

Webinar 1

Building's life carbon emissions modeling

24th April 2024

Speakers: Shady Attia (ULiege, BE), **Steffen Petersen** (Aarhus Uni, DK)

Moderator: Aurora Bertini (ULiege, UCLouvain BE)

Agenda

01

Introduction

02

Prof. Steffen Petersen
The safe operating space for buildings

03

Prof. Shady Attia
Building Carbon Emission Modelling Framework – Beta 1

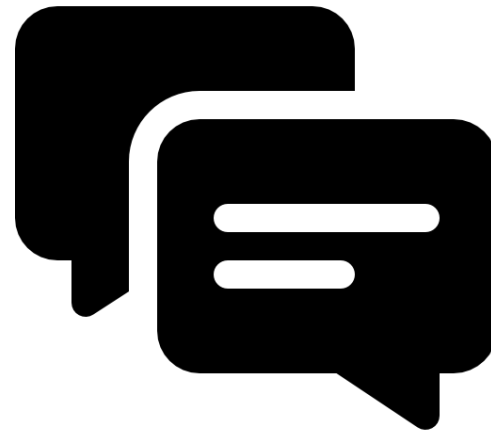
04

Q&A

Meeting rules



Mute your microphone



Feel free to ask questions
in the chat



The meeting is recorded
and shared on YouTube



Photo: Bob Berwyn

1. The ice sheet in Antarctica is **4776 meters** deep. It averages 2,160 meters thick.
2. According to NASA, the polar ice caps are melting at an alarming rate of **10% per decade** and raising sea levels by **4 meters per decade**.
3. Simulations suggest ice-free Arctic summers by 2050.

<https://www.theworldcounts.com/stories/ice-cap-melting-facts>



Photo: UN Photo / Albert Farran

1. Sub-Saharan Africa was projected to have over **70 million** climate migrants by 2050.
2. The estimation is based on a pessimistic scenario (+2 C) of high greenhouse gas emissions and unequal development.

Dynamic Renowave project



Project participants

Shady Attia (ULiege, BE), Émilie Gobbo (UCLouvain, BE), André Stephan (Melbourne Uni, AU)
Aurora Bertini (ULiege, UCLouvain BE), Maxime Dasse (ULiege, UCLouvain BE)

Aim

Develop a **parametric** and **dynamic** life cycle energy and greenhouse gas emissions analysis **model** for retrofitting residential buildings

Project website

https://www.sbd.uliege.be/cms/c_11206199/en/sbdlab-dynamicrenowave?id=c_11206199

Speakers



Steffen Petersen
Full Professor
Aarhus University, Denmark



Shady Attia
Full Professor
Liege University, Belgium

Q & A

Next event

Webinar 2

Building's life carbon emissions modeling

Where: **Online**

When: **29 May 2024 16:00 – 18:00 (GMT +2)**