





EIC Kick-Off Meeting Agenda

Welcome to EIC Members

- Introduction CRREM
 - High level overview
- Consortium Members
- Overview of Working Packages

- European Investor Committee
 - Role, Responsibilities, and Expectations
- Expected meetings
- Communications

- Strategic input
 - Alignment with other initiatives
- Tool specifications
- Property type classifications
- Research survey

- Next meeting details
- Q&A / Discussion





EIC Kick-Off Meeting Welcome to EIC Members

- alstria office REIT-AG: Alexander Dexne (CFO)
- CDP Carbon Disclosure Project: Alberto Carrillo Pineda (Director Science Based Targets and RE)
- Credit Suisse: Roger Baumann (COO & Head Sustainability/Co-Head Germany)
- EPRA: Gloria Duci (ESG Officer)
- Grosvenor Britain & Ireland: Tim Francis (Head of Research)
- Land Securities: Tom Byrne (Sustainability Manager)
- PGGM: Mathieu Elshout (Senior Director Private Real Estate)
- ZIA: Thies Grothe (Head of Department General Building Policies)

Further EIC candidates:

- Deka Immobilien
- Deutsche Asset Management Investment
- CA Immo
- WorldGBC

EIC has a maximum capacity of 12 representatives







Risk

Increase of intensity and frequency of Extrene Weather Events

Direct and indirect costs of negative long-term changes int the climate system
Impact of "creeping" climate changes like sea level rise or increased extreme weather evetns
(drought, heat, bushfires, flood, storms...) on real estate markets

Limited real estate research

Stranded assets and portfolios

- Assets not meeting future regulatory requirements and future market expectations: loss of value + costs of retrofitting
- Not or insufficiently decarbonized real estate
- Real estate with high use costs and significant carbon footprint due to high energy use from non-renewable sources

CRREM

Upside "Risk" / Opportunity: Positive willingness to pay for energy Efficiency and sustainability

- 1. Portfolio level
 - Diversifikation
 - Investment alternative with special risk-reurtn profile
 - Green Funds, SRI and RPI "en vogue"
- 2. Corporate level
 - Sustainabilty as production factor
 - Positive Impact on Yields, Tobin's Q, Asset Turnover and risk measures
 - CSR-strategy
- 3. Property level
 - Sustainability is impacting rents, vacancies and values
 - Green Building certificates



Climate Change

Intensive research with hedonic pricing (regression)

Opportunities

CRREM EIC Kick-Off Meeting

785058 — CREEM — H2020-EE-2016-2017/H2020-EE-2017-CSA-PPI





CRREM: Carbon Risk Real Estate Monitor - Framework for science based decarbonisation pathways, toolkit to identify stranded assets and push sustainable investments

(February 2018 – January 2021)

The project is funded by the Horizon 2020 Framework Programme of the European Union.

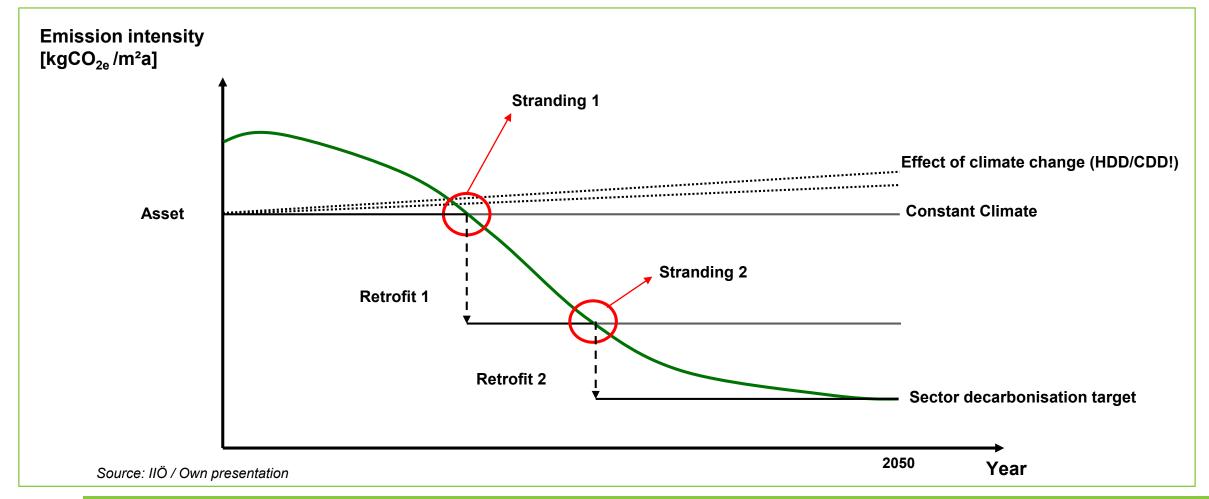
General Objectives:

- Objective 1 Downscaling & transparency: Breaking down INDCs by sector, company and property level for more transparency and capacity building
- Objective 2 Strategic implication of "Stranded assets": Defining areas for improvement and strategic options
- Objective 3 Framework, Toolkits & Methods: Making decarbonisation in the commercial real estate sector measurable





STRANDING: Exceedance of regulatory carbon targets \rightarrow needs for energetic retrofitting



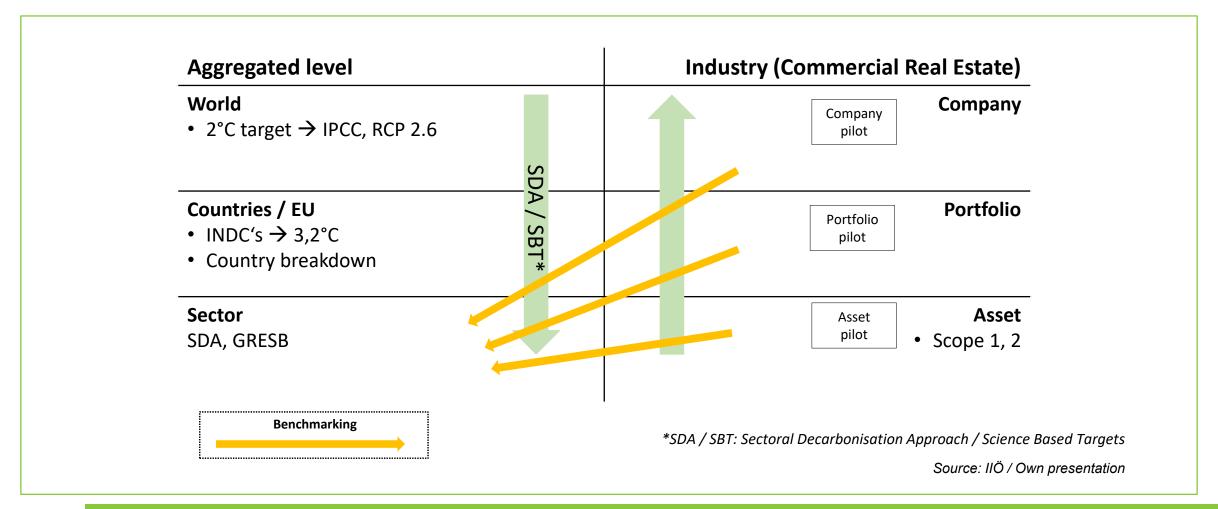
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Page 6





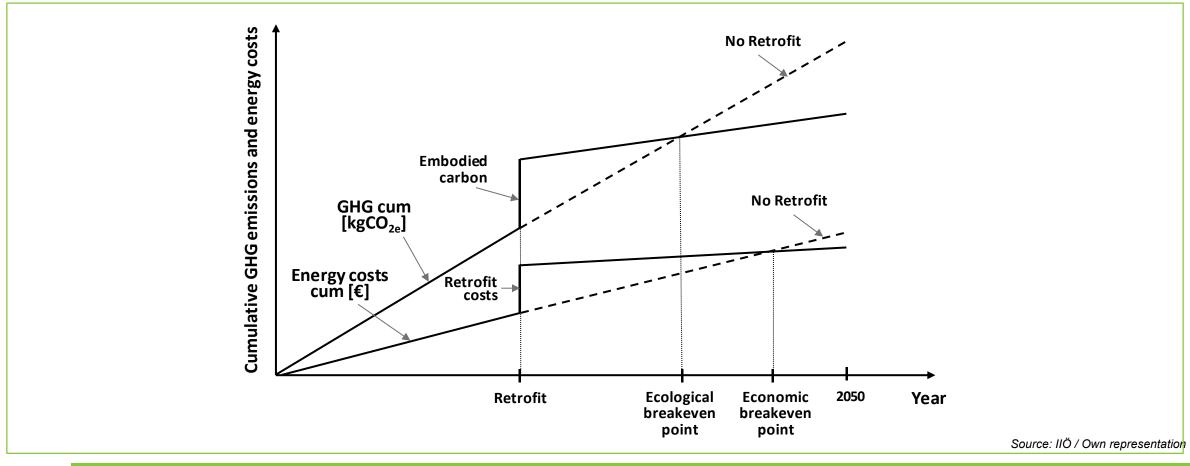
Main objective: Development of the CRREM-Tool







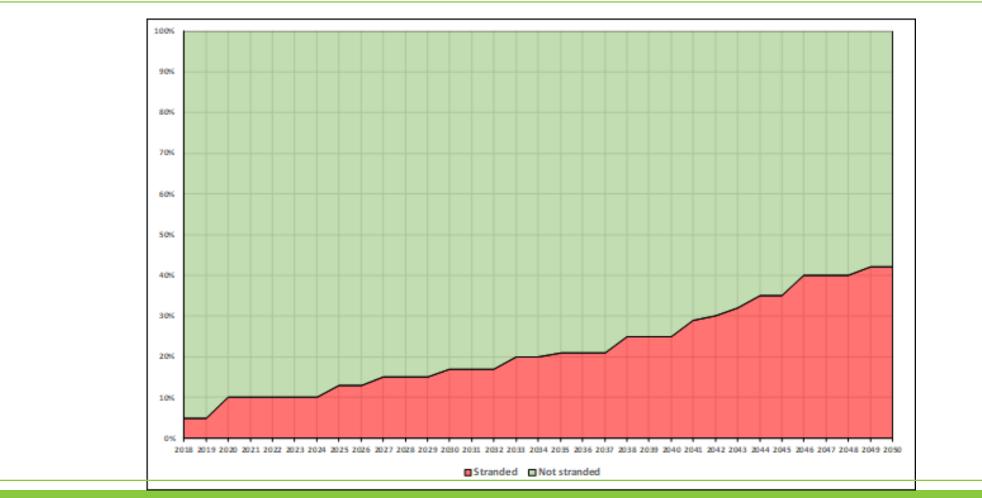
Cumulative GHG emissions, energy costs and breakeven points of retrofit measures including embodied carbon and retrofit costs:







Share of stranded assets over time due to increased regulatory requirements:



Source: IIÖ / Own representation





Introduction CRREM *Consortium Members*

IIÖ
INSTITUTE FOR REAL ESTATE
ECONOMICS



sturgis carbon profiling













Introduction CRREMOverview of working packages

#	Working Package Title	Lead Participant	
WP1	Programme Management	IIÖ	
WP2	Downscaling and setting Science Based Targets for Real Estate	Sturgis Carbon Profiling	
WP3	Carbon risk integration in corporate strategy & budgeting	Ulster University	
WP4	Methodology development and coping with uncertainty	GRESB	EIC Input Focus Area
WP5	Data issues for energy efficiency pricing and performance	TiasNimbas	
WP6	CO2-Property risk assessment tool for stranded assets	IIÖ	
WP7	Testing and Stakeholder Evaluation based on Community Building	GRESB	
WP8	Corporate communication of CO2-targets – Reporting of "2- degree-readiness"	Sturgis Carbon Profiling	
WP9	Innovation, Engagement, Exploitation, and Dissemination	University of Alicante	

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Date: 21st June 2018





European Investor Committee Role, Responsibilities, and Expectations

Core Functions

- Give non-binding strategic input and feedback
- Provide feedback on the output of Working Packages
- Test a pilot version of the Carbon Risk Assessment tool

Term

- EIC is a temporary governance body
- Representatives are encouraged to attend <u>five</u> EIC meetings during a full term
 - Two EIC meetings are planned to be in-person
- Members may resign voluntarily at any time
 - By written notice to the Coordinator

Procedures and principles

- All meeting may be held by conference call
- Ability to nominate a colleague if unable to attend
- The Coordinator is responsible for keeping meeting minutes





European Investor Committee Role, Responsibilities, and Expectations

Expectations:

- Help ensure that the CRREM tool fulfills an industry need
 - By making the tool as relevant as possible for your organization or stakeholders
- Engage in one-on-one meetings for sharing specific technical expertise
 - The diversity and expertise of the EIC might make group meetings suboptimal for technical discussions
- Promote the use of the tool if the project is deemed successful
 - "Success" is to be defined by you as the EIC
 - EIC input: Defining key criteria that will make CRREM successful





European Investor Committee *Expected meetings overview*

#	Purpose of meeting	Date	Туре
1	European Investors Committee kick-off, introduction to project consortium parties, discussion on initial findings WP2 and research setup WP3.	June 21, 2018 (Today)	Teleconference
2	Testing assumptions and practicalities interim report WP2, discussing initial research outcomes WP3, and framework for peer grouping WP4.	October 8/10, 2018	Teleconference / In- person (Expo Real)
3	The first In-person meeting will discuss initial results, progress, and setup WP2-6.	March, 2019	Teleconference
4	Introduction to pilot version of CRREM Risk Assessment tool, including details of elements to be tested by European Investors Committee representatives.	October, 2019	Teleconference/ In- person (TBD)
5	Go-live decision of CRREM Project Tool. Discuss feedback pilot version and research outcomes. Discuss potential dissemination of the tool to key industry stakeholders.	March, 2020	Teleconference/ In- person (TBD)





European Investor Committee *Communications*

CRREM EIC press release

- Short thought piece, highlighting the importance of the topic
- **EIC input:** Call for quotes on the importance of a stranded asset tool

Listing EIC representative names on CRREM website

• **EIC input:** Permission to include EIC organizations' logos and/or committee representatives names on CRREM website

Distribution list

GRESB will create a Google groups distribution list, which can be used for (internal) EIC communications.

Ability to participate in CRREM panels, working groups, webinars

- Idea for a Stranded Asset Panel at Expo Real, Munich
- EIC input: any interest from representatives to be included on this panel





Alignment with other initiatives

 EIC discussion: Which carbon risk tools and frameworks should CRREM align with in order to be successful

















Strategic Input *Tool specifications*

Tool specifications

- The CRREM Carbon Risk Tool can either be an Excel-based tool or developed in an online environment
 - **EIC discussion:** Pros and Cons of developing the tool in Excel compared to an online environment.



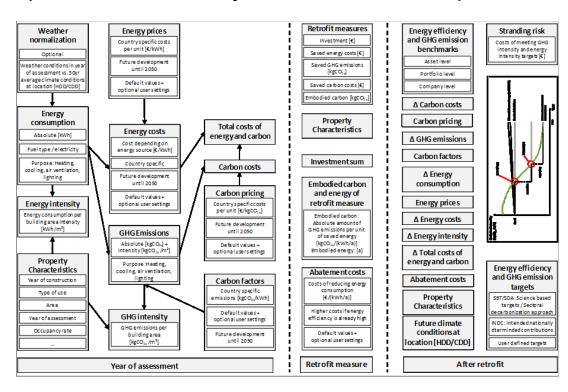
Strategic Input *Tool specifications*

Tool specifications

IIO to provide a list of (potential) user input indicators for the CRREM Tool

• **EIC discussion:** Which input indicators are easy to collect and which input indicators or are normally not

available.



Source: IIÖ / Own representation





Property type input

- There is a mismatch between the building type typology used in the commercial real estate industry and those available in public (research) databases.
 - EIC input: What property type typology/classification should CRREM focus on?

GRESB (Current)	Bulding Stock Observatory	ENTRANZE	ODYSSEE	DIRECTIVE 2010/31/EU [NZEB]
Office - Private	Office - Private	Office (all)	Private and Public Office	Office
Office - Public?	Office - Public	Public		
Retall - High Street				
Retall - Shopping Centre	Retall	Wholesale and trade	Wholesale and retail trade services	Wholesale and retall trade services
Retall - Warehouse				
Hotel	Matala and Bastavanata	Matela and Plantaumata	Matala and Dantananta	Hotels and Restaurants
Fleeteurente	Hotels and Restaurants	Hotels and Restaurants	Hotels and Restaurants	
Health Care	Health Care	Health	Hospitals	Hospitals
Education	Education	Education	Education	Education
Sport facilities			<u>Qth</u> er	Sport facilities
Data Centres	Cias			Other
Industrial - Business Park				
Industrial - Distribution Warehouse		Other		
Industrial - Manufacturing	-			
Other	-			





Strategic Input Research survey

Ulster University has developed a research survey

- **Purpose:** to acquire a deeper understanding of how the carbon risks of real estate investment vehicles are assessed and determined, and how carbon risk strategies impact asset retention/liquidation/retrofitting.
 - GRESB will host the survey using Google Forms.
- **EIC input:** Call to test the survey, and provide feedback on survey questions.
- **Ulster University input:** Provide an overview of the benefits of participating in the survey.





EIC Kick-Off Meeting Next meeting details

Date and time

- Planned to be during the EXPO REAL 2018, Munich
 - o Proposed times: Monday, October 8, 11:30 am, or Wednesday, October 10, 9:30 am.
 - EIC Input: preference for either of these times.
- Ability to call in using Webex or join in Expo meeting room

Agenda

- Testing assumptions and practicalities interim report WP2
- Discussing initial research outcomes survey WP3
- Framework for Peer Grouping WP4
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EIC Kick-Off Meeting Q&A / Discussion

Q&A / Discussion