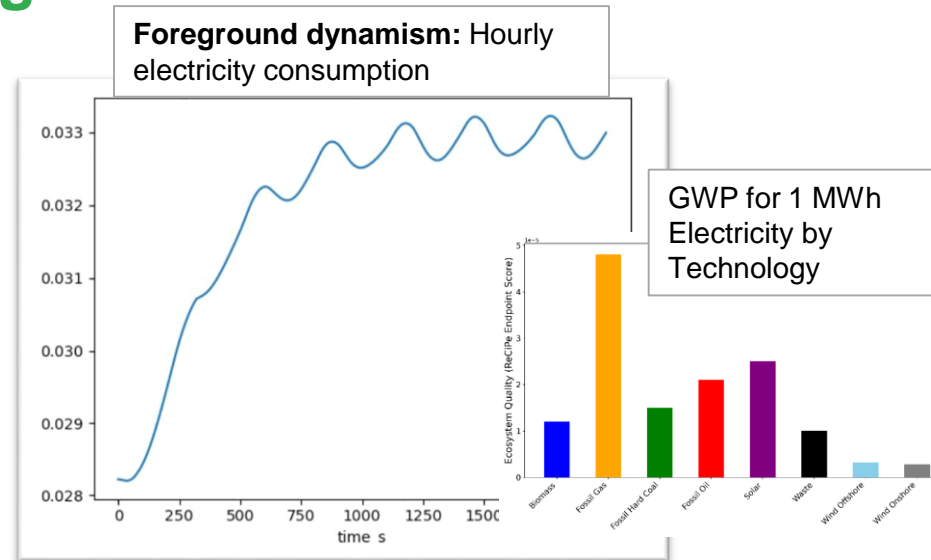
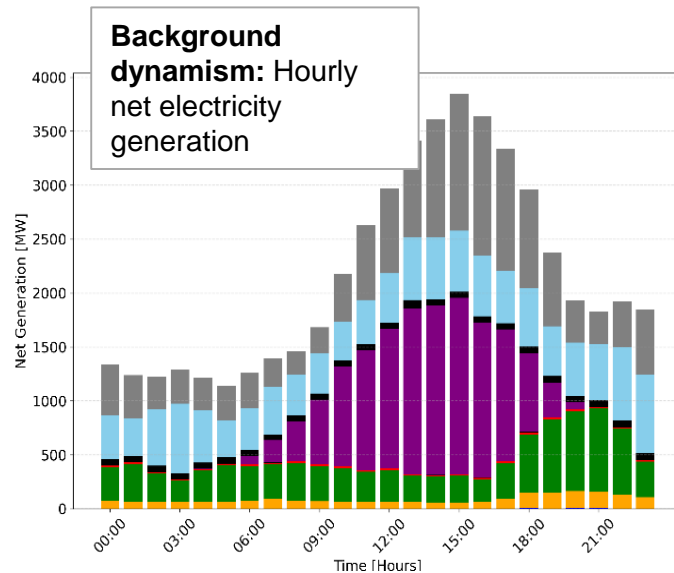


Master's Thesis Opportunity

Dynamic LCA in CO₂ capture using Rotating Packed Beds

Duration
4 months (flexible)
Start
Immediately



Co-funded by the European Union

What? Implement a time-resolved Life Cycle Assessment that links hourly energy demand from a Rotating Packed Bed post-combustion CO₂ capture system to simultaneous changes in the electricity grid mix.

How? Use **MATLAB** RPBs model to track real-time power consumption and integrate it with a dynamic LCA in **Brightway** framework to map foreground demand to the hour-by-hour background electricity composition.

Why? Help identify optimal periods for cleaner electricity usage for process intensification under the HiRECORD EU initiative demonstrating CO₂ capture using Rotating Packed Beds (Interaction and collaboration with project members from EU and UK universities and institutions).



Interested in participating/Further Questions? 

Join us and make a real impact on carbon capture landscape 

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Supervisor : Professor Dr. Stavros Papadokostantakis