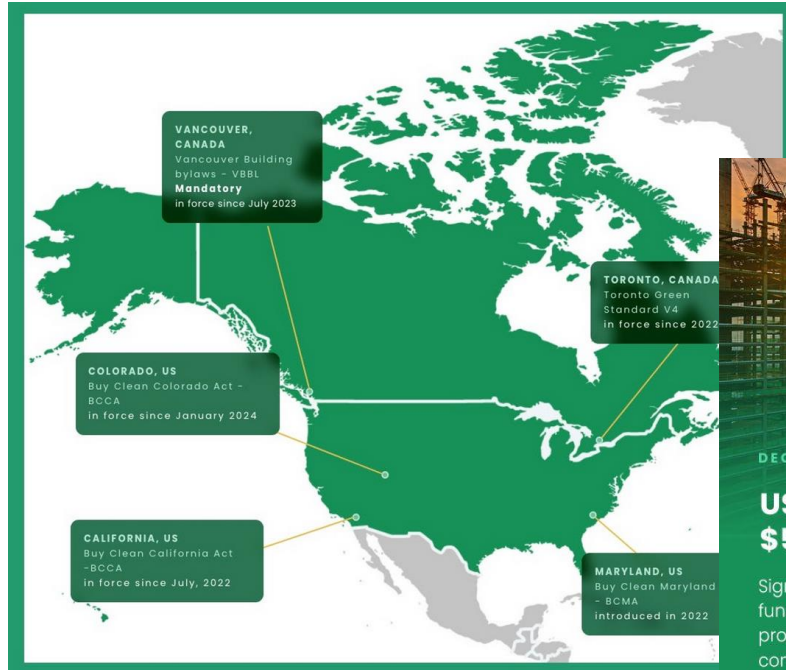


The background of the slide is a photograph of a city skyline, likely San Francisco, with the Transamerica Pyramid visible in the distance. A thick layer of fog or low clouds obscures the lower portions of the buildings. A solid green horizontal banner is superimposed across the middle of the image, containing the title text in white and black.

# EUROPEAN CONSTRUCTION LCA POLICY REVIEW

# For now, Europe is still leading the way but other countries are catching up rapidly



## DECARBONIZATION NEWS

### US Inflation Reduction Act allocates over \$5 billion for low-carbon construction

Signed on **16th August 2022**, the US Inflation Reduction Act 2022 earmarks funds for low-carbon construction and data including \$250M for a program to develop, standardize and make **more transparent EPDs** for construction products and materials via grants and technical assistance. The legislation also includes \$100M towards the development of **low-carbon product labeling for construction materials** and \$8B towards additional costs of **low-carbon and climate-resilient investments** in the construction sector.

## DECARBONIZATION NEWS

### Mostadam: Saudi Arabian green building rating system offers incentives for LCA

The rating system which is developed by the Saudi Green Building Council (SGBC) offers credits for conducting Life Cycle Assessments (LCA). The credit covers embodied carbon and will be relevant only for new buildings. The scope of assessment should incorporate the envelope and structural elements of the building (refer to the Buildings D+C Manual).

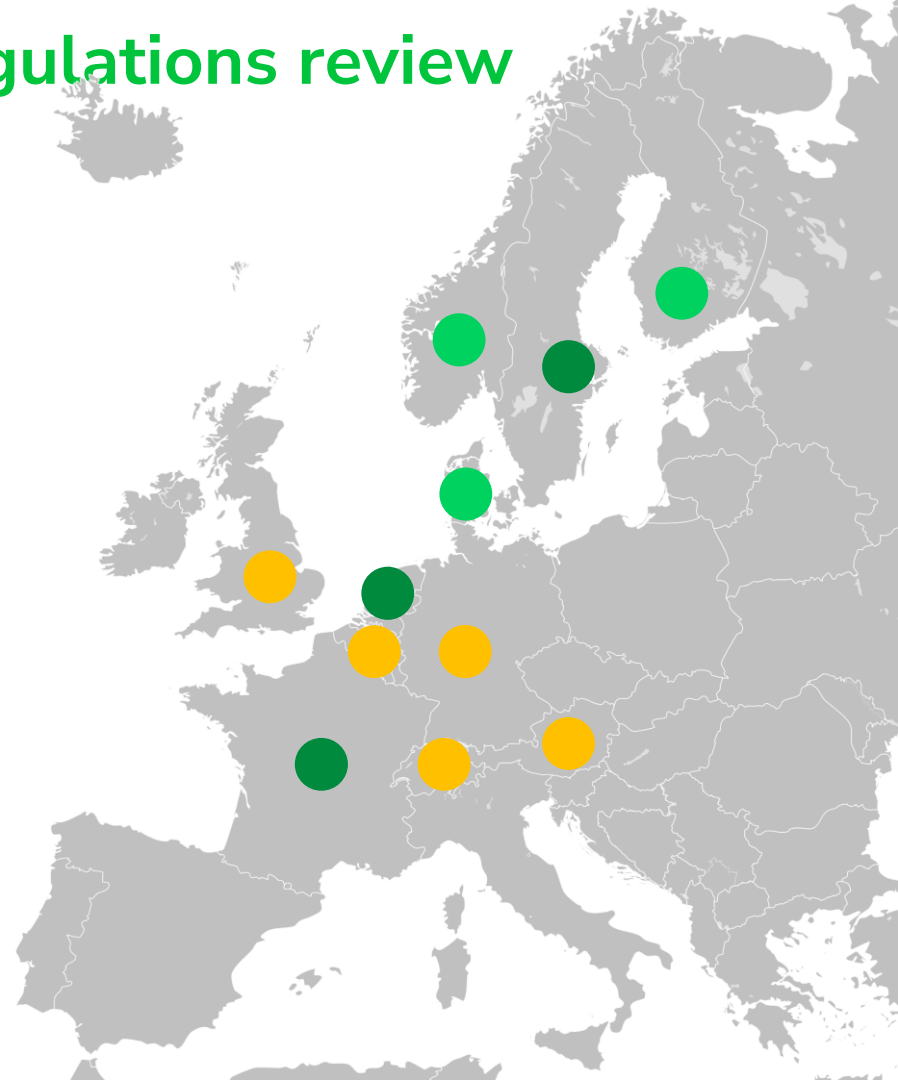
البناء المستدام  
Sustainable Building



[oneclicklca.com](http://oneclicklca.com)

# European construction LCA regulations review – due to publish this fall

- Regulation in force
- Regulation about to enter in force
- Public project rules or systems



# Review of the market and zoom-in to regulations

## 12 COUNTRIES + EU

All where government active

### MARKET OVERVIEW

- Market overview
- National building regulations
- Sub-national regulations
- Building LCA limit values
- Policies for public buildings
- National LCA methodology
- Policies for infrastructure
- Constr. product requirements
- Generic data and databases
- Voluntary certifications
- Other developments
- System openness to trade

## 8 COUNTRIES WITH REGULATIONS IN PLACE OR UNDERWAY

All those with regulations either in place or lined up for implementation; UK added due to GLA

### REGULATION

- Applicability
- Timing of assessment
- Accepted data
- Limit value or declaration
- Tool compliance

### METHODOLOGY

- Assessment scope - modules
- Assessment scope - elements
- Standards alignment
- Data alignment
- Calculation period
- Decarbonization
- End of Life Scenarios
- Reused materials
- Biogenic carbon
- Impact categories

### LCA DATABASES

- Amount of data
- Generics / EPDs
- Data alignment
- Sources of data
- Conservativeness factors
- Upstream database(s)
- Service life
- End of life & module D
- Impact categories
- Update frequency
- Access to data
- Trade restrictions

# The regulations covered in the report

DRAFT

Country	Methodology	In force	Applies to renovations	Timing of assessment	Applicable buildings	Acceptable data	Preference of EPDs	Compliance type	Compliant tools
Denmark	Bæredygtighedsklassen	2023	Yes	Multiple assessments (Building permit & Post construction)	All	LCAByg or Ökobaumat	No	Limit value	Open
Finland	Finnish method / RakL	2024 Expected	Yes	Single assessment – Planning Stage (Building permit)	All Buildings requiring an energy declaration	EN 15804+A2, CO2data	Yes	Declaration <sup>3</sup>	Open
France	RE2020	2022	No	Multiple assessments (Building permit & Post construction)	Residential Offices Education	INIES database	Yes	Limit value	Approved tools
Netherlands	MPG	2013	No	Single assessment – Planning Stage (Building permit)	Offices and residential	NMD only	Yes	Limit value	Approved tools
Norway	NS 3720 / TEK 22	2022	Yes	Single assessment – Planning Stage (Building permit)	Residential and commercial buildings	EN 15804	Yes	Declaration	Open
Sweden	Klimatdeklaration av byggnader	2022	No	Single assessment – Post construction	>100 m <sup>2</sup>	EN 15804, Boverket	Yes	Declaration	Open
UK	Part Z via RICS, GLA <sup>1</sup>	Uncertain / Proposed	Yes	Multiple assessments (Prior and post construction)	>1000m <sup>2</sup> Or >10 dwellings	EN 15804 and other standards	Yes	Declaration	Open
EU	Level(s) via EPBD	2027/2030 Proposed	Yes	Multiple assessments (Conceptual / detailed / <u>as-built</u> )	All	EN 15804	Yes	Declaration	Open

# The databases covered in the report

Country	Database	Status in regulation	Amount of data (25/07/2022)	Generic data included	Generic data alignment	Market data included	Market data alignment	Source of data
Belgium	B-EPD	Mandatory in construction product regulation	112	No	-	Yes	EN 15804 +A2	3 <sup>rd</sup> party verified EPDs
Finland	CO2data	Mandatory in LCA regulation	255	Yes	EN 15804 +A1	No	-	Govt commissioned
France	Inies	Mandatory in construction product & LCA regulation	6 084	Yes	EN 15804 +A1, NF EN15804/CN	Yes	EN 15804+A1, EN 50693	Govt commissioned & 3 <sup>rd</sup> party verified EPDs
Germany	ÖKOBAUDAT	-	1 719	Yes	EN 15804 +A1, EN 15804 +A2	Yes	EN 15804+A1 and EN 15804+A2	Govt commissioned & 3 <sup>rd</sup> party verified EPDs
Netherlands	NMD	Mandatory in LCA regulation	3 181	Yes	EN 15804 +A1, EN 15804 +A2	Yes	EN 15804+A1, EN 15804+A2	Govt commissioned & 3 <sup>rd</sup> party verified EPDs
Sweden	Boverket	Mandatory in LCA regulation	208	Yes	EN 15804 +A1	No	-	Govt commissioned

# What is the best practise? We evaluate it as follows

## REGULATION: DECARBONIZATION IMPACT & OPENNESS

**Broad scope, limit values, top-up factors and pre- and post-assessment increase impact**

**Standards, ability to use EPDs and tools from range of suppliers increases efficiency**

### DECARBONIZATION IMPACT

- Decarbonization impact
- Assess before and after
- Generics data topped up
- Limit values applied
- Scope covers whole life-cycle
- Scope covers whole building

### POLICY OPENNESS

- Openness for data
- Openness for tools
- Standards alignment

## DATABASES: AVAILABILITY, ACCESS, COST & QUALITY

**Extensive, easily accessible database with interfaces increases process impact**

**Process & frequency & standards reduce costs, others increase quality**

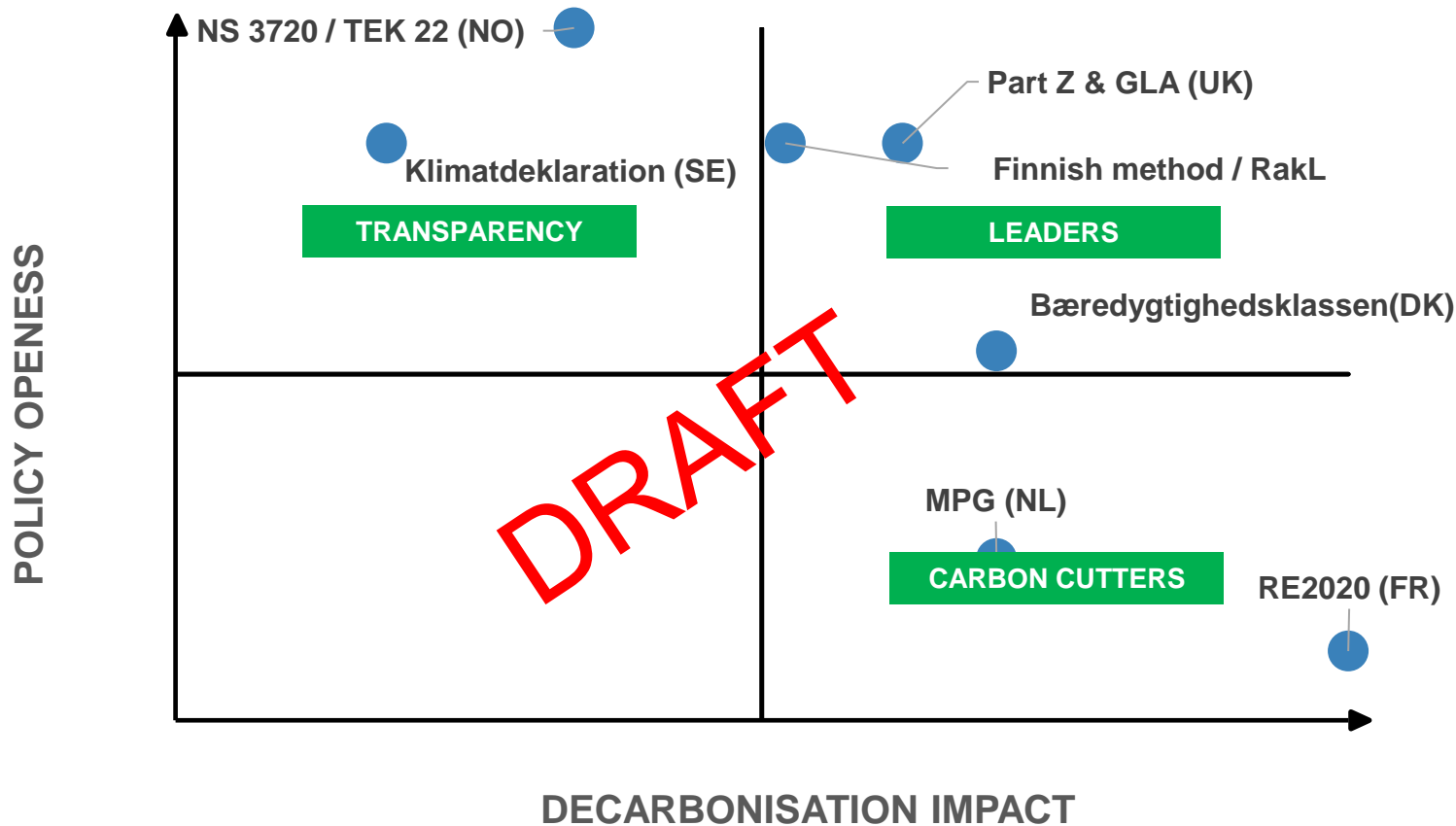
### AVAILABILITY & ACCESS

- Amount of data
- Generics, EPDs or both
- Access to database
- Digital infrastructure

### COST & QUALITY

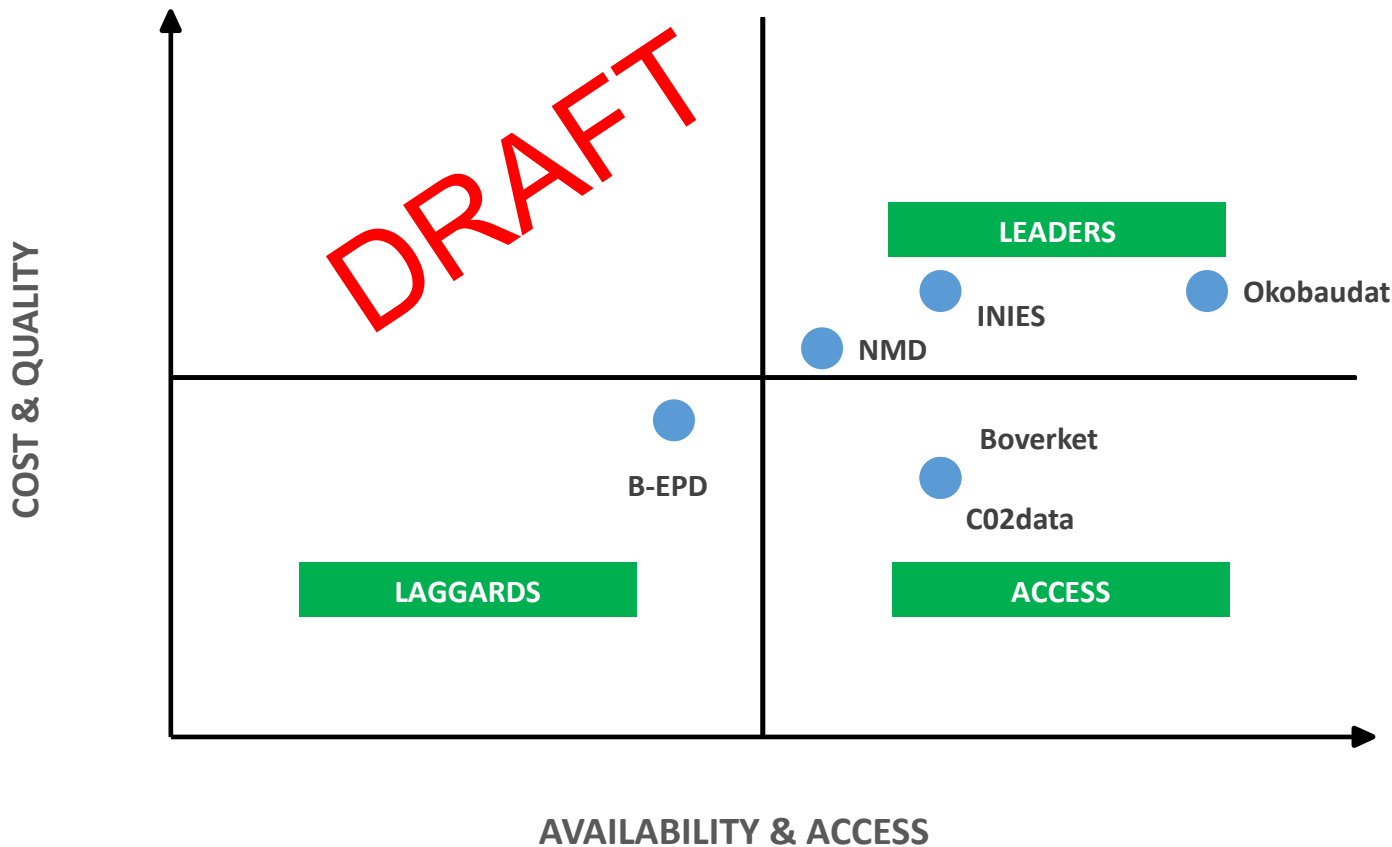
- Conservative factors
- Generic production process
- Update frequency
- Cross-publishing accepted
- EN 15804 aligned indicators

# Best practise implementation for regulations





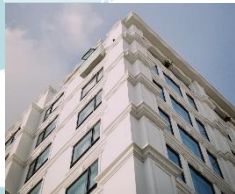
# Best practise implementation for databases



# World's leading construction LCA & EPD software



## BUILDINGS



## MANUFACTURING



## INFRASTRUCTURE



## ACADEMY



## OPERATIONS



#1 WORLDWIDE 140+ COUNTRIES ALL GLOBAL DATA 15+ INTEGRATIONS 100+ STAFF 20+ YEARS

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