer perception: Material is most important

Qn: Which material meets all consumer and technical requirements for a smart garden?

1) Sustainable 2) Durable, easy to maintain 3) Design – timeless 4) Hold water 24 h / day

slido

A) Wood



B) Bioplastic



C) Recycled plastic (ABS/ASA)



Recycled plastic meets the requirements and is the sustainable way forward

1. Reduces Pollution Across Ecosystems
2. Needs Less Energy & Helps Conserve Natural Resources
3. Saves Fast-depleting Land-fill Space
4. Eases the Demand on Fossil Fuel Consumption
5. Promotes a Sustainable Lifestyle

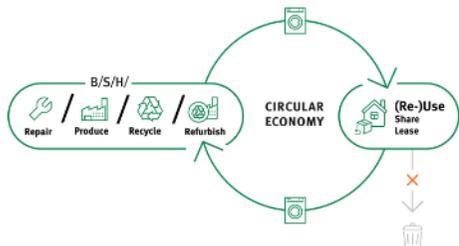
Recyclability

Durability

Easy to maintain

Dishwasher-safe

C) Recycled plastic (ABS/ASA)



Bosch SmartGrow Life

Design your own home garden, one SmartGrow at a time



No green thumb required



- **Variety**

50+ herbs, salads, edible flowers, fruits, microgreens

- **Natural**

Healthy, vitamin-packed and fresh all year round, no GMO, no pesticides

*Even in winter and
And your holiday*

- **Auto-optimized**

Patented, intelligent technology for the right lighting and irrigation when needed

- **Sustainable** *Across the value chain*

Made in Europe, highly efficient and durable, made of 100% recycled white plastic

- **Design your way**

Modular configurations for the look and experience you want

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SmartGrow Life - Comprehensive sustainable approach from cradle to cradle

From listening to the consumer to making it happen in < 2 years with our strategic suppliers



Zero waste approach



100% recycled
Sourced & produced in EU
Closed loop

Recycled & Recyclable



High Efficiency & Durability



Circular Economy

Packaging

- 100% free of EPS / Styrofoam
- 100% recyclable
- 80% recycled paper
- Innovative cut-out design (no stuffing material)
- Upcycling (2nd Life)

Device

- Made in Europe
- 100% recycled white plastic
- 66,3% recycled content
- 87.5% recyclability rate

Plant Consumable

- 100% recycled plastic frame
- Rockwool from basalt rock

Efficient and durable technology

- 10 year lifetime magnetic coupling pump-motor system

- 1) Cradle-to-cradle LCA study with LCS GmbH, reference: supermarket basil
- 2) DE as a pilot market
- 3) Social organization as partners for consumable and closed loop

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SmartGrow Life Sustainable Packaging

No EPS, recycled and recyclable materials, 2nd life

Recycled cardboard
Packaging is also the transport box

Protective plastic
biodegradable/compostable

Modularity
for optional accessories

Second usage
Inlay for accessories holder

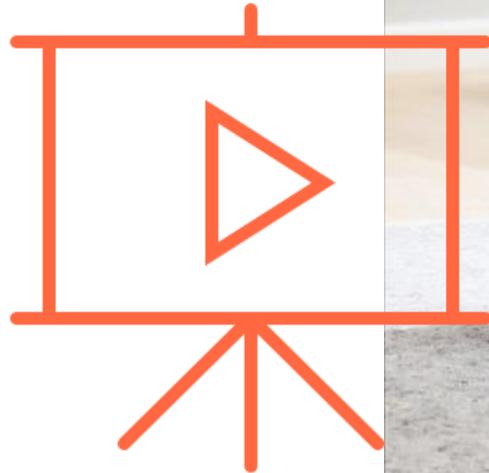
Second usage
for e.g. animal farm



SmartGrow Life Sustainable Packaging

No EPS, recycled and recyclable materials, 2nd life

BSH Partner:





SmartGrow Life - Comprehensive sustainable approach from cradle to cradle



Zero waste approach



100% recycled
Sourced & produced in EU
Closed loop

Recycled & Recyclable



High Efficiency & Durability



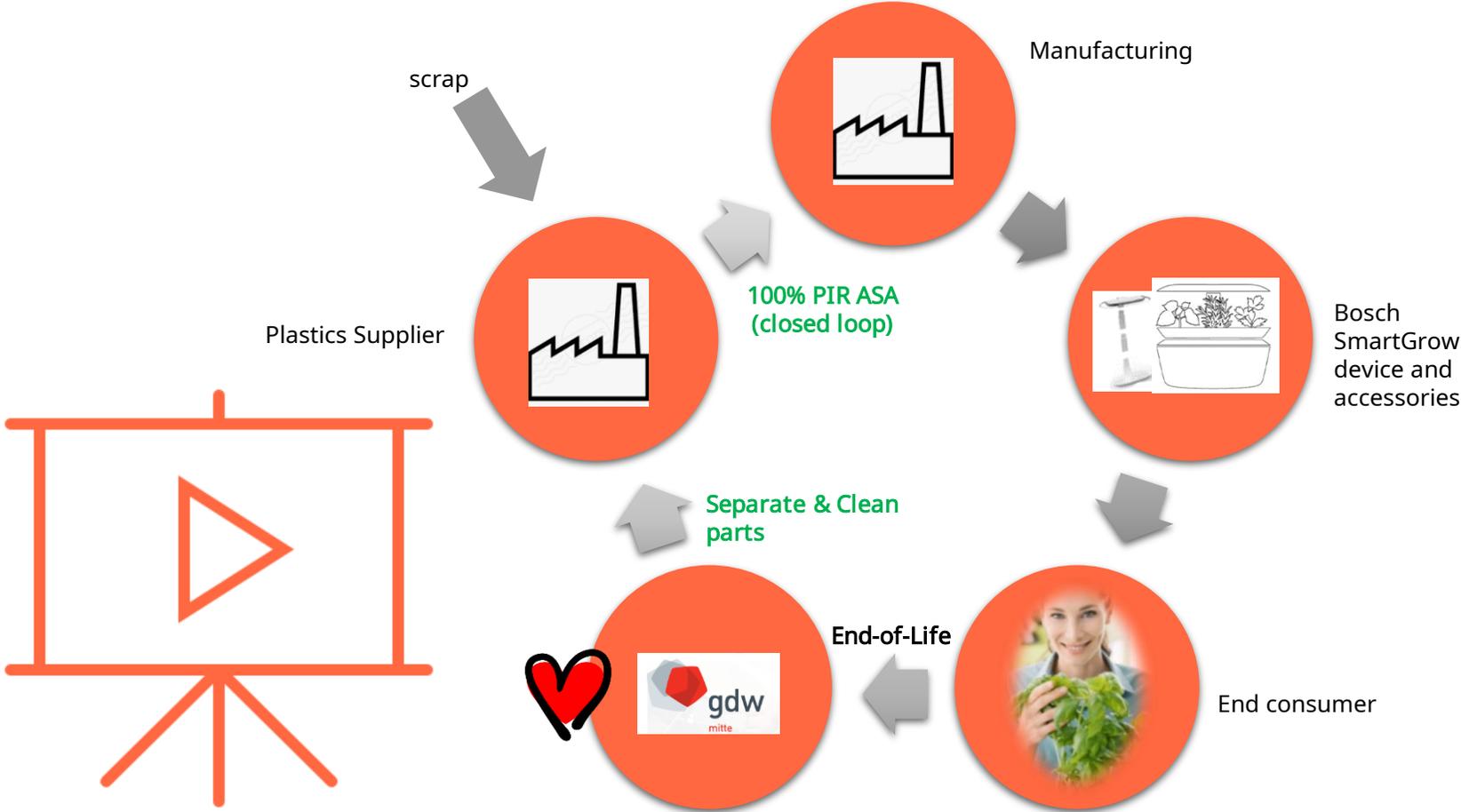
Circular Economy



Social organization as partners for consumables and closed loop

SmartGrow Life: Circular Economy with closed loop (DE pilot market)

Old SmartGrows shall be collected and re-processed to make new SmartGrows



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Recycled materials – challenges as the pioneer

Balancing Consumer expectation and acceptance – a journey and collaboration together

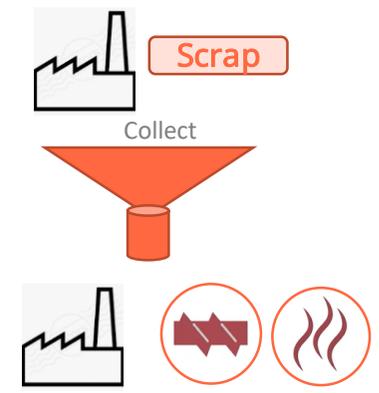
Quality and productivity



Customer expectation



Supply and price

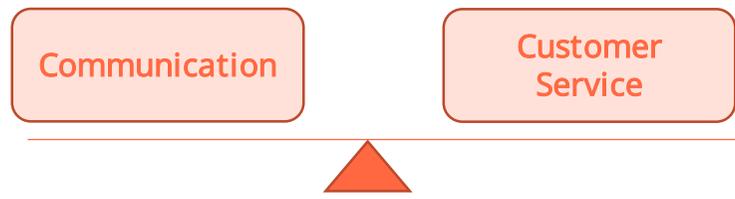


Root causes of impurities:

- Scrap source
- Tool and line cleaning
- Pigmentation in each granule
- ...

Expects

- Visible parts → virgin material
- Hidden parts – tolerant



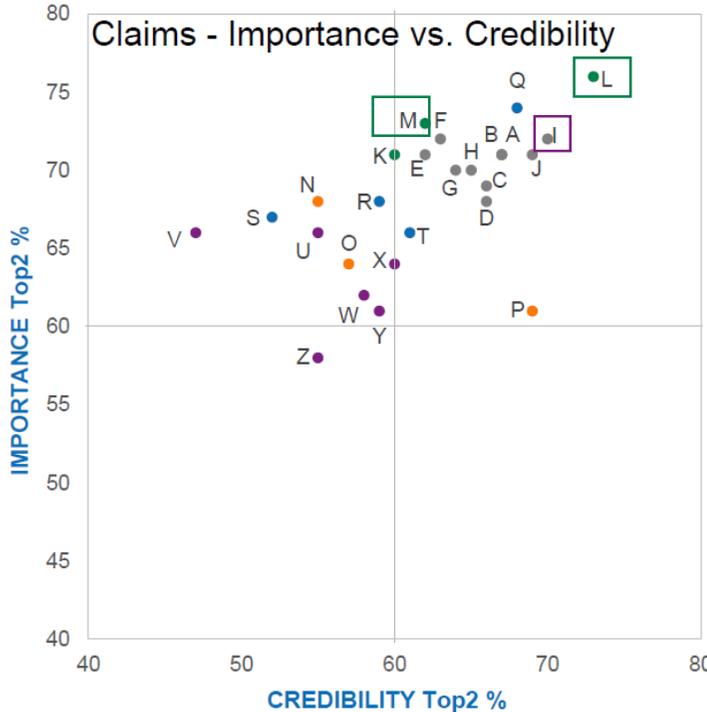
- **Source: Supply < Demand** ↓
- **Price** ↑

Continuous learning on Communication to improve resonance and credibility

Focus on the right topics and the right phrasing is mission-critical

Claims around Recyclability & Materials and Quality & Longevity most convincing. Social aspects less credible/important. Power consumption also stands out.

- To pursue / consider in the future
- True but not communicated yet -> communicate!
- True and communicated -> needs to rephrase
- Communicated -> keep



Recyclability & Materials	
A	In order to save plastics, we use a high proportion of recycled plastic from old industrial plastics.
B	In order to save resources, we use a high proportion of recycled materials.
C	Our products are made from 74% recycled plastics from old industrial plastics.
D	Our products are made from 58% recycled material.
E	Our products only use 100% recycled white plastics.
F	Our products have a recycling rate of 87.5% after usage/disposal.
G	The white plastics in our products are 100% recyclable.
H	Our products can be returned at any time free of charge. We will recycle the appliance and prepare the parts for further processing.
I	Our packaging is made from 80% recycled paper. After use, the packaging is 100% recyclable.
J	Our packaging is 100% free from styrofoam.

Production	
N	Our products are produced carbon-neutrally.
O	100% CO2 neutral: We offset the entire CO2 emissions from production through CO2 certificates.
P	Our products are produced in the EU.

Energy/Carbon consumption	
Q	Our product ensures highest performance with low power consumption/efficient power consumption thanks to the optimized water and lighting system.
R	The annual average energy consumption of our product is 27 kWh.
S	The annual average energy costs of our product are at 7/9 Euros.
T	Growing basil in our product creates up to 50% less carbon emissions than buying basil from a conventional greenhouse.

Quality & Longevity	
K	Our products have been tested for 10 years of use.
L	We believe in the longevity of our products and therefore give a 5-year guarantee.
M	We believe in the longevity of our products and therefore give a 10-year guarantee.

Social Aspects	
U	For every product sold, we plant a tree.
V	For every product sold, we collect 1 kg of garbage from the sea.
W	For every product sold, we donate 1% of the price to projects that make this world a better place.
X	For every product sold, we donate 1 Euro to projects that make this world a better place.
Y	We donate 1% of our sales to the United Nations World Food Programme to support projects for a world without hunger.
Z	A part of our product assortment is produced by a social non-profit organization.

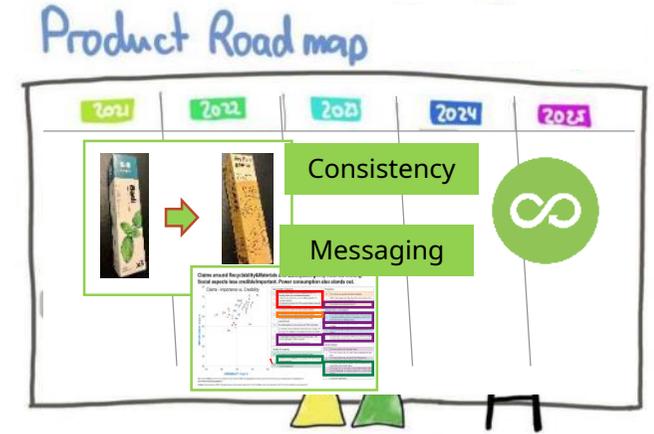
Q3a: How credible do you find this statement from Bosch? Q3b: How important would this promise be when you are deciding about the purchase of a smart indoor gardening appliance?

Sample: Total sample (n=1579). Top2 Box values in % on 5point scale from 1="not credible at all / not important at all" to 5="very credible / very important"

Outlook and next steps of our Sustainability journey

Continuous improvement and learning

1. Extend to entire portfolio: e.g. packaging
2. Material → Goal: stability in quality, supply and price
3. Communication and positioning



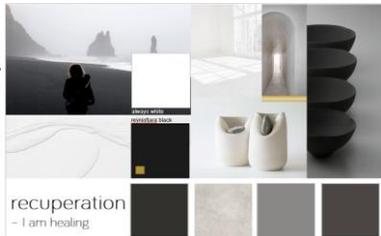
Emotional

Rational

Bosch

Design
Trends

Planet



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SUSTAINABILITY
is a journey that is long and arduous
but necessary and rewarding

SmartGrow
your life

