



European Standardization Organizations

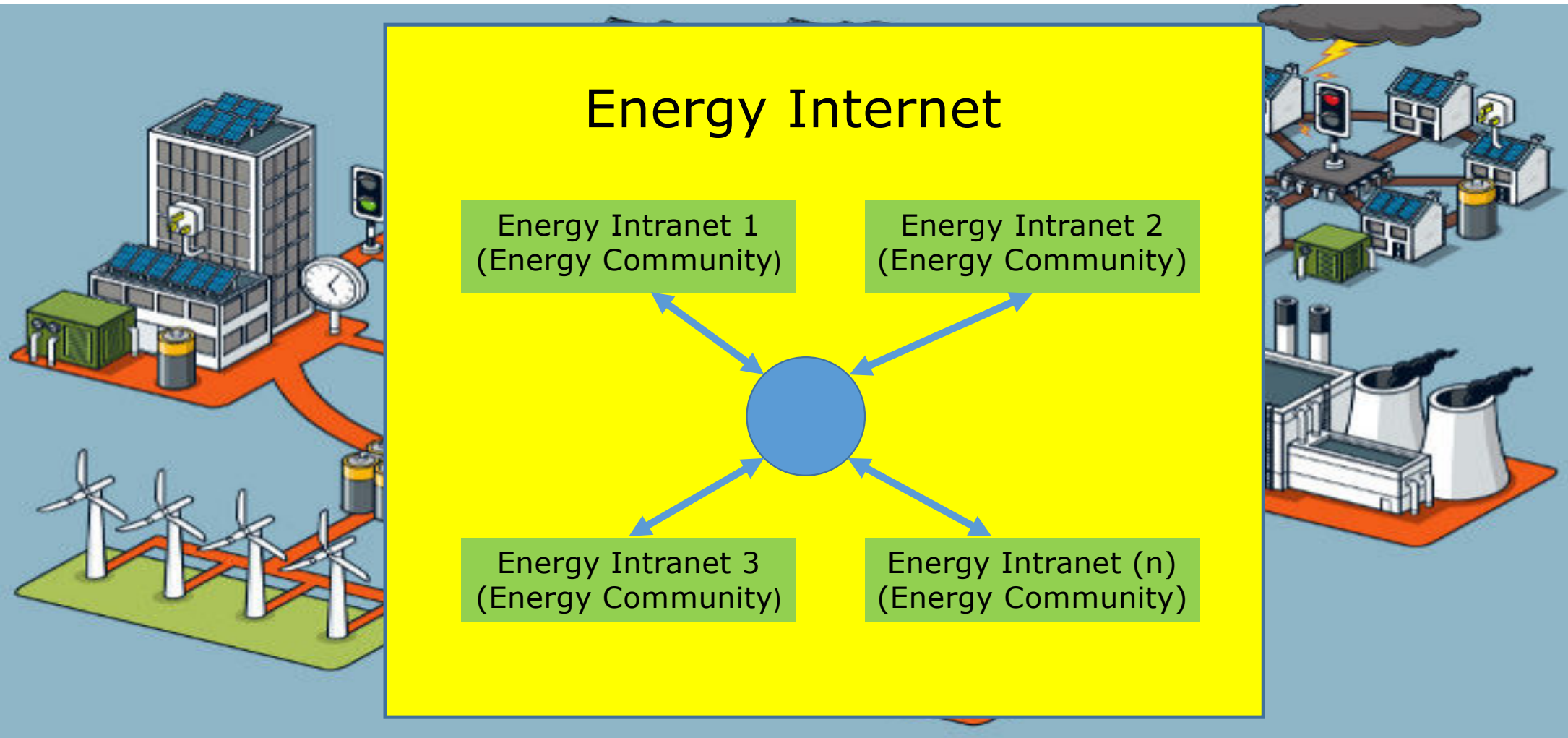
## Innovative approach to use standards in a new business model blockchain ready

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# Agenda

- The critical success factors to derisk energy efficiency improvement projects
- The energy efficiency framework and process
  - ✓ today
  - ✓ tomorrow
- Take away

# The way forward to supply energy efficient demand and cleaner energy

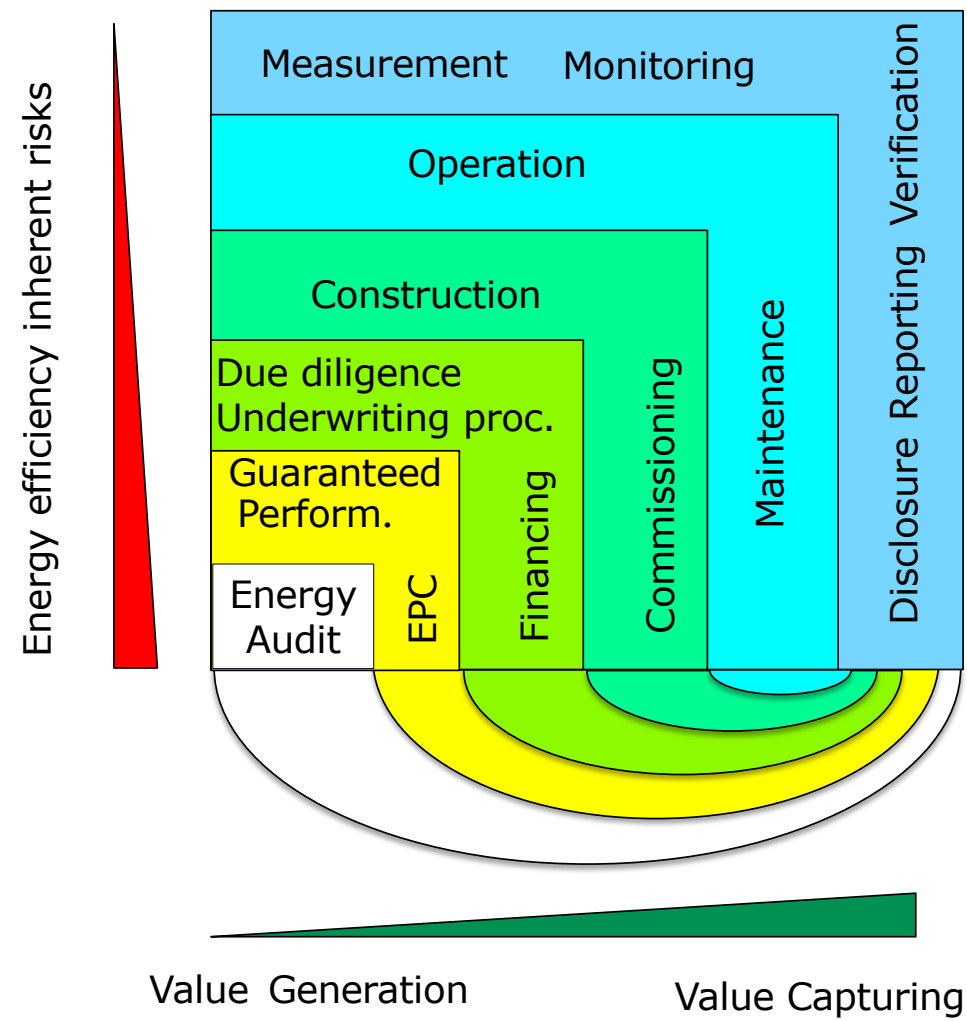


## The critical success factors

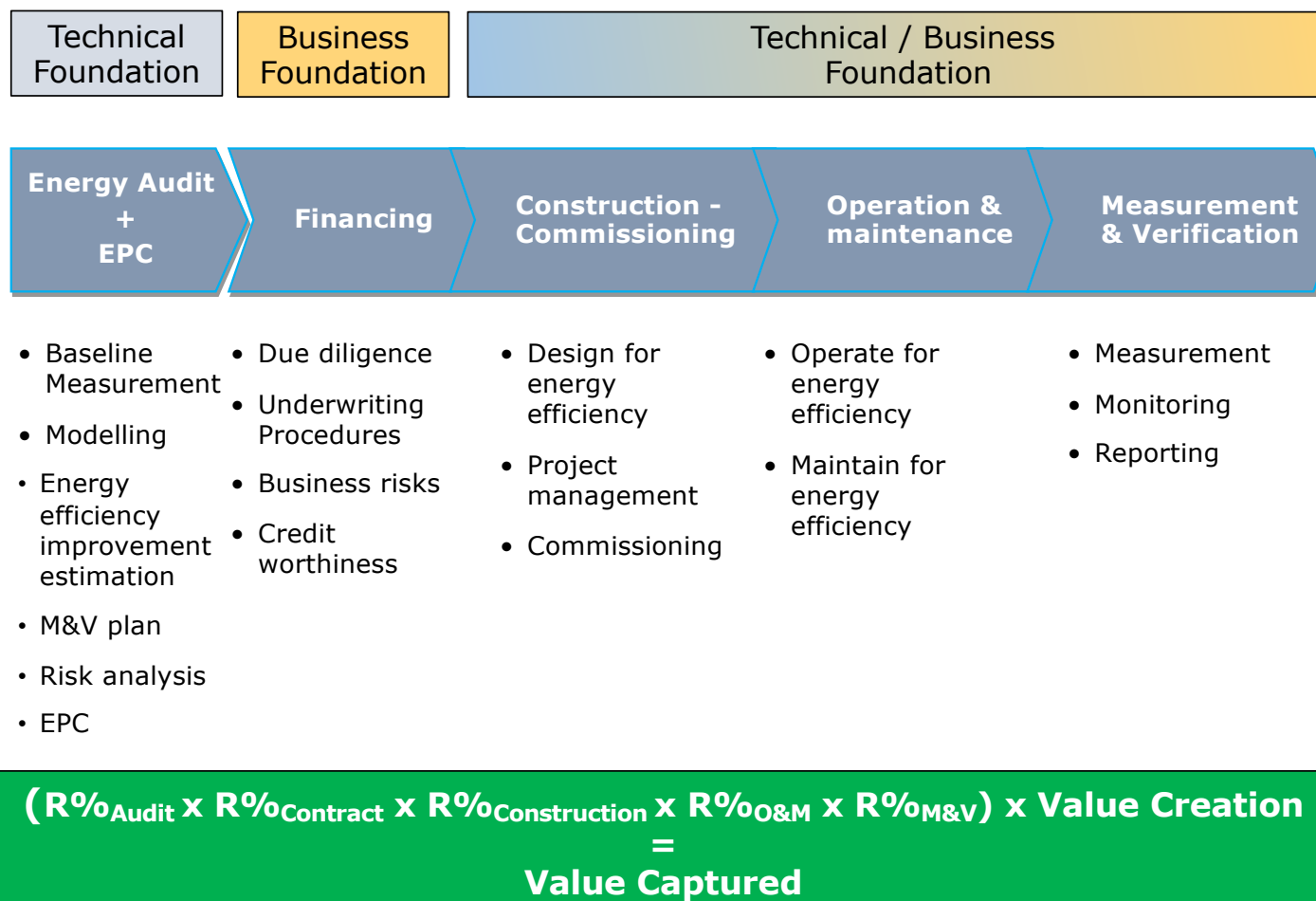


- Establish a framework on how energy efficiency improvement becomes environmentally and financially “material”
- Establish a framework on how financial and non financial reporting (ESG) & disclosures integrate energy efficiency improvement “materiality”
- “Materiality” embeds end to end:
  - Results (quantitative and qualitative)
  - Transparency
  - Traceability
  - Trustworthiness
  - Lean and cost effective execution

# The energy efficiency framework “building blocks”

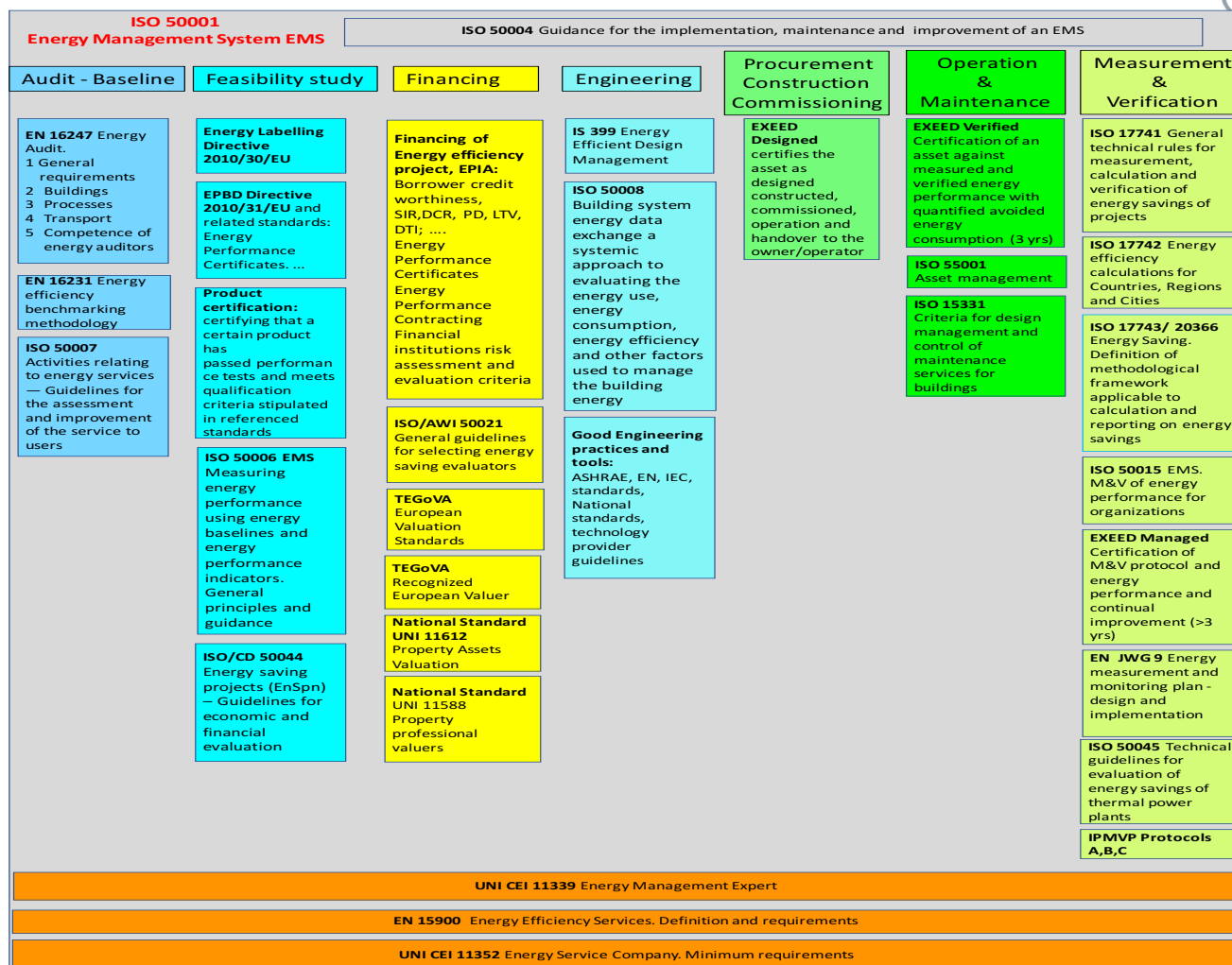


# The value chain risk is multiplicative: is as good as the weakest component

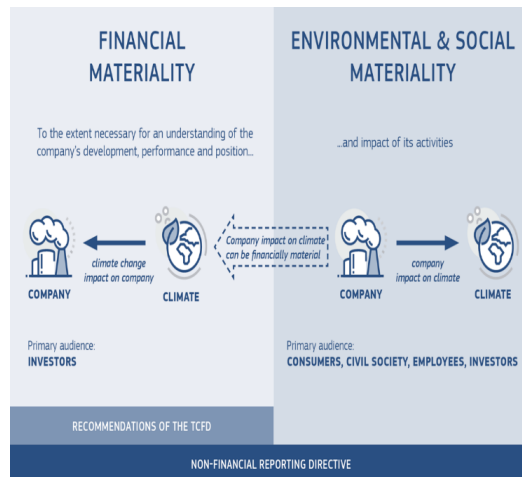




# Linking standards to derisk energy efficiency improvement providing materiality and transparency along the value chain



# The sustainable finance materiality: qualitative vs quantitative approach to derisk energy efficiency



\* Financial materiality is used here in the broad sense of affecting the value of the company, not just in the sense of affecting financial measures recognised in the financial statements.



**Taxonomy: Final report of the Technical Expert Group on Sustainable Finance**  
March 2020

The International Accounting Standards Board (Board) issued *Definition of Material* (Amendments to IAS 1 and IAS 8) in October 2018. The amendments refine the definition of material in IAS 1 *Presentation of Financial Statements* and align the definitions used across IFRS Standards and other publications.

The amended definition of material states:

Information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.

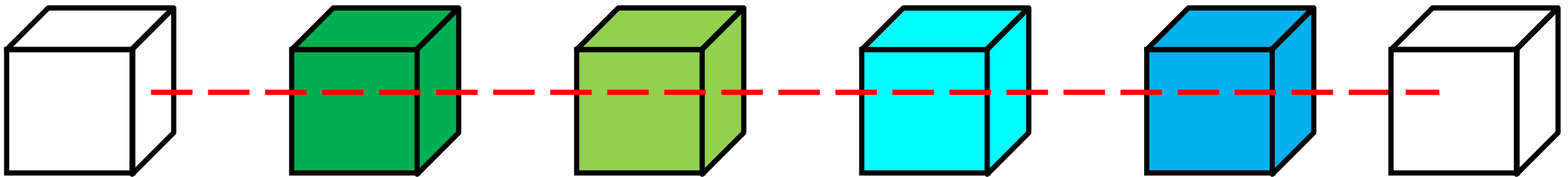
The amendments are effective from 1 January 2020 and are required to be applied prospectively. Early application is permitted.

22.6.2020	EN	Official Journal of the European Union	L 195/13
REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance)			
THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,			
Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,			
Having regard to the proposal from the European Commission,			
After transmission of the draft legislative act to the national parliaments,			
Having regard to the opinion of the European Economic and Social Committee (*),			
Acting in accordance with the ordinary legislative procedure (*),			



What if:

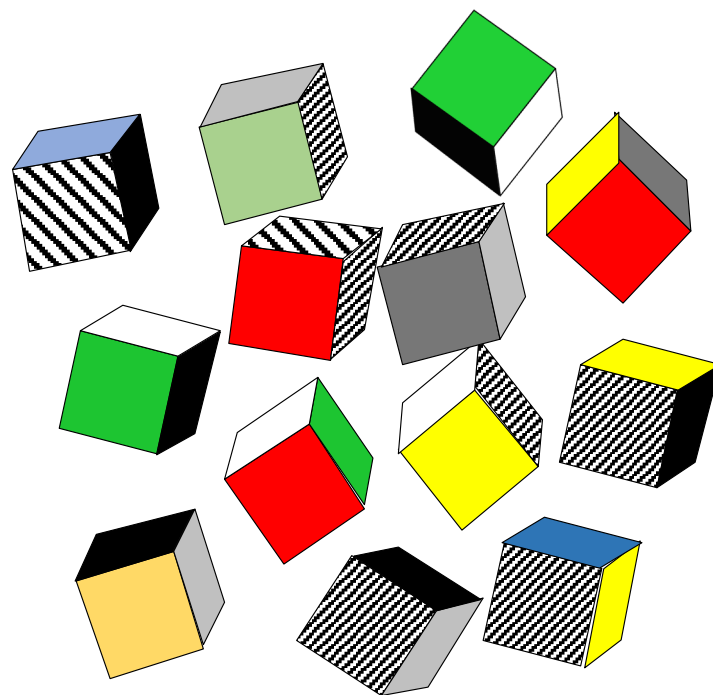
..... the building blocks would have a simple, standardized, transparent framework and taxonomy



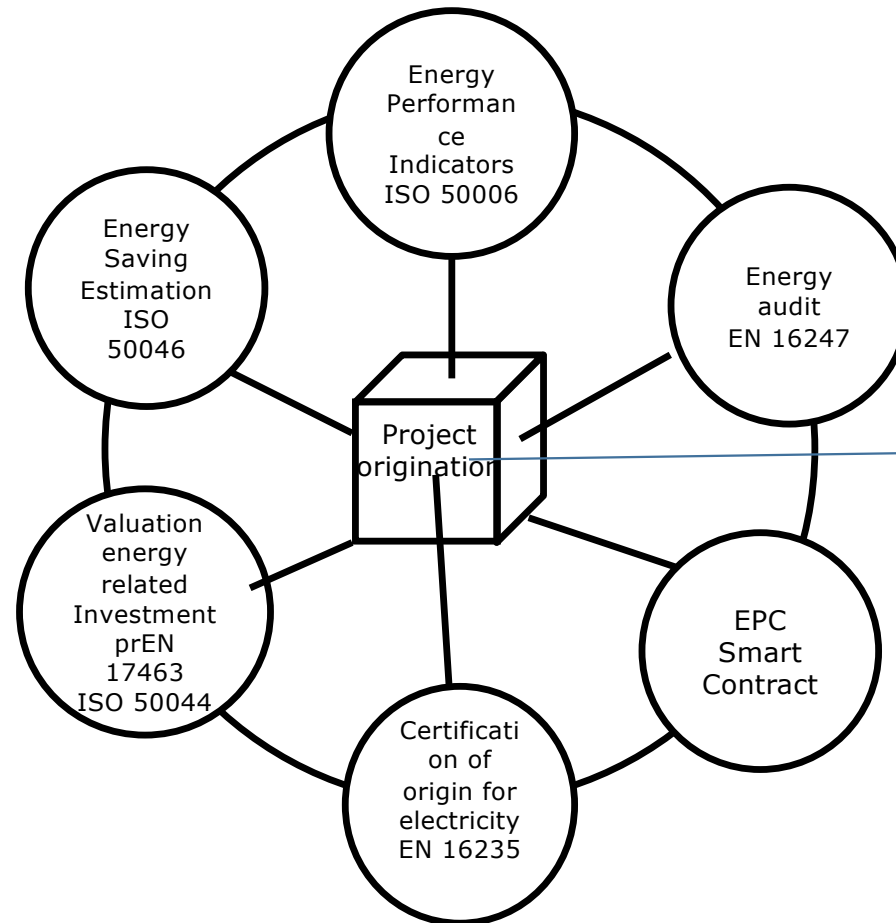
Each block is a network node (clearance house) of the transaction and has quantitative algorithm to check for materiality and risks assessment using agreed standards. RegTec

Blockchain based Chain of Custody strengthens the Value Chain

“Building blocks” are not integrated

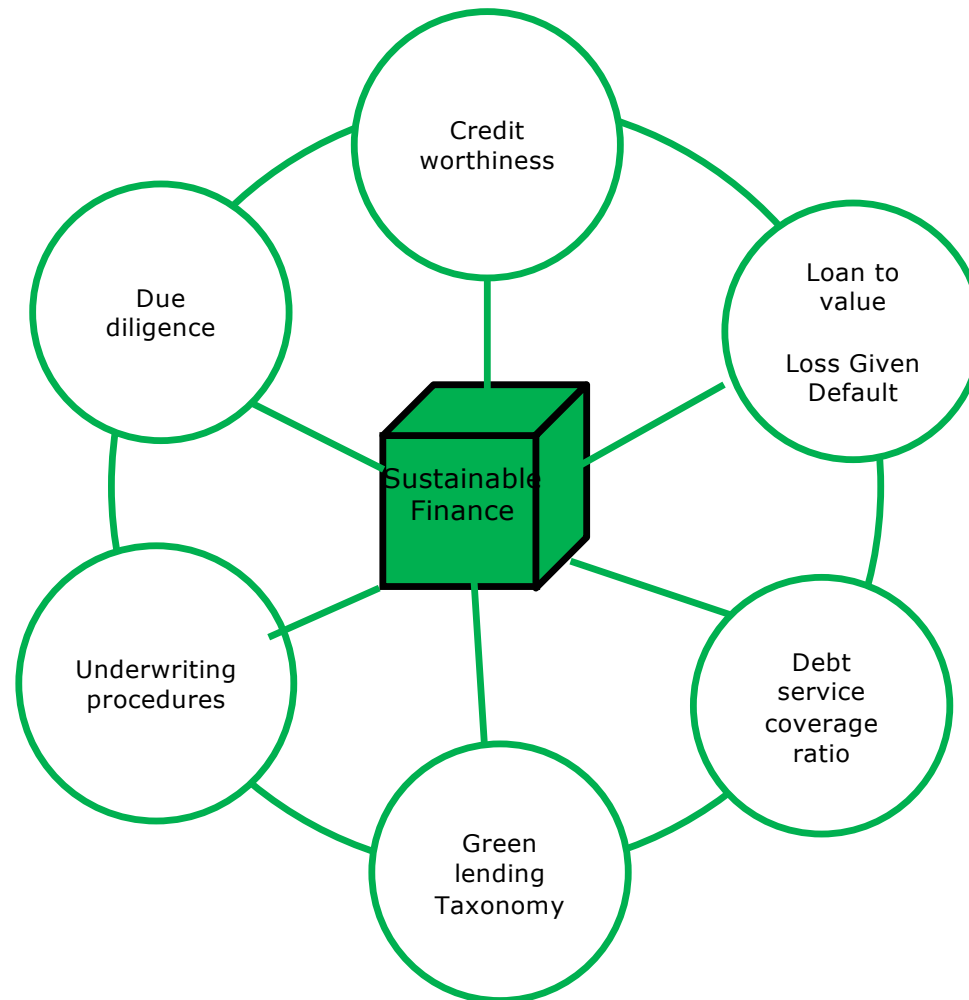


# The energy efficiency origination block

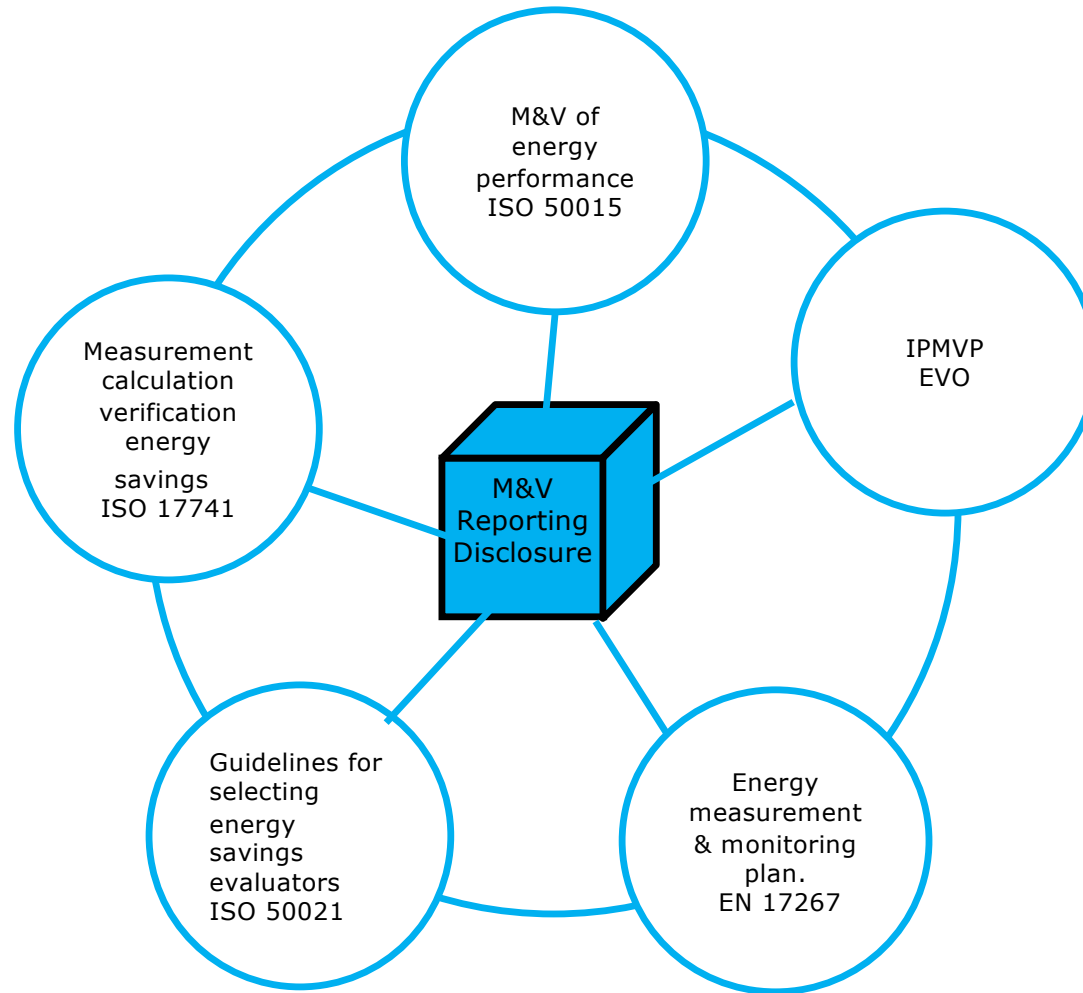


Clearance House  
Information aggregation  
Check for agreed  
standards compliance

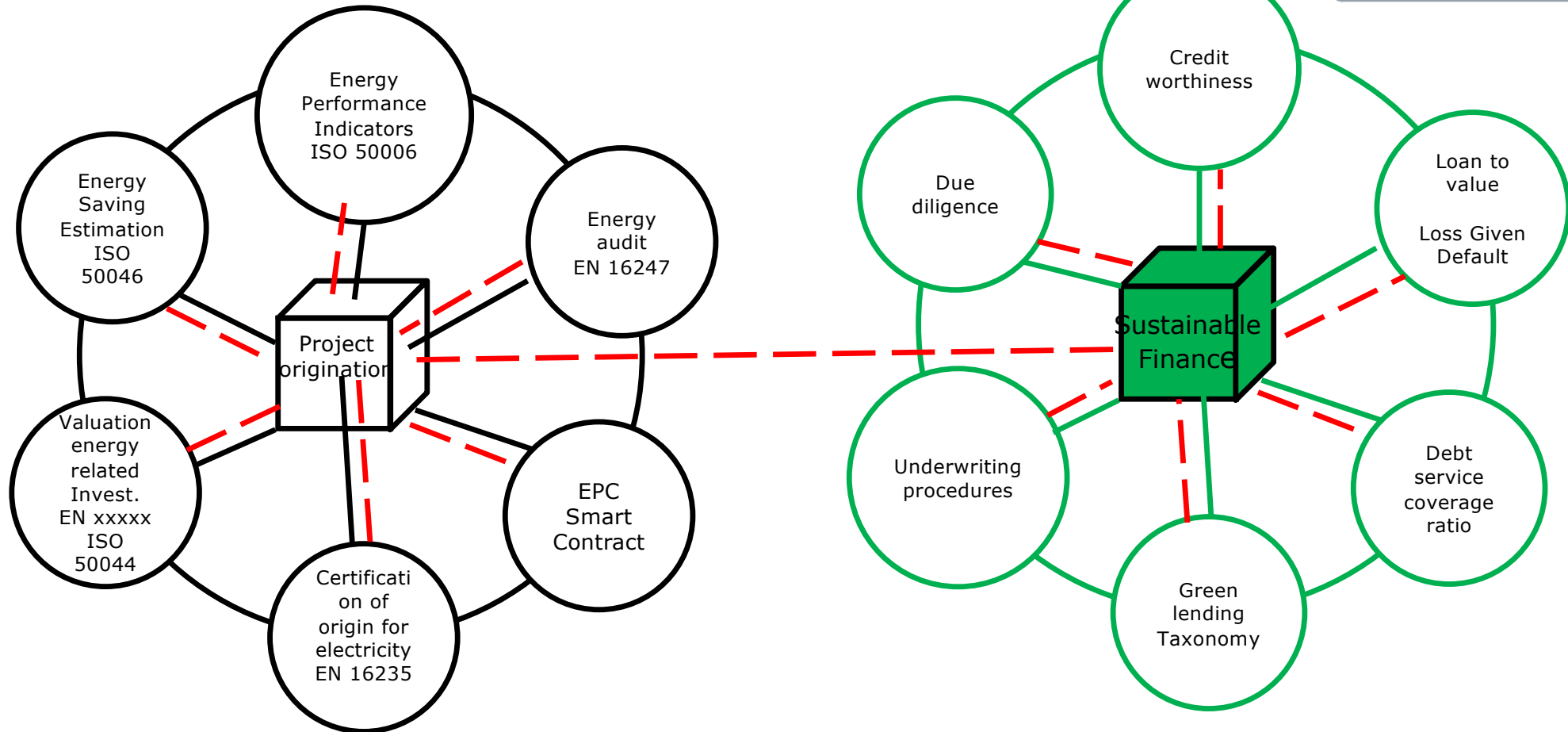
# The sustainable financing block



# The M&V and reporting block

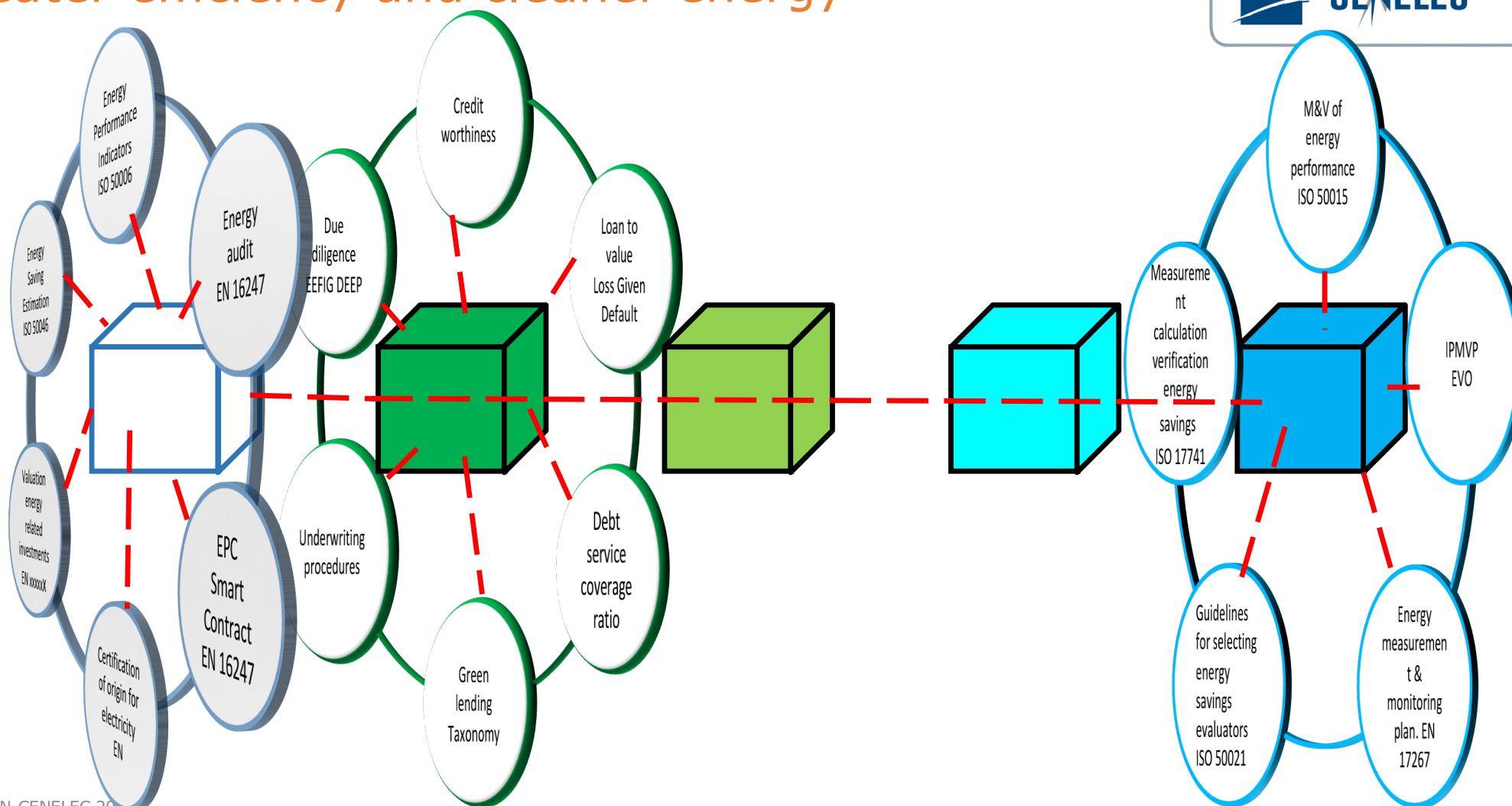


# Connecting the blocks to derisk energy efficiency

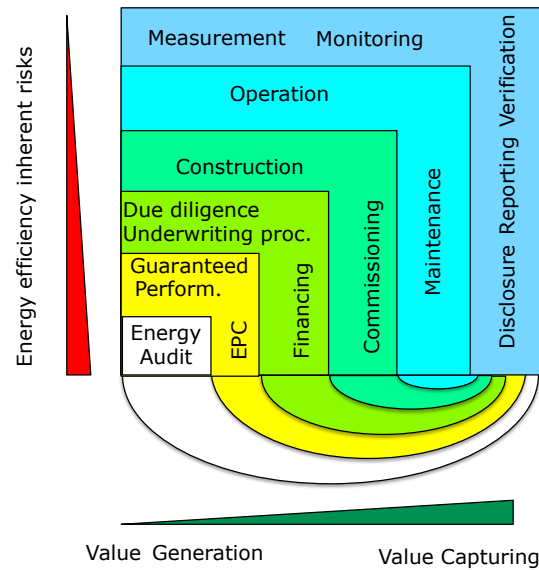




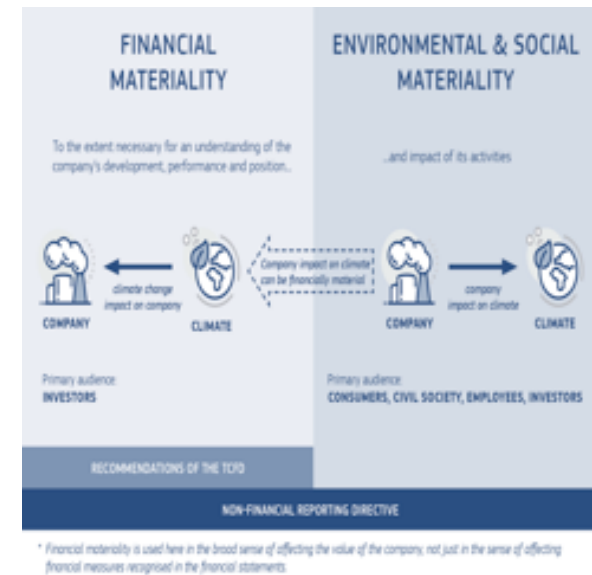
# Can Blockchain catalyze the transformation towards greater efficiency and cleaner energy



# How can this conference help?



Mind the gap



Connecting the missing dots of materiality enabling digitalization along the value chain

# Growing responsibilities on all of us



- Derisk 1,8 Trillion investments of Green Deal financing and sustainable recovery
- Enable greater transparency and accountability along the supply chain
- Impact on delivering decarbonization, streamlining eligibility, reporting, disclosure
- Promote the use of technical, accounting, financial, ESG “materiality” on blockchain tool
- Dissemination of information to any interested party: Consumer, Service Supplier, Investors

# Your CEN CENELEC interfaces for the Energy Internet



## SFEM

Sector Forum Energy  
Management &  
Energy Transition

## SABE CE-TG

Strategic Advisory Board  
Environment  
Circular Economy  
Technical Group

### Scope

- Maintain overview of the CE initiatives and exchanges within CEN/CLC
  - Identify standardization needs
  - Identify and prioritize related cross sectorial issues related to best practices technology, financeability, materiality
- 
- Liaise with relevant CEN/CLC TCs for common understanding of standardization matters on Energy Management and Energy Transition
- 
- Liaise with relevant CEN/CLC TCs for common understanding of standardization matters on CE

# Energy management standards in revision or in development – Blockchain ready



- Energy audit
- Valuation of energy related investments
- Energy Performance Contracting
- Certificate of origin for electricity, Hydrogen, Biomethane-Hydrocarbon, Heating&Cooling
- EN ISO 50001 Energy Management System “family”

# The roadmap for the digital transformation of the energy sector – mapping the standard VS use cases



Use Cases	Business Model	Standard
On site optimization for C&I and residential buildings	...	
Smart district		
Energy aggregators		
Customer Data Access		
Smart meters		
Urban energy systems		
Energy Communities	Collective self consumption	
RES Origination		
Improved Grid	Digital Power Grid APM Digital Power Plant Platform as a service	
Flexibility Markets	Grid congestion management platform Single platform for energy trading and ancillary services	

**New SFEM WG Blockchain-Energy**  
**Internet for**  
**energy management-transition**  
[anam@cencenelec.eu](mailto:anam@cencenelec.eu)

Elaboration from :EU Assessment and road map for the digital transformation of the energy sector towards an Innovative internal energy market. March 2020



## Expected benefits



- Single platform to consolidate standardized upstream and downstream data and taxonomy
- Technical and business data quality rules to identify and address risks issues
- Flexibility to aggregate records, projects for downstream energy efficiency and drill down into detailed analysis
- Derisk the Energy transition process integrating technical, accounting, financial and ESG business models

## Take away



- Standards are derisking tools because of embedded taxonomy and “materiality”
- Measuring and valuing the true market benefits of energy efficiency will unlock sustainable finance, deploy risks management and enable reporting/disclosure
- Will blockchain deliver:
  - ✓ cost reduction of energy (efficiency) transactions end to end
  - ✓ a transparent financial and non financial reporting
  - ✓ the way forward to energy efficient demand and cleaner energy supply
  - ✓ meter to cash processes
- Sign up for SFEM WG Blockchain-Energy Internet for energy management & transition

# Thank you

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