



UC Berkeley

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My Carbon on the Margin: Webtool to assess the carbon impact of electricity consumption

Carlos Duarte, Paul Raftery

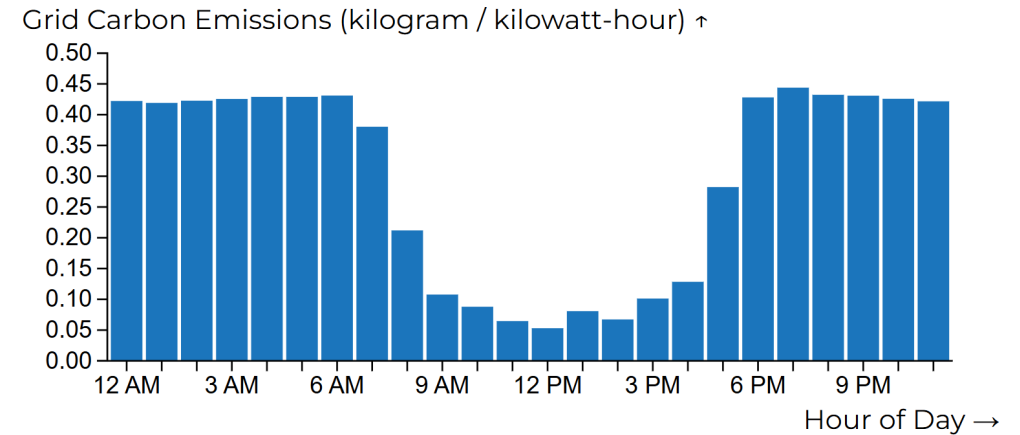
CBE

Ben Trefry and URAP students

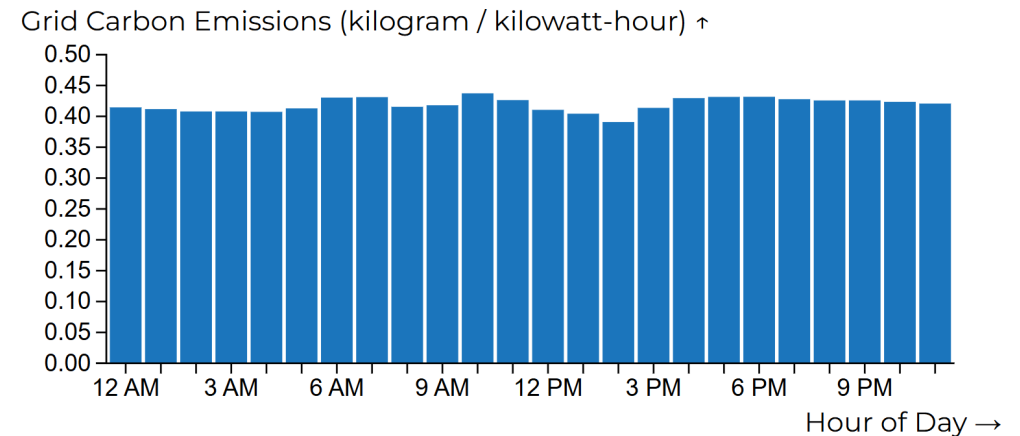
Undergraduate Research Apprentice Program

Dynamic electrical grid means dynamic carbon intensity

- Grid marginal emissions are the carbon emissions rate that responds to changes in load on the local grid at a certain time
- During an abundance of solar generation, using additional electricity has low carbon emissions
- Marginal emissions are usually different than average emissions



July grid marginal carbon emissions



November grid marginal carbon emissions

Project overview

Objective

- Develop an intuitive, web-based tool to visualize marginal carbon emissions from Green Button electricity data

Methods

- Leverage WattTime data to assess carbon impacts of electricity consumption
- Process electricity data to discover carbon reduction opportunities

Funding

- CBE Industry Consortium



How it works

Step 1



Upload

Securely upload your Green Button Energy data from your utility provider. We'll handle the data safely—no personal info required.

Step 2



Analyze & Visualize

Our tools crunch your energy patterns to find where and when your energy use produces the most carbon impact.

Step 3



Recommend

Receive simple, data-driven recommendations to reduce emissions, save energy, and lower your bills.



MyCarbon on the Margin

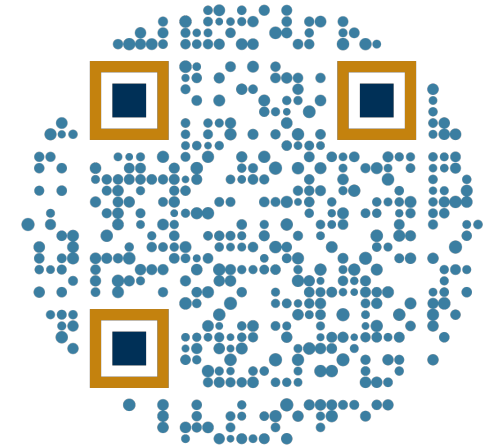


Welcome!

Let's Lower Carbon.

Upload your Green Button Energy data for personalized carbon avoidance recommendations.

[Learn More](#)



Click or scan to webtool



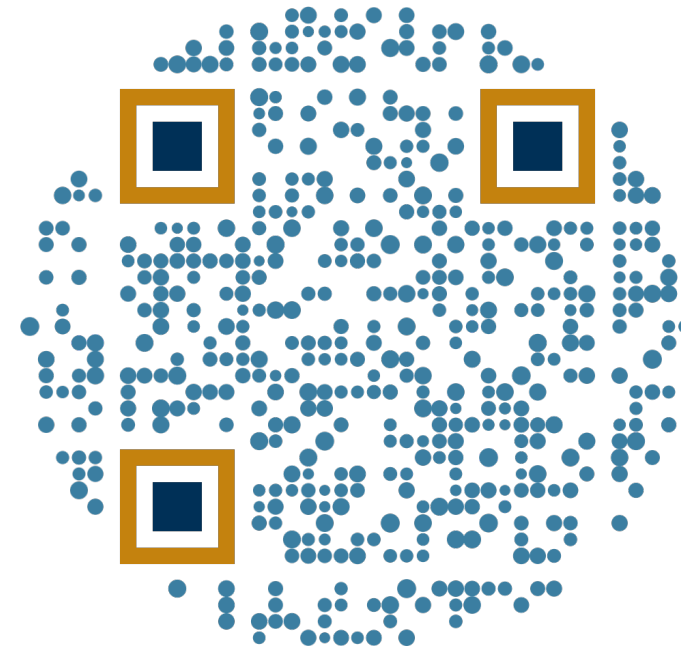
Q&A

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MyCarbon
on the Margin



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