

# Circularity Indices and EPDs: The Eco Platform Proposal

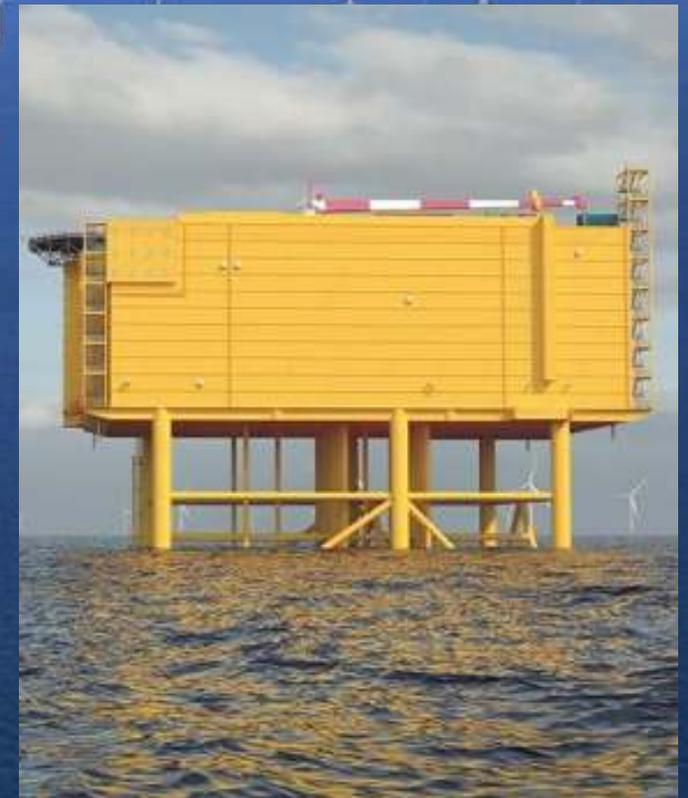
State and Outlook of the CE Task Group



Martin Blumberg  
Convenor of the ECO Platform CE Task Group  
ICMQ Conference Milan, February 23rd, 2024



# Ijmuiden Ver Auction for a 4 X 1-1,15 GW Off-Shore Windfarm





### Harmonization

global alignment of EPD, PCR,  
Building LCA – common rules

### Verification

reliable data by common  
verification guidelines for ECO EPD

### Digitalization

freely available digital product data  
(EPD) via ECO Portal

**83** ECO  
Members



## CE Task Group Mandate

- to propose a generally recognized and accepted approach that helps construction products manufacturers to assess, how well their products align with circular economy principles.
- to develop a proposal of how best to integrate verifiable circularity information into the Environmental Product Declaration (EPD)
- and to develop verification guidelines that enables independent verification of the information provided on the circularity of construction products in compliance with regulatory frameworks.

## Construction Product Manufacturers & Associations

## Standardisation & Regulation

### CE TASK GROUP

breeam

DGNB

201

- Basic materials and precursors 21%
- Building products 8%
- Building services engineering 8%
- Other Non-Building/Construction Products 63%

Alliance  
**HOE**

eurima  
European Insulation Manufacturers Association



Bau-EPD  
European Product Declaration

EUROPEAN ALUMINIUM



### Academia



## Existing methods for circularity assessment of societies, companies and products

CE assessment methods	Qualitative	Quantitative
Assessing CE on a <b>societal</b> level	15	14
Assessing CE on a <b>company</b> level	8	7
Assessing CE on a <b>product</b> level	1	<b>15</b>

## Product circularity dimensions in the EPD (ECO Platform proposal)

Recycled content

Recyclability

Renewables

Quality of recycling

Design for disassembly

Design for low maintenance and repair

Design for reuse





## Product circularity dimensions in the EPD (ECO Platform proposal)

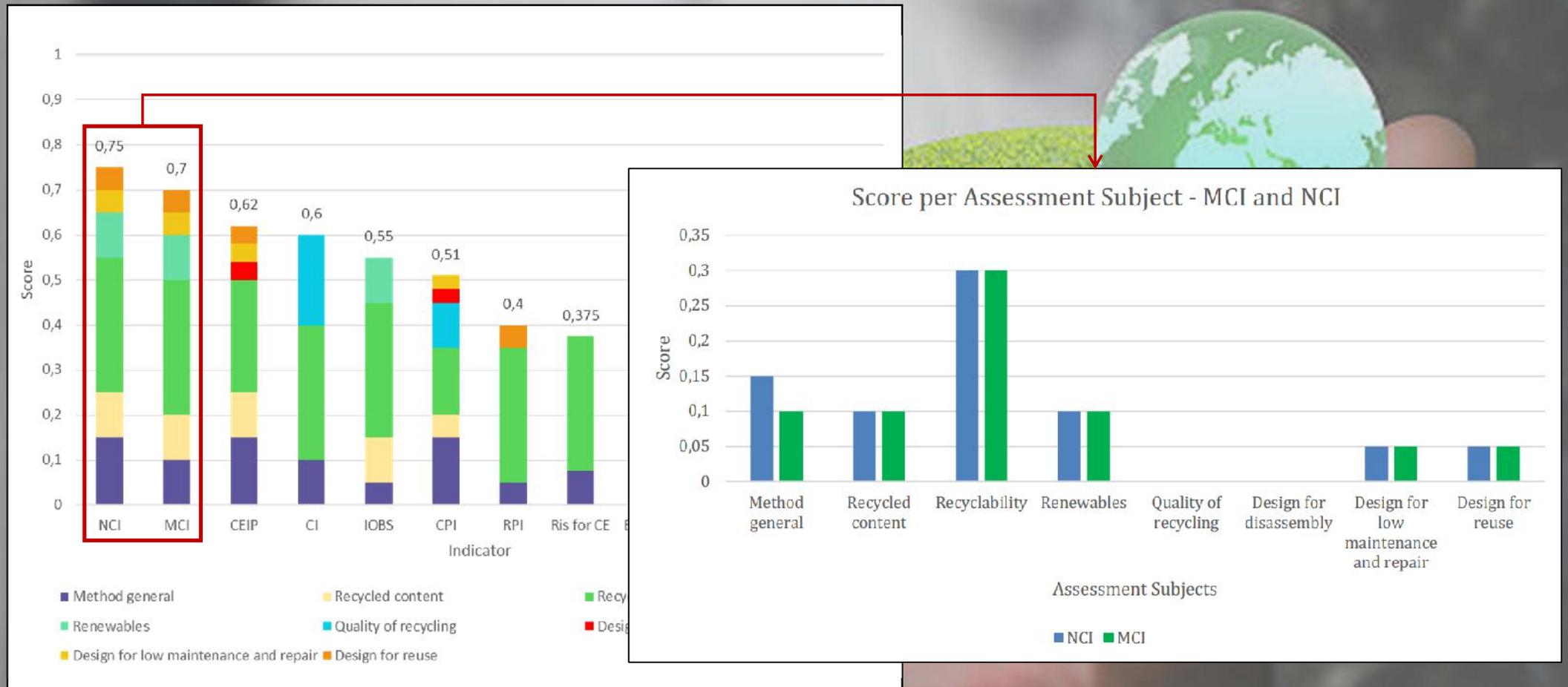
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## Most relevant aspects by number of mentions and integrations in the systems

- Recycled content/ use of primary materials:** % of primary raw material, % of pre-consumer recycled content, % of post-consumer recycled content, % of reused or repurposed material
- Recyclability after life-cycle or waste route:** can the product be recycled, downcycled or does it need to be disposed of in a certain way (waste-to-energy, landfill)
- Design for disassembly and deconstruction:** separability of the material components, separability from neighbouring materials (reversible connections), flexibility of the product
- Design for reuse:** can easily be reused after first use
- Durability/ resilience/ lifespan:** information about how to keep the product from degrading, information about typical lifespan (can be taken from standard)
- Hazardous components/ ingredients:** list all hazardous components or ingredients, e.g. SVHC, carcinogens
- Origin of materials:** supply chain information, chain-of-custody for wood products



# Performance of the quantitative CE assessment methods

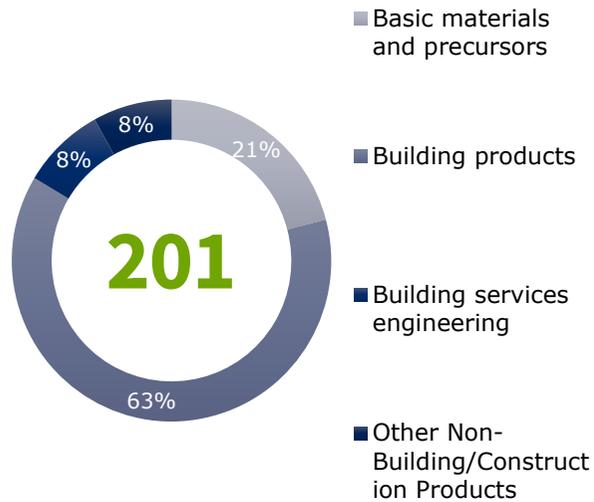


# MCI and NCI results for a sliding door

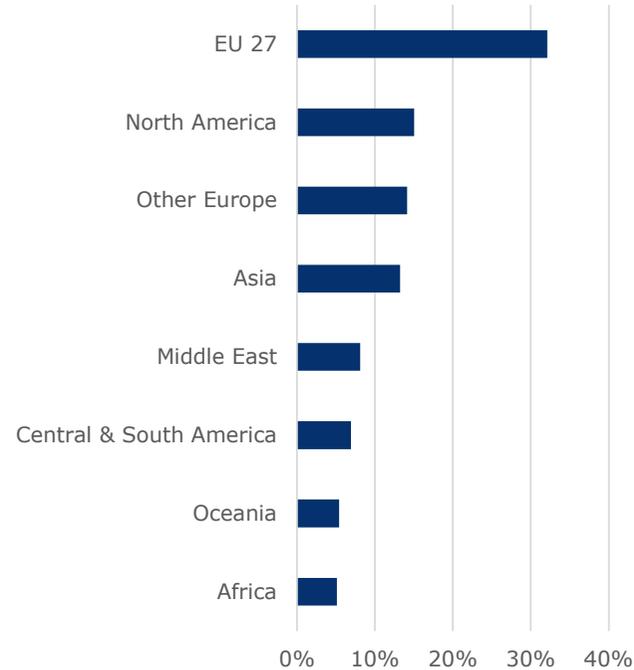


# ECO PLATFORM SURVEY 2023 ON THE OPPORTUNITIES AND CHALLENGES OF CIRCULAR ECONOMY IN THE CONSTRUCTION INDUSTRY

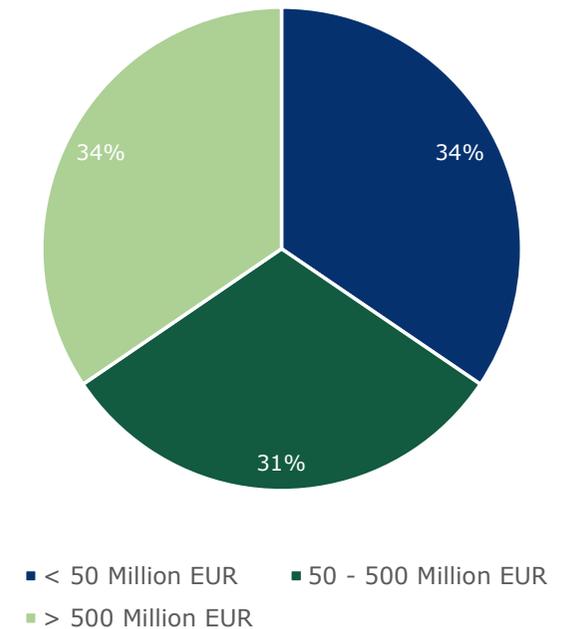
## DISTRIBUTION OF PARTICIPANTS BY PRODUCT CATEGORY



## DISTRIBUTION OF PARTICIPANTS BY MAIN SALES REGION

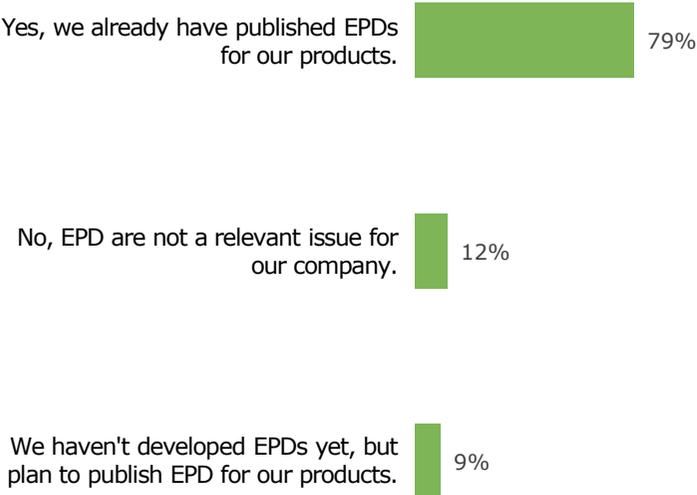


## DISTRIBUTION OF PARTICIPANTS BY COMPANY SIZE

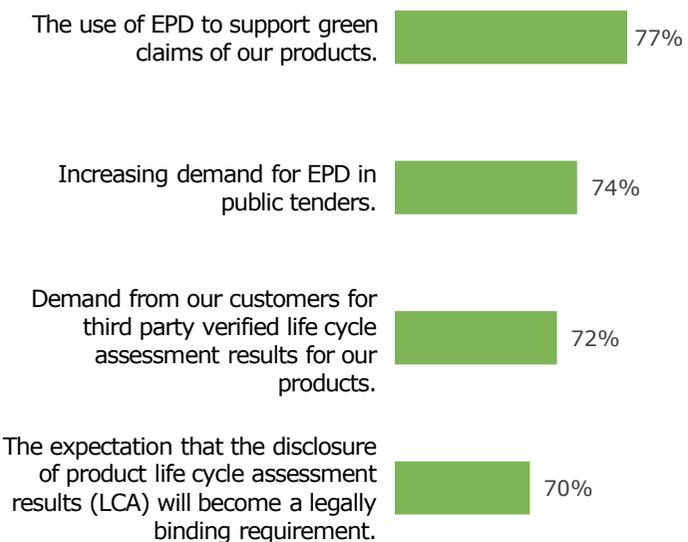


# THE EPD HAS ESTABLISHED ITSELF INTERNATIONALLY - COMPANIES ARE MOVING TOWARDS CIRCULAR PRODUCTS AND OPERATIONS

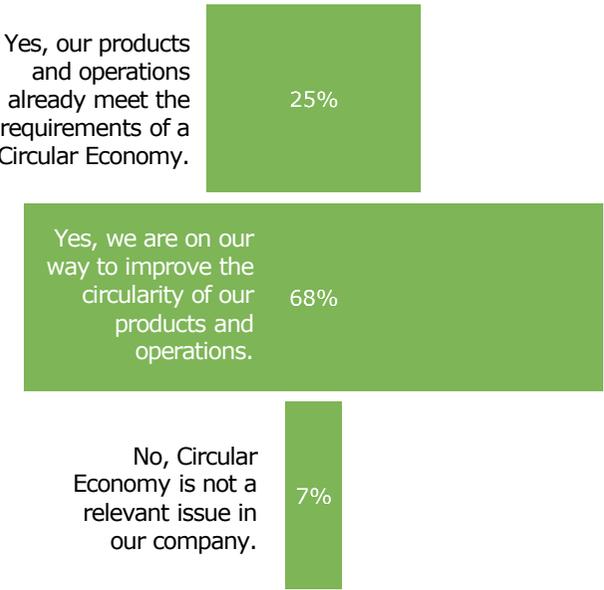
## EPD RELEVANCE



## DRIVERS OF EPD RELEVANCE



## RELEVANCE OF CIRCULAR ECONOMY



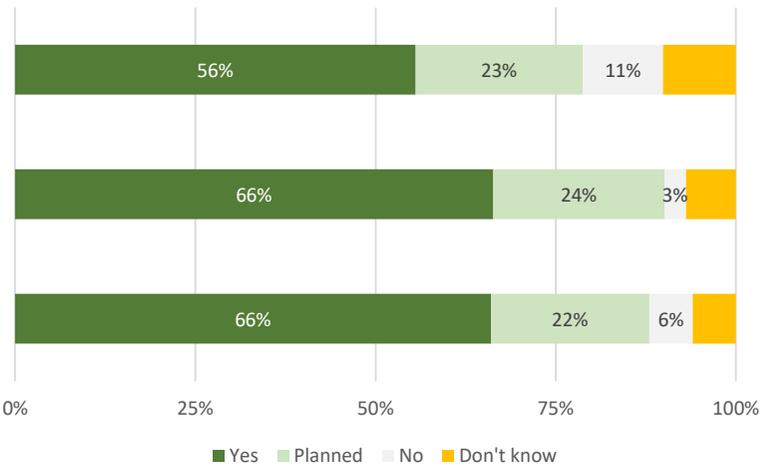
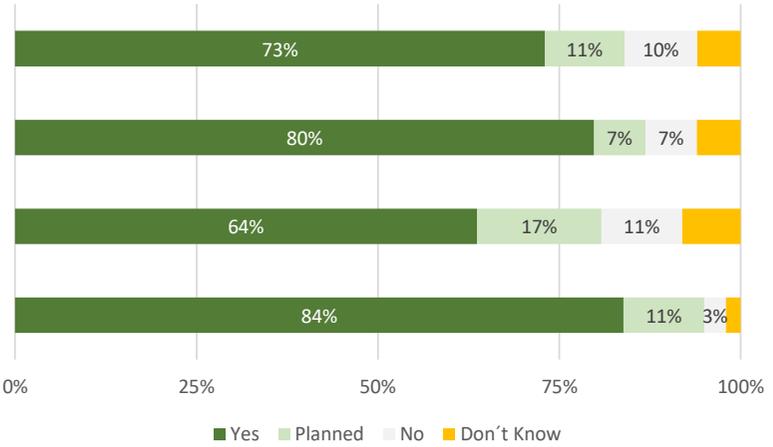
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## WE KNOW...

- ...any **critical raw materials** in our products (e.g. lithium).
- ...any **chemical substances of high concern** in our products (e.g. lead).
- ...the ingredients of the auxiliary and operating materials we use.
- ...the ingredients of all the products and materials we use.
- ...the proportion of **reused substances**, materials and/or components we use.
- ...the proportion of **renewable substances**, materials and/or components we use.
- ...the proportion of **recycled content** in the substances, materials and/or components we use.

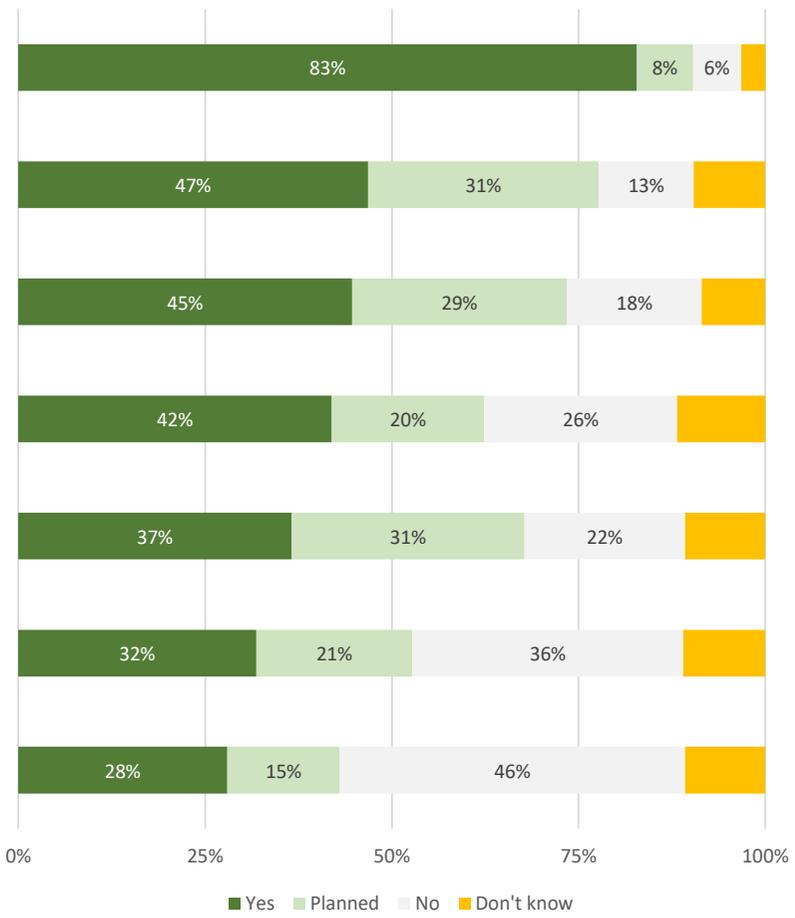


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- We design our products for low maintenance and repair.
- We design our products in a way that they can be easily disassembled (dismounting, disassembling, dismantling) after their service life.
- We design our products for maximum recyclability of material fractions, components and parts at their end of life.
- We provide our customers with information on how to extend the service life-time of our products (beyond the standard life-time).
- We design our products that they can be easily re-used after their initial life cycle.
- We provide our customers with instructions for a deconstruction compliant installation of our products.
- We offer our products as a service to our customers.



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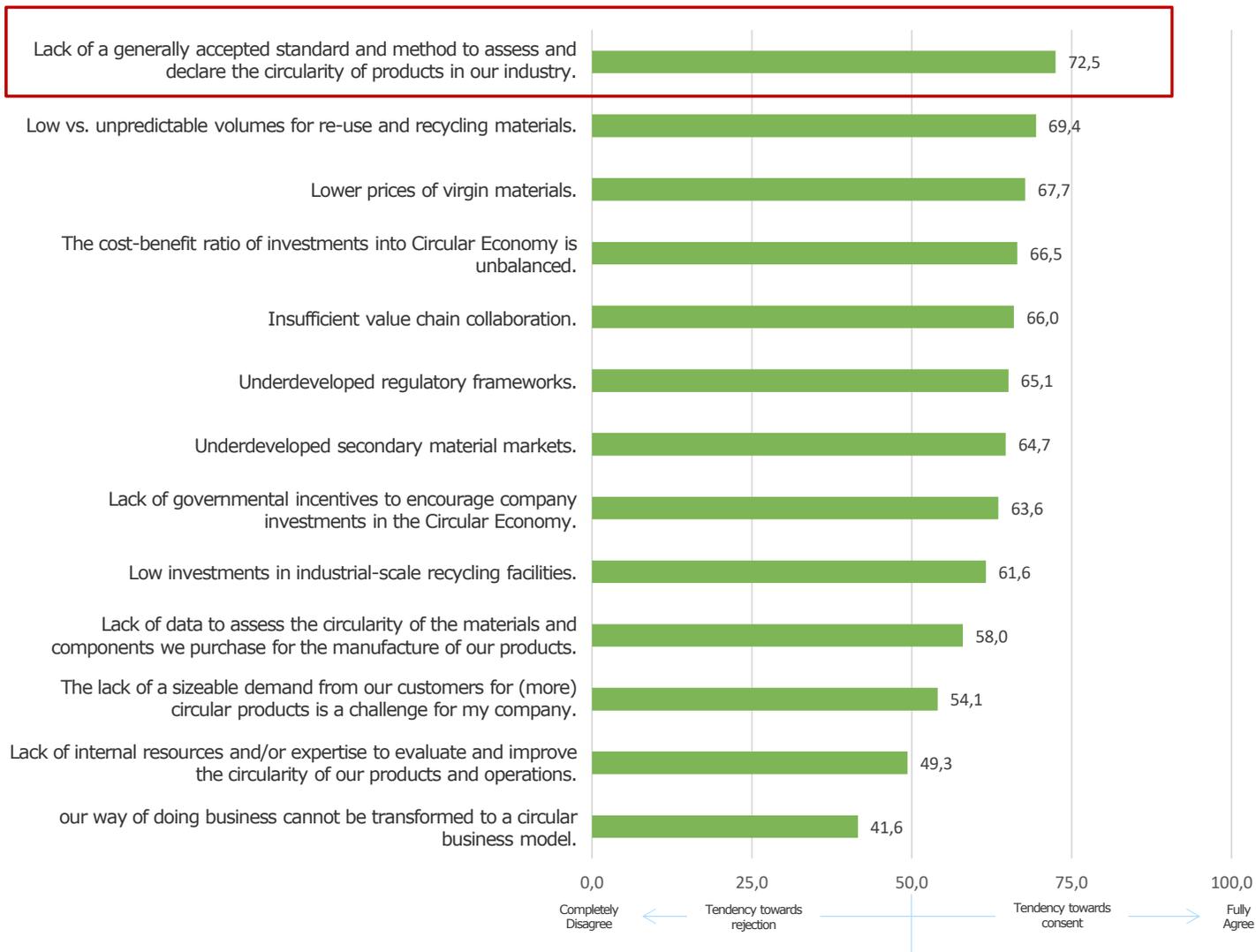
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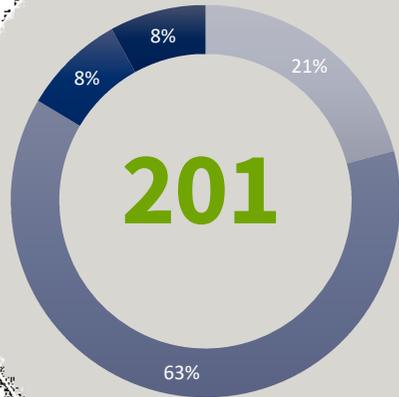
## CHALLENGES/BARRIERS TO CE IN THE CONSTRUCTION INDUSTRY



Bright ideas. Sustainable change.



## Construction Product Manufacturers & Associations



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## Standardisation & Regulation

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## Academia

