

NILÖRN

Packaging materials: Plastic or Paper  
– key considerations for brands

March 2026

*Expert series*  
WEBINAR

# Knowledge hub

Agenda →

# Expert talk



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# Agenda

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01

Comparing Nilörn packaging

/ Paper vs. LDPE

02

Featured solutions

/ Vela™ – Glassine bags,  
WILDPLASTIC® - LDPE

03

Panel discussion

/ Key considerations  
for brands



# The bigger picture

## *Circular strategies for packaging*

### Material

- Selection
- Functionality
- End of life options
- Legal compliance
- Reduction

### Construction

- Flat pack boxes
- Mailers preferred to boxes
- Appropriate size options

### Design

- Functionality
- Recyclability
- Optimised layouts
- Compliance labelling

### Logistics

- Local production
- Lower emission freights

# Opening poll

*What is currently your biggest packaging challenge?*

- Compliance & labelling
- Sustainability targets
- Cost
- Performance
- Consumer expectations

# Responsibility

*Offering more preferred materials*

## Material Targets for packaging

### Target 2026

90% certified paper (FSC, PEFC) in paper base products

100% certified recycled material (PCR/PIR) in LDPE polybags

### Current status

85%

93%



# Market appeal

## LDPE PACKAGING (PIR/PCR)

## PAPER PACKAGING (FSC)

Price level (excl.  
fees + taxes)

Low unit cost  
Low material weight →  
efficient production & transport effort

Higher unit cost  
Higher material weight →  
higher production & transport effort

Aesthetics

Functional, garment bags  
are transparent

More natural look and feel,  
garment bags are semi-transparent

Consumer  
perception

Skepticism around material recovery

Recyclable & renewable

# Performance

## LDPE PACKAGING (PIR/PCR)

## PAPER PACKAGING (FSC)

Functional performance

Lightweight, durable, waterproof

Higher material weight, overall lower functional performance for pure paper

Material recovery

Variable recovery rates globally, challenges with small formats in recycling

Stable recovery rates globally, Impact of performance additives: laminations or coatings

Recycling rates

EU (plastic packaging):  
LDPE ~23% | all plastic packaging ~41%

~74% EU  
~67% globally

Global (all plastics):  
LDPE ~2–5% | all plastics ~9%

# Sustainability

## LDPE PACKAGING (PIR/PCR)

## PAPER PACKAGING (FSC)

Feedstock origin

Fossil-based

Wood fibres

Environmental considerations

Overall lower resource use,  
Impacts of fossil fuel extractions,  
impacts of mismanaged plastics

Overall higher resource use,  
Deforestation risk, impact from mill  
outputs reduced for certified paper

Certifications  
(Nilörn products)

GRS, Blue Angel

FSC™ Mix,  
FSC™ Recycled

# Recycled content

## LDPE PACKAGING (PIR/PCR)

## PAPER PACKAGING (FSC)

Minimum recycled content targets

**YES**  
(>35% PCR EU PPWR by 2030)

**NO**  
(but can depend on the format/use and market)

Packaging Tax

**YES**  
(>30% PCR for exemption ruling, e.g. UK)

**NO**  
(unless plastic component is present)

Certification

**YES**  
(recycled content verification)

**YES**  
(but not for recycled content only, e.g. EUTR origin due diligence)

# Labelling

## LDPE PACKAGING (PIR/PCR)

## PAPER PACKAGING (FSC)

Material  
composition

**YES**  
(Material code and  
abbreviated material name)

**YES**  
(Material code and  
abbreviated material name)

Sorting / EPR

**YES**  
(Symbols and  
sorting instructions)

**YES**  
(Symbols and  
sorting instructions)

Additional labelling

**YES**  
(e.g. identification, traceability,  
safety warnings, certifications)

**YES**  
(e.g. identification,  
traceability, certifications)

# Other requirements

## LDPE PACKAGING (PIR/PCR)

## PAPER PACKAGING (FSC)

Material-specific constraints

**YES**  
(Thickness / safety / channel restrictions)

**YES**  
(Coatings / composites)

Reporting obligations

**YES**  
(EPR, plastic-specific reporting)

**YES**  
(EPR, specific reporting for plastic components)

Recyclability

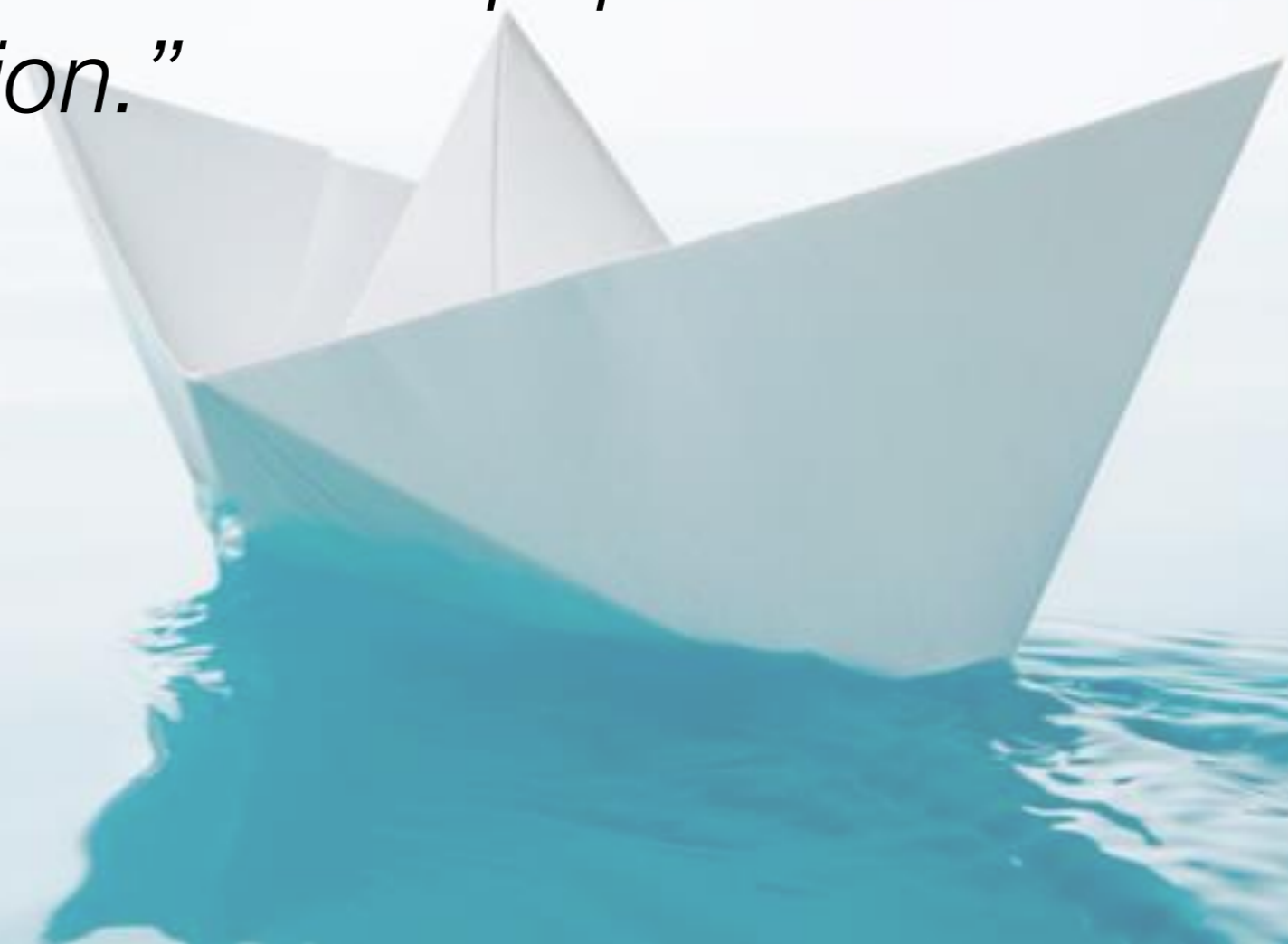
**YES & NO**  
(Lack of infrastructure with negative impact on local recyclability)

**YES & NO**  
(Mature infrastructure but coatings / laminates / composites can limit local recyclability)

# In a nutshell

*“Recycled LDPE packaging typically carries more layered, material- and format-specific obligations, while FSC paper packaging tends to follow a more straightforward regulatory path.”*

*“Recycled LDPE packaging excels in efficiency and function, while FSC paper packaging leads in material recovery and consumer perception.”*



# Sources

## Sources use case comparison

- **Consumer perception:** 2025, McKinsey - Sustainability in packaging - Inside the minds of global consumers
- **Environmental considerations:** 2025, Sustainable Packaging Coalition - Considerations for Materials Decision Matrix; 2026, Ellen Macarthur Foundation – Paperbased flexible packaging
- **Material Recovery/Plastic:** EU: 2020, European Plastic Recyclers - Flexible Films Market In Europe, State Of Play; 2024 Eurostat: 41% of plastic packaging waste recycled in 2022; Global: 2023, World Economic Forum, Measuring Reuse
- **Material Recovery/Paper:** EU: 2024, CEPI - Confederation of European Paper Industries; Global: 2026, Worldmetrics - Paper waste statistics report

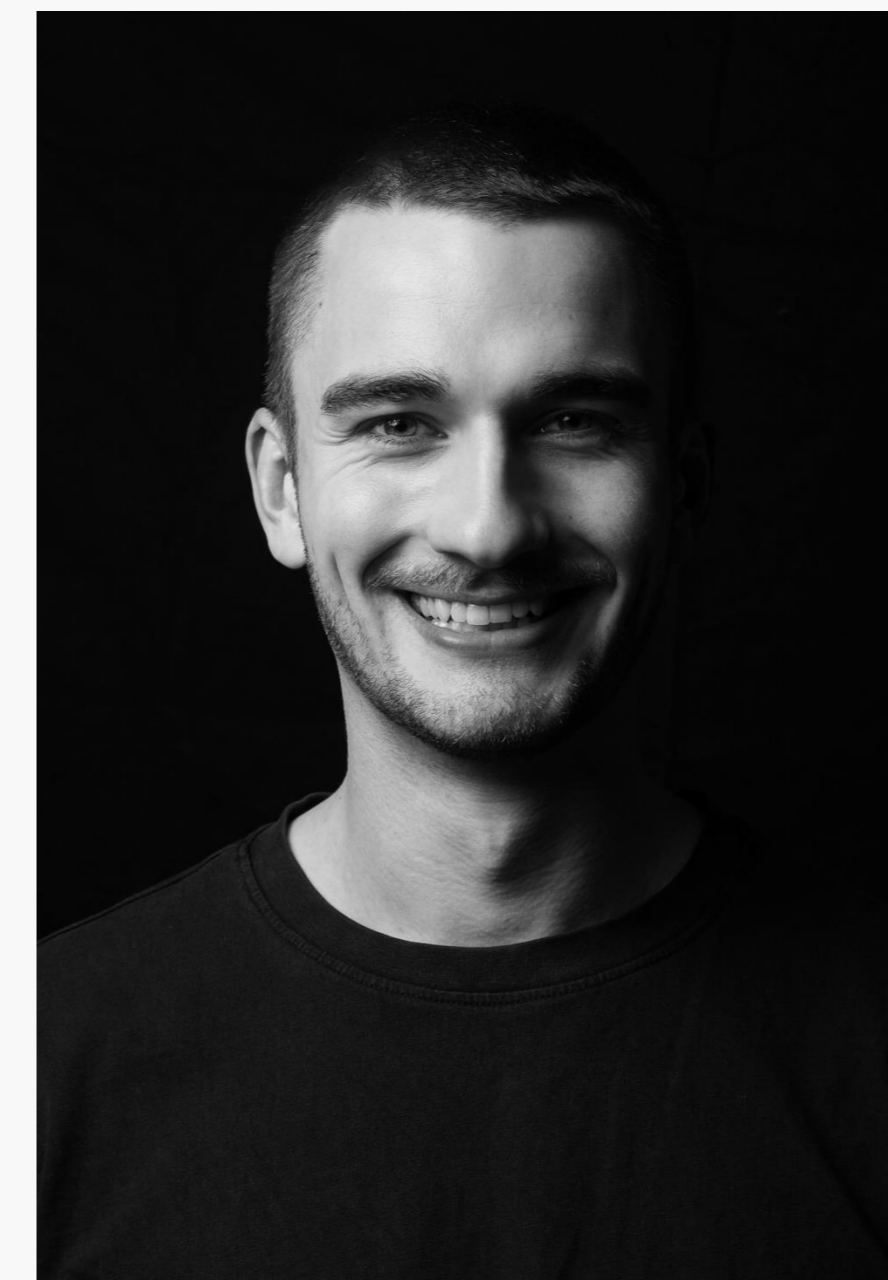
## Sources regulatory comparison

- European Commission (2023), Commission Notice – Guidance Document for Regulation (EU) 2023/1115 on Deforestation-Free Products (EUDR Guidance Document).
- European Union (2025), Packaging and Packaging Waste Regulation – Regulation (EU) 2025/40.
- European Commission (1997), Packaging Material Identification System – Commission Decision 97/129/EC.
- European Union (2024), Empowering Consumers for the Green Transition – Directive (EU) 2024/825.
- European Union (2023), Deforestation-Free Products – Regulation (EU) 2023/1115.
- European Commission (2025), Guidance Document for Regulation (EU) 2023/1115 (EUDR) – Commission Notice C/2025/4524.
- HM Revenue & Customs (2025), Plastic Packaging Tax: Mass Balance Approach and Removal of Pre-Consumer Plastic – Policy Paper (GOV.UK).
- Agencia Tributaria (2022), New Environmental Taxes Created by Law 7/2022 (incl. plastic packaging tax) – Official Notice (Spanish Tax Agency).
- CalRecycle (2025), Accurate Recycling Labels (SB 343) – Regulatory Guidance (CalRecycle).
- CITEO (2026), European Overview of EPR for Household Packaging – January 2026, CITEO, Paris.
- Forest Stewardship Council (2021), Chain of Custody Certification – FSC-STD-40-004 (Version 3-1).
- OECD (2018), Improving Markets for Recycled Plastics: Trends, Prospects and Policy Responses, OECD Publishing, Paris.

# Featured solutions



**Ester Milano**  
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# Time for questions.

*Ask questions and share your thoughts.  
Feel free to raise any points or queries you have.*

# Thanks!

- The presentation slides will be shared with you after this session.
- To receive a recording of the webinar – contact [knowledgehub@nilorn.com](mailto:knowledgehub@nilorn.com)
- Next webinar is planned for 29<sup>th</sup> of April  
Invitations will be sent out closer to the date.

## Nilörn

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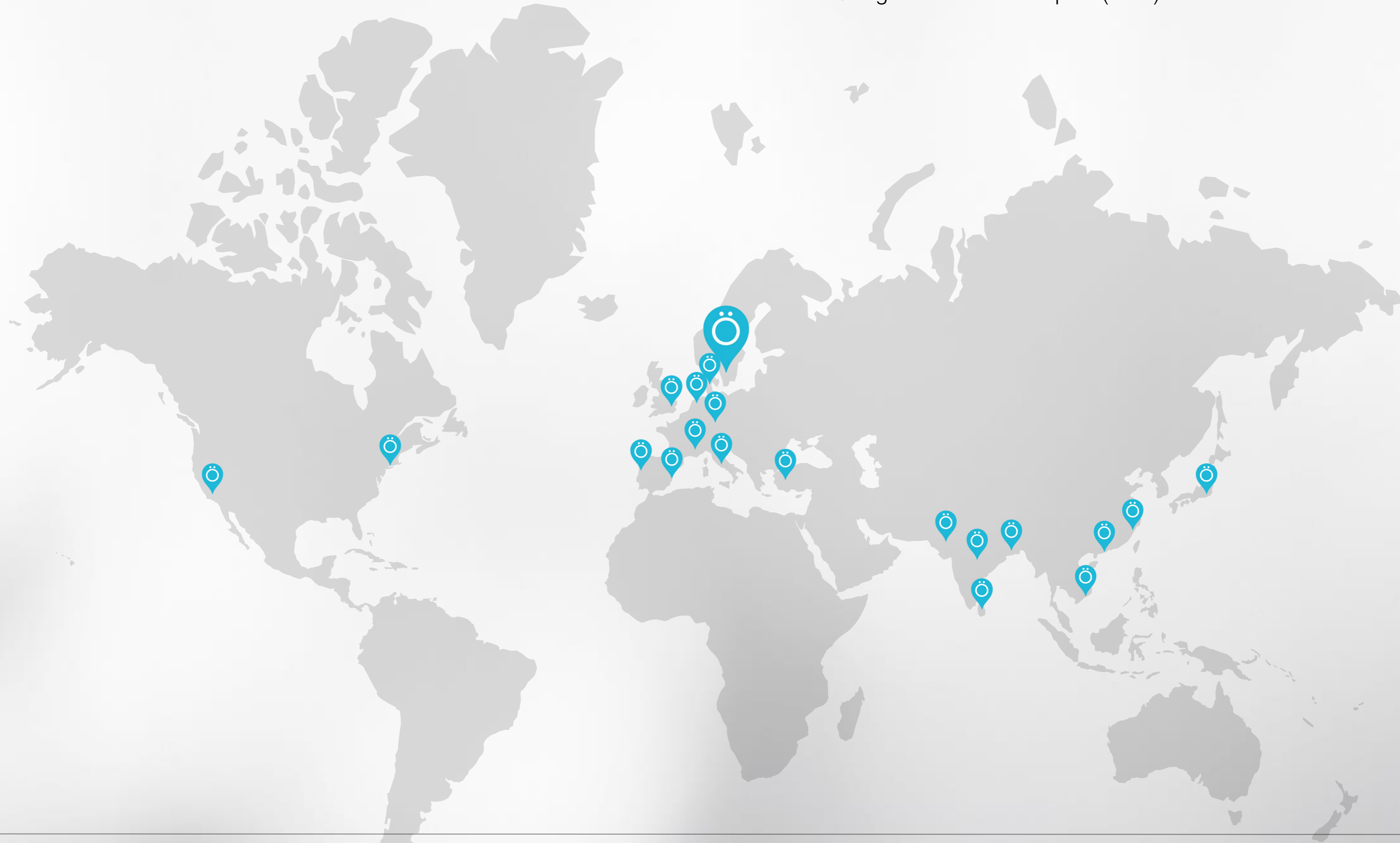
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