



TOWARDS A SUSTAINABLE CONSTRUCTION SECTOR: ENVIRONMENTAL PRODUCT DATA

Dieter De Lathauwer

Chair of CEN TC/350 & policy advisor at the Belgian Federal Public Service

EOTA forum, November 2023

“ON THE MARKET ARE ONLY CONSTRUCTION PRODUCTS AND MATERIALS AVAILABLE FOR WHICH THE MANUFACTURER DECLARES THE GLOBAL ENVIRONMENTAL IMPACT OVER THE ENTIRE LIFE CYCLE.



THIS WILL STIMULATE PRODUCT AND PROCESS INNOVATION.

IT WILL ALSO LEAD TO INCREASED INSIGHT INTO THE ENVIRONMENTAL IMPACT AT BUILDING LEVEL AND AS SUCH TO A REDUCED ENVIRONMENTAL IMPACT PROVIDED APPROPRIATE POLICY SUPPORT.”

... 2008

This presentation focus on EPD

Foam core (without glass tissue facer)

	Production			Construction process stage		Use stage							End-of-life stage				D Reuse, recovery, recycling
	A1 Raw material	A2 Transport	A3 manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	
 GWP total (kg CO2 equiv/FU)	4,22E+00	1,47E-01	1,42E+00	8,21E-02	3,31E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,68E-02	5,96E+00	1,54E-02	-1,38E+00
GWP fossil (kg CO2 equiv/FU)	1,03E-02	2,93E-04	-1,96E-03	4,38E-05	1,70E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,03E-05	5,35E-04	1,64E-05	-7,33E-03
GWP biogenic (kg CO2 equiv/FU)	4,21E+00	1,47E-01	1,42E+00	8,20E-02	3,31E-01	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,67E-02	5,96E+00	1,54E-02	-1,37E+00
GWP luluc (kg CO2 equiv/FU)	1,06E-03	9,79E-05	2,41E-04	2,87E-05	3,68E-05	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,98E-05	1,04E-04	4,77E-07	-1,09E-03
 ODP (kg CFC 11 equiv/FU)	3,12E-07	2,81E-08	1,25E-07	1,86E-08	1,18E-08	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,29E-08	4,12E-08	4,50E-10	-2,19E-07
 AP (mol H+ eq/FU)	1,55E-02	1,52E-03	2,83E-03	3,35E-04	4,81E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,32E-04	1,56E-03	1,14E-05	-1,74E-03
 EP - freshwater (kg (PO4)3- equiv/FU)	7,14E-05	2,83E-06	1,75E-05	6,44E-07	2,10E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	4,46E-07	4,08E-06	1,61E-08	-1,18E-05
 EP - marine (kg (PO4)3- equiv/FU)	2,76E-03	4,65E-04	5,59E-04	9,94E-05	1,07E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,88E-05	6,48E-04	2,00E-05	-4,39E-04
 EP - terrestrial (kg (PO4)3- equiv/FU)	3,43E-02	5,15E-03	6,36E-03	1,10E-03	1,25E-03	MND	MND	MND	MND	MND	MND	MND	0,00E+00	7,61E-04	7,01E-03	4,57E-05	-5,08E-03
 POCP (kg Ethene equiv/FU)	1,30E-02	1,40E-03	2,49E-03	3,37E-04	4,29E-04	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,33E-04	1,79E-03	1,62E-05	-1,59E-03
 ADP Elements (kg Sb equiv/FU)	3,11E-05	2,56E-06	9,75E-06	2,22E-06	1,06E-06	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,54E-06	1,63E-06	1,11E-08	-1,33E-06
 ADP fossil fuels (MJ/FU)	1,35E+02	2,15E+00	2,30E+01	1,24E+00	3,37E+00	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,56E-01	1,23E+00	3,47E-02	-3,35E+01
 WDP (m³ water eq deprived /FU)	2,00E+00	1,07E-02	2,98E-01	3,44E-03	5,00E-02	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,38E-03	7,16E-02	1,71E-04	-2,14E-01

CEN / TC 350

Sustainability of construction works

Chair: Dieter De Lathauwer (Belgium)
 Manager: Karine Dari (Afnor)

Convenors & secretaries group

WG1
Environmental performance of buildings
 Convenor: A. Ijomaki (Finland)

WG3
Product levels
 Convenor: J. Goerke (Germany)

WG5
Social performance of buildings
 Convenor: ...

WG6
Civil engineering works
 Convenor: A. Burgueno (Spain)

WG8
Sustainable refurbishment
 Convenor: S. Biorberg (Norway)

EN 15804:2012+A2:2019
NBN EN 15804:2012+A2:2019

SC 1
Circular economy in the construction sector

Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

SC1 / WG1
Framework, principles and definitions
 Convenor: L. Ortosen

SC1 / WG2
Gap analysis
 Convenor: M. Blum

Chair: K. Guldager Jansen
 Manager: C. Vartou Forsingdal

SC1 / WG3
Chair's advisory group (CAG)

Used for development of Complementary PCR rules

PROPOSAL(S)

BT,

- noting the request of CEN/TC 350 as in Annex 1 BT N 9216;
- noting the concerns and recommendation of the Construction Core Group as in Annex 2 to BT N 9216;
- endorses the Construction Core Group recommendation 165/2013;
- asks CEN/TCs developing product standards to take into consideration the horizontal rules of EN 15804;
- encourages the close liaison between CEN/TC 350 'Sustainability of construction works' and product TCs when those product TCs are preparing specific Product Category Rules based on EN 15804;
- invites product TCs in the construction sector and CEN/TC 350 to consult the Construction Core Group, should issues be identified

2013-03-27 - GA

PROPOSAL(S)

BT,

- noting,
 - decision 284 of CEN/TC 350 'Sustainability of construction works' taken on 2022-04-05 (see Annex 2);
 - CEN/BT Decision 3/2013, asking CEN/TCs developing product standards to take into consideration the horizontal rules of EN 15804 and encouraging the close liaison between CEN/TC 350 and product TCs when those product TCs are preparing specific Product Category Rules (PCRs) based on EN 15804 (see Annex 1);
- decides, when a new Standardization Request (SReq) is being developed referring to EN 15804 and/or to quantified environmental characteristics of construction products or services, that:
 - CEN/TC 350 shall be informed and consulted regarding the content of the draft construction product SReq prior to their acceptance;
 - CEN/TCs involved in the execution of the SReq shall contact CEN/TC 350 to inform about the standards of concern and liaise with CEN/TC 350 to apply the workflow and templates of CEN/TC 350 when developing complementary PCRs to avoid conflicts with EN 15804;

2022-04-22 - ALG

CEN/BT decisions: Informing each other when work starts + liaise

I.

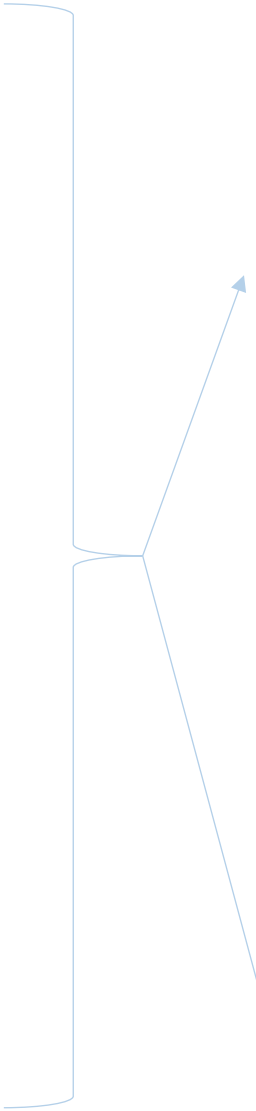
WE ARE IN A
CHAOTIC PERIOD
WHICH IS LOGIC
AS EVERY MAJOR
TRANSITION
COMES WITH
UNCERTAINTY.

*USA financial supporting acts
Wars stressing resources
Post covid price hausse*

- CARBON AND CLIMATE
- WASTE FRAMEWORK DIRECTIVE
- LCA
 - CPR, CPR Acquis, CPR Revision
 - EPBD revision: mandatory GWP?
 - Carbon certificates?
 - LEVEL(s)
 - Ecodesign for sustainable products regulation (espr)
 - Digital product passport
 - Building logbook and renovation passport
 - National initiatives
 - Green claims
 - EN 15804, EN 15978
 - GPP

- FINANCE: EU TAXONOMY
- CIRCULARITY
- DIGITILIZATION

DIETER DE LATHAUWER \ EOTA FORUM



We should focus
on a robust and
complete
implementation
and guidance of
what is on our
(large) plate
right now.
This all costs
money, lets do it
right.

Don't wait for
stability.

II.

LETS STAY
POSITIVE AND
FIND
OPPORTUNITIES

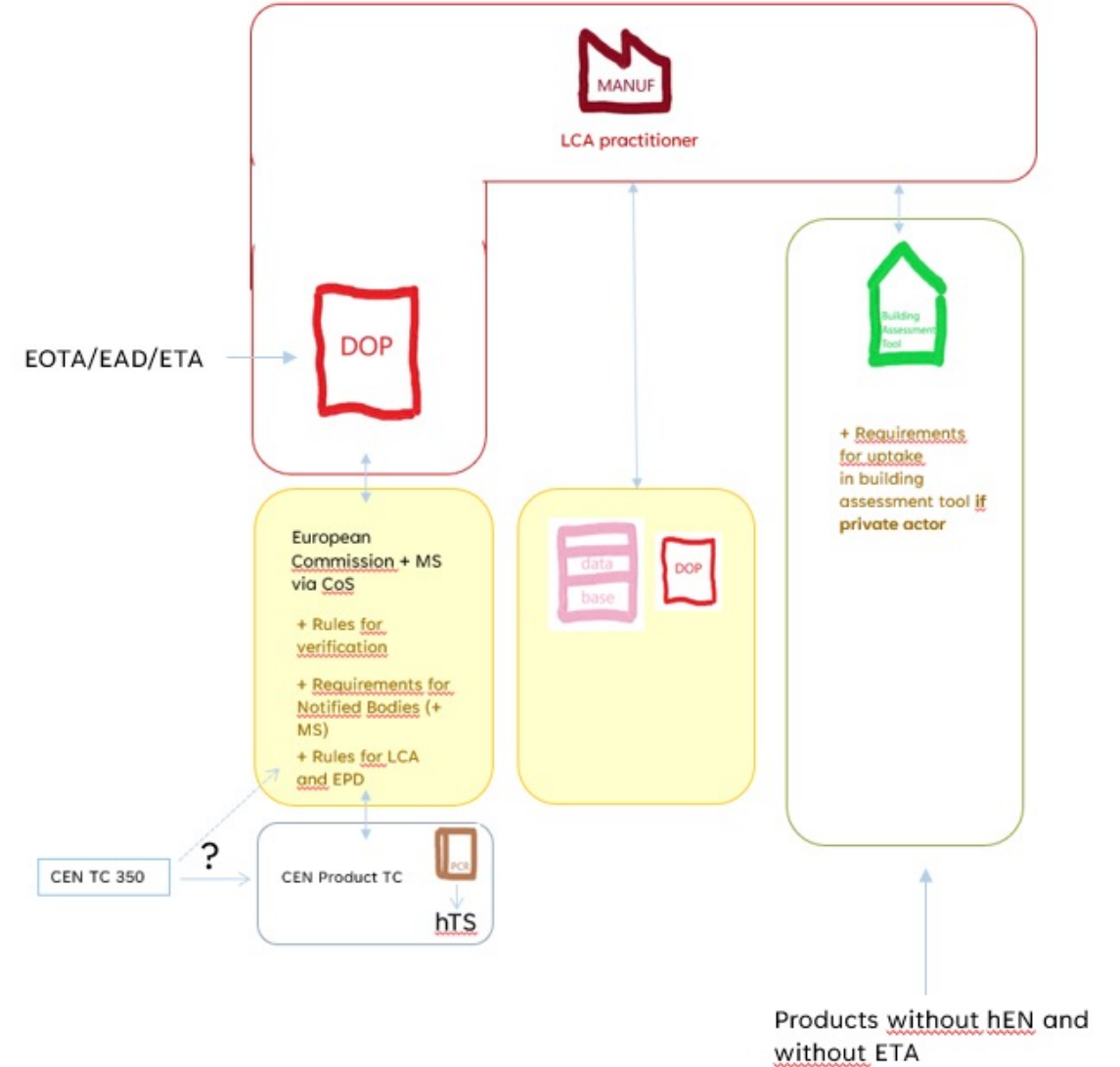
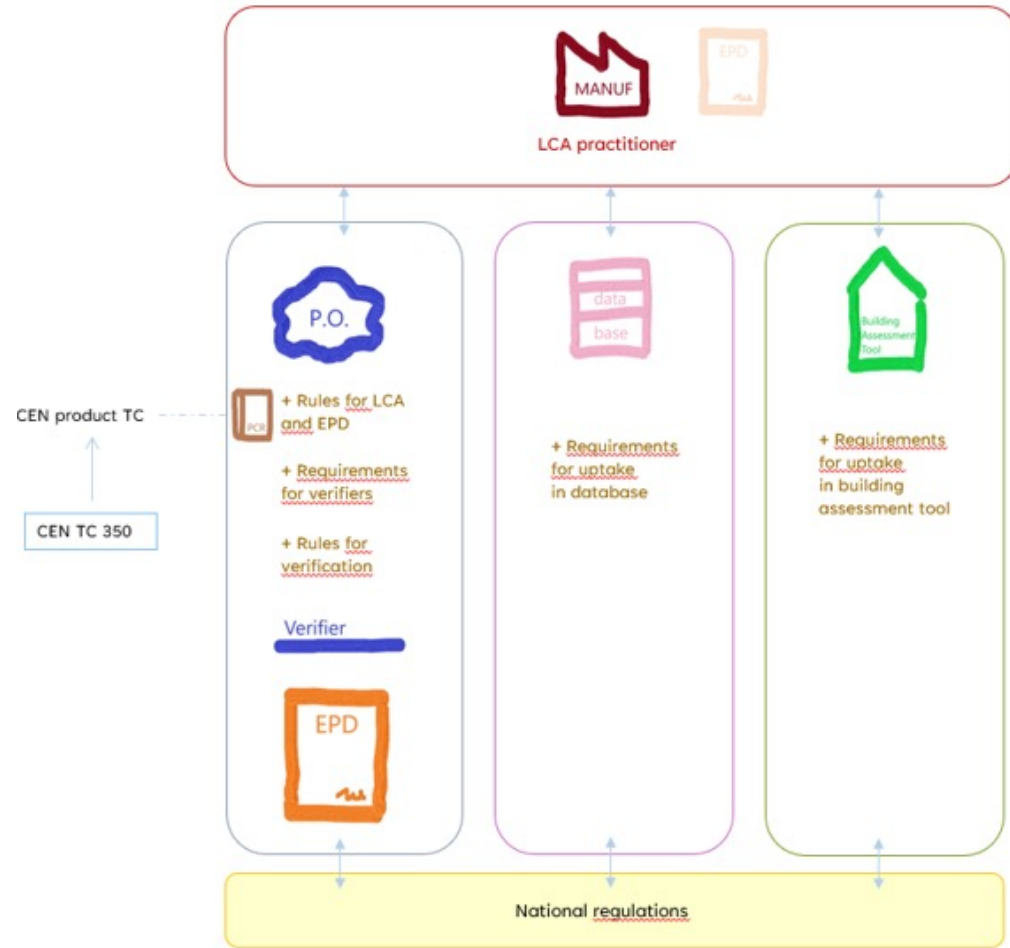
- EU MARKET FOR PRODUCTS
- EXEMPLARY ROLE
- GROUP INITIATIVE TO LOWER THE COST OF THINGS THAT ALREADY HAPPEN
- LEVEL PLAYING FIELD
- LOWERING PRODUCTION COSTS BY IDENTIFYING HOTSPOTS
- A MORE EFFICIENT CONSTRUCTION SECTOR (REGION DEPENDENT)
- **EVERY COMPANY SHOULD REFLECT ON FINDING ASSETS AND CRITICALLY ASSESS WHAT THESE CHANGES MEAN AND HOW THEY CAN BE TURNED INTO SOMETHING POSITIVE.**

III.

SOME CHALLENGES COMING WITH THE ENVIRONMENTAL ELEMENTS IN THE CPR REVISION

- HELP UNDERSTANDING THE COMPLEX CPR
- **FROM EPD TO DOP**
 - From realistic average to Worst case
 - From 5y validity to Keeping it updated
 - Transport: factory address not disclosed
 - Eu scenarios
 - Loss of EPD metadata? Understandability for the user let alone the computer?
- EU C-PCR DEVELOPMENT
- SLOW TIMELINE LEADING TO COEXISTING DATA
- CONSISTENCY AT BUILDING LEVEL
- PREPARE FOR BIG DATA !!
- ACCURACY, UNCERTAINTY, ROBUSTNESS
- MS SHOULD PREVENT CHERRY PICKING IF NOT ALL INDICATORS MANDATORY
- MARKET SURVEILLANCE
- **WHY NO OBLIGATION FOR THE SUPPLIERS TO PROVIDE ENVIRONMENTAL DATA TO THE MANUFACTURERS?**
- IMPLEMENTATION !!!!!!!!!!!!!!!!!!!!!!!

FROM EPD TO DOP



IV.

CONSISTENCY AT BUILDING LEVEL

Number of indicators declared
Functional unit
Possible conflicts between product groups
...

- How to guarantee
- (i) alignment with EN 15804,
 - (ii) comparability and
 - (iii) possibility to aggregate at building level?



EUROPEAN COMMITTEE FOR STANDARDIZATION



Revised Construction Products Regulation

30 March 2022
#EUGreenDeal
#CircularEconomy

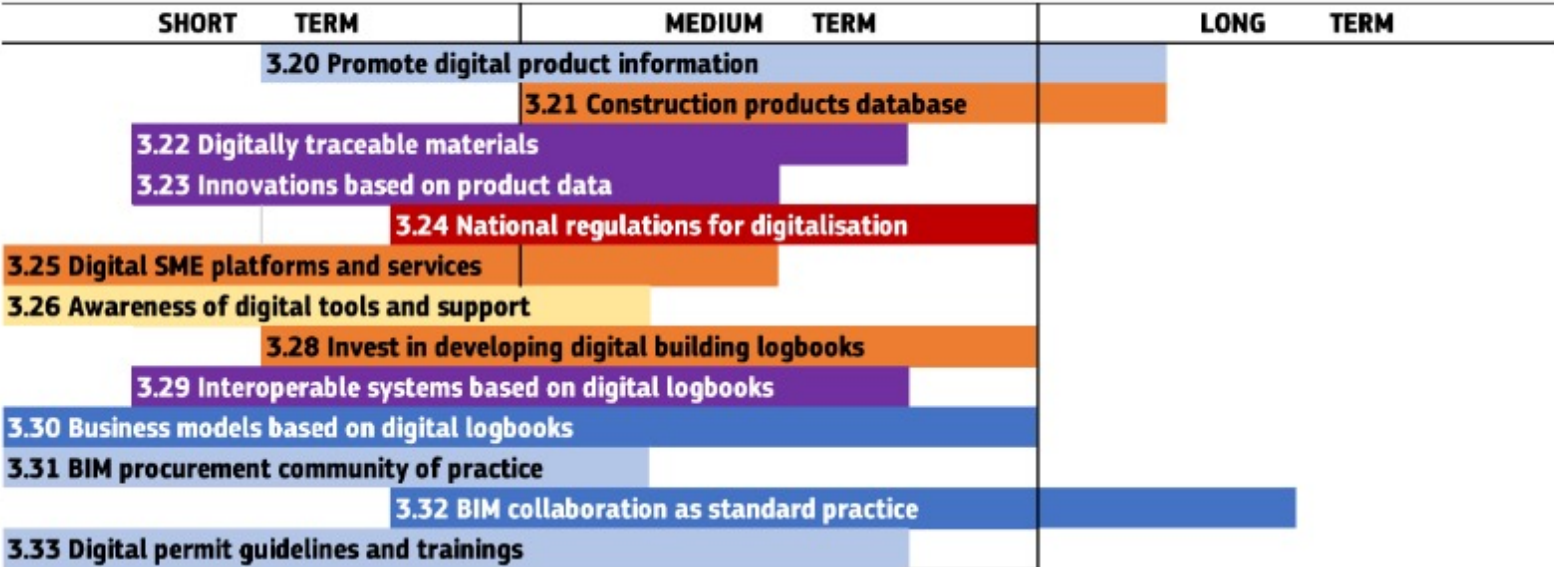
CEN/TC 350
for commenting on EN 15804

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
establishing a framework for setting ecodesign requirements for sustainable products
and repealing Directive 2009/125/EC

Non-harmonized zone

EU transition pathway for the construction sector

Roadmap 6: Towards a fully digital construction and built environment



https://single-market-economy.ec.europa.eu/sectors/construction/construction-transition-pathway_en

V.

BUILDINGS LAST A LONG TIME, LETS LOOK BEYOND CLIMATE AND CARBON

- CONSTRUCTION WORKS HAVE A VERY LONG LIFE SPAN
 - DECISIONS WE TAKE NOW HAVE A LONG EFFECT
 - FOCUS ON CLIMATE ONLY WILL CAUSE BURDEN SHIFTING FOR BOTH THE ENVIRONMENT AND FOR THE CONSTRUCTION SECTOR
 - EN 15804 AND PEF PROVIDE IN MORE ENVIRONMENTAL IMPACT CATEGORIES
 - THE ADDITIONAL FINANCIAL BURDEN IS LITTLE
 - THE USERS WANT THE INFORMATION
- => INCLUDE THEM IN THE DECLARATION

TABLE ES.1 Summary of past trends, outlooks and prospects of meeting policy objectives/targets

Theme	Past trends and outlook		Prospects of meeting policy objectives/targets		
	Past trends (10-15 years)	Outlook to 2030	2020	2030	2050
Protecting, conserving and enhancing natural capital					
Terrestrial protected areas			<input checked="" type="checkbox"/>		
Marine protected areas			<input checked="" type="checkbox"/>		
EU protected species and habitats			<input checked="" type="checkbox"/>		
Common species (birds and butterflies)			<input checked="" type="checkbox"/>		
Ecosystem condition and services			<input checked="" type="checkbox"/>		
Water ecosystems and wetlands			<input checked="" type="checkbox"/>		
Hydromorphological pressures			<input checked="" type="checkbox"/>		
State of marine ecosystems and biodiversity			<input checked="" type="checkbox"/>		
Pressures and impacts on marine ecosystems			<input checked="" type="checkbox"/>		
Urbanisation and land use by agriculture and forestry					<input checked="" type="checkbox"/>
Soil condition			<input checked="" type="checkbox"/>		
Air pollution and impacts on ecosystems			<input type="checkbox"/>	<input type="checkbox"/>	
Chemical pollution and impacts on ecosystems			<input checked="" type="checkbox"/>		
Climate change and impacts on ecosystems			<input checked="" type="checkbox"/>		
Resource-efficient, circular and low-carbon economy					
Material resource efficiency			<input checked="" type="checkbox"/>		
Circular use of materials				<input type="checkbox"/>	
Waste generation			<input type="checkbox"/>		
Waste management			<input type="checkbox"/>		
Greenhouse gas emissions and mitigation efforts			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Energy efficiency			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Renewable energy sources			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Emissions of air pollutants			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pollutant emissions from industry			<input type="checkbox"/>		
Clean industrial technologies and processes			<input type="checkbox"/>		
Emissions of chemicals			<input checked="" type="checkbox"/>		
Water abstraction and its pressures on surface and groundwater			<input checked="" type="checkbox"/>		
Sustainable use of the seas			<input type="checkbox"/>		
Safeguarding from environmental risks to health and well-being					
Concentrations of air pollutants			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Air pollution impacts on human health and well-being				<input checked="" type="checkbox"/>	
Population exposure to environmental noise and impacts on human health			<input checked="" type="checkbox"/>		
Preservation of quiet areas			<input checked="" type="checkbox"/>		
Pollution pressures on water and links to human health			<input checked="" type="checkbox"/>		
Chemical pollution and risks to human health and well-being			<input checked="" type="checkbox"/>		
Climate change risks to society			<input type="checkbox"/>		
Climate change adaptation strategies and plans			<input type="checkbox"/>		
Indicative assessment of past trends (10-15 years) and outlook to 2030			Indicative assessment of prospects of meeting selected policy objectives/targets		
	Improving trends/developments dominate	Year	<input checked="" type="checkbox"/>	Largely on track	
	Trends/developments show a mixed picture	Year	<input type="checkbox"/>	Partially on track	
	Deteriorating trends/developments dominate	Year	<input checked="" type="checkbox"/>	Largely not on track	

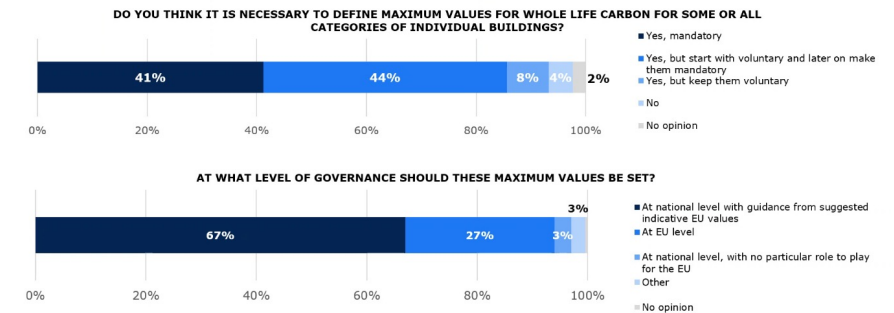
Note: The year for the objectives/targets does not indicate the exact target year but the time frame of the objectives/targets.

VI.

IF WE WANT
CAPACITY
BUILDING WE
NEED
PERFORMANCE
BASED GOALS
BOTH AT
PRODUCTS AND
AT WORKS LEVEL

- “IF YOU WANT TO SCORE YOU NEED A GOAL.” COMPANIES WANT AND NEED TO SCORE.
- ROADMAP FOR DECARBONIZING BUILDINGS IS NOT SUFFICIENT

Strong support for mandatory maximum values – and for a harmonised approach with an option for national target values



- A **EU SUSTAINABLE BUILDING DIRECTIVE ?**
- EVEN IF MAIN DRIVER IS THE CONSTRUCTION WORK, STILL THE PRODUCTS LEVEL SHOULD NOT BE FORGOTTEN.
 - Obligation to prevent premature obsolescence?
 - Obligation to design in such a way that they can easily be repaired?
 - Obligation to provide information on how to easily repair?
 - Obligation to design products in such a way that reuse, remanufacturing and recycling are facilitated?
 - Extended producer responsibility?
 - The obligation as a supplier to deliver environmental data?



European
Commission

JRC TECHNICAL REPORT

EU Green Public Procurement (GPP)
criteria for the design, construction,
renovation, demolition and management
of buildings.

*DRAFT TECHNICAL REPORT
(v1.0)*

Shane Donatello, Aleksandra Arcipowska,
Zahara Perez, Angela Ranea

February 2022

VII.

WHO WILL ESTABLISH AND MONITOR A RENOVATION MASTERPLAN

- THEORY AND REAL LIFE ARE OFTEN DIFFERENT (OWN EXPERIENCE): UNDERESTIMATION OF THE FEASIBILITY OF LIGHT RENOVATIONS >> AVOID THIS IN THE FUTURE.
- RENOVATION RATE IN BELGIUM: 1%
- EPBD RENOVATION OBLIGATION, WILL THE COMMISSION PROPOSAL OF MANDATORY RENOVATION STAND?
- THERE IS A STRATEGY “A RENOVATION WAVE FOR EUROPE - GREENING OUR BUILDINGS, CREATING JOBS, IMPROVING LIVES”
 - Focus lies on climate and on EU
 - Translation to the real world?
- ACTIONS, RESPONSIBILITIES, TIMING, INTERACTION, ...
- **EU SUSTAINABLE BUILDING DIRECTIVE?**

60 km was too far for a specialised contractor
Outside insulation no option
Inside insulation = big investment
Heating on gas = not old enough to renew (roi), low temperature would be high investments
Architectural details (bombed glass) – no room for traditional skills?

= domino effect



VI.

CIRCULARITY

- PRIORITY: DEVELOP AN EU TECHNICAL FRAMEWORK FOR REUSE OF CURRENT BUILDING STOCK OF MATERIALS
- DEVELOP A SET OF COMMON INDICATORS FOR NEW PRODUCTS
- FOCUS ON BUILDING FOR THE FUTURE: ADAPTABILITY AND REVERSIBILITY INSTEAD OF FOCUSING ON DECONSTRUCTION
- COORDINATION !!!!

CIRCULARITY: example of MANDATORY INFORMATION ON REVERSIBILITY

]

Description	Type of fixing	Level of reversibility	Simplicity of disassembly	Speed of disassembly	Ease of handling (size and weight)	Robustness of material (material resistance to disassembly)	Comment
Describe to what element or other product the product is installed to	Description of ancillary material and way of connecting. One line per way of connecting. See table below for options.	Indicate the level of reversibility based on the table below per type of fixing . <ul style="list-style-type: none"> - Reversible connections - Reversible connections with light repairable damage - Reversible connections with non-repairable damage - Non reversible connections 	per type of connection, choose from <ul style="list-style-type: none"> - simple – no specific dismantling tools required - Simple – requires the use of specific though common tools - Simple, but collecting the material is a bit more intensive (ex. bulk material) - More complex - requires specific tools and/or skills 	Per type of connection choose from <ul style="list-style-type: none"> - speedy disassembly - Speedy, lightweight material - Speedy, material loosely laid / in bulk - Rather speedy disassembly - Speed of disassembly varies from quick to slow depending on element dimensions - Speed of disassembly varies from quick to slow depending on element dimensions and number of fixations per distance unit - Disassembly is slow (due to dimensions, weight and/or fixation method) 	Per type of connection choose from <ul style="list-style-type: none"> - Easy to manipulate (by hand (small size and limited weight): one worker should be sufficient - Material easy to manipulate by hand, one to two workers required depending on dimensions - Can be handled manually, but due to size, weight and/or tools two or more workers are required - At least two workers and additional specific equipment are needed - Comes in a manipulable size, but the whole is rather heavy to manipulate. 	Per type of connection choose from <ul style="list-style-type: none"> - The material resists well during disassembly - Disassembly is possible but should be done carefully in order not to generate any damage - Material with a long lifespan, disassembly is possible but the material should be handled with care in order to prevent damaging it - Disassembly is possible but can cause damage to the material due to the type of assembly or fixing used. - Disassembly is possible but will likely cause damage to the material due to the type of assembly or fixing used - Disassembly is possible but will likely cause damage to the material due to the type of assembly or and tools used and the presence of additional layers. 	
e.g. Bricks joint together to form an external wall	cement mortar for masonry joints (R joint \geq Rmat)	E.g. Non reversible connections.					
e.g. Insulation attached to concrete flat roof structure	Loose laid with ballast	e.g. reversible connections					
e.g. Insulation attached to concrete flat roof structure	screws	reversible with light repairable damage	simple - use of dismantling tools required	speedy disassembly	easy to handle manually, one workers is usually sufficient	disassembly is possible but should be done carefully in order not to generate any damage	
...					



VII.

WE NEED A FEELING OF AT LEAST SOME CONTROL: CHANGE MANAGEMENT AND COORDINATION!

- WE ARE MOSTLY STUCK INTO THE NARROW LOOK OF A ONE STEP SEPARATED HIERARCHY AND TAKES A LOT OF HUMAN AND FINANCIAL RESOURCES, CREATES FRICTION AND RESISTANCE
- COMMUNICATION! OVERVIEW! HOW IS EVERYBODY INTERLINKED INSTEAD OF ONLY SEEING YOUR DIRECT PEERS?
- A LOT OF QUESTIONS EXIST: WHAT IF THERE WOULD BE A **EU PLATFORM** WHERE ALL THE QUESTIONS AND CHALLENGES ARE RECORDED, GROUPED AND TRACKED TO AT LEAST KNOW IF THE RELEVANT STAKEHOLDERS ARE AWARE OF THE CONCERN? (EXTENSION OF THE HIGH LEVEL CONSTRUCTION FORUM?)
- THE NUMBER OF LCA EXPERTS IS NOT UNLIMITED.
- **EVERY INITIATIVE AND PLATFORM SHOULD IDENTIFY CONNECTIONS AND LIAISE IN AN ACTIVE WAY**

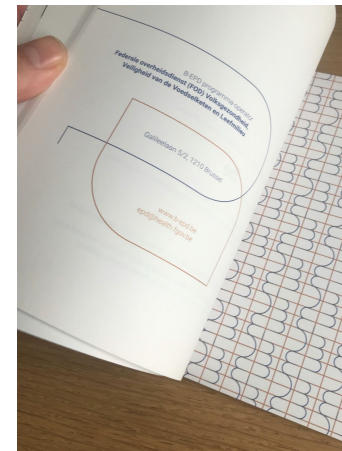
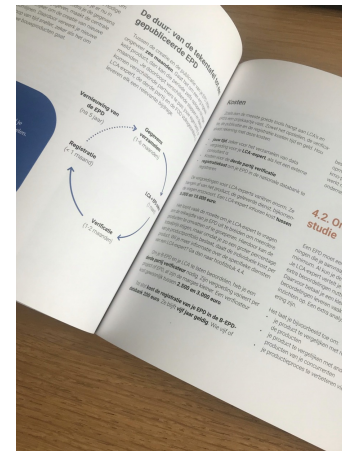
Roadmap 5: Towards a greener built environment

SHORT TERM	MEDIUM TERM	LONG TERM
3.4 Prioritise renovation over demolition		
3.10 Sustainability requirements for products		
3.11 Extend service life through maintenance		
3.12 Reporting of whole life carbon		
3.14 Benchmarking environmental performance with Level(s)		
3.15 Consistent calculation of whole life carbon		
	3.16 Equivalent of Level(s) for infrastructure	
	3.18 Align national assessment schemes with Level(s)	
3.19 Align procurement to EU green approaches		
3.27 Uptake of environmental analysis tools		
5.3 Public information for renovation financing		

VII.

SME

- WHAT ARE THE TRUE NEEDS OF BOTH SME'S AND THE ARCHITECTS AND THE CONTRACTORS AND DOES AN ETA CREATE THE NECESSARY ADDED VALUE?
- CONSEQUENCES OF AN EAD NO LONGER A HARMONIZED TECHNICAL SPECIFICATION?
- HOW TO FOSTER INNOVATION?
- ADMINISTRATIVE BURDEN? HOW TO AVOID CONSULTANTS?
- UNDERSTANDING?
- COST?
- DO WE HAVE A PROPER PLAN AND GUIDANCE FOR CONSTRUCTION COMPANIES EMBRACING INNOVATION? IF NOT, LET'S PROVIDE ONE.
- COMMUNICATION: **MOST GUIDES FOCUS ON THE WHAT TO DO, NOT ON THE IMPLICATIONS FOR YOUR ORGANIZATION, GOVERNANCE, WHO TO INVOLVE, ETC.**



IN A NUTSHELL



- LCA is becoming mainstream, right now.
- From EPD to DoP has consequences
- A plethora of policy actions and measuring tools exist. If we want efficient use of our resources, we need proper change management and coordination over the different actors. Supporting measures!
- All change is difficult, and it will come at a cost. List the needs to make sure all stakeholders are heard and identify the priorities to join forces.
- Address the societal consequences
- As environment will become an essential part of the CPR, we should safeguard that also the composition of the committees and expert groups reflects thi
- We need a proper plan and guidance for construction companies embracing innovation
- A sustainable building directive could be the right trigger to bring everything together: enabling MS targets, reporting, information platforms, pushing green public procurement, bringing all actors together, ...



Competitiveness on the long run will not be achieved by lowering the bar. Be ambitious.

Every change with high investment costs needs a properly managed plan.
It's not just about indicators, goals and performance.
It's also about values, people and motivation.

We need more tasty carrots, less sticks.

THANK YOU

dieter.delathauwer@health.fgov.be

Disclaimer: this presentation expresses my own personal views and is not an official position of CEN TC/350.
This presentation is highly susceptible to changes as a lot of the information is extremely fluid for the time being.