

# Integrating Ecovisor into Mosaik Co-Simulation

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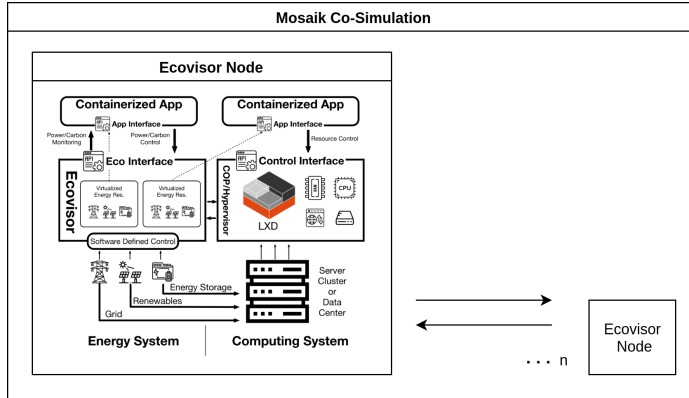





Figure: Ecovisor simulated within Mosaik Co-Simulation; adapted from Souza et al. [1]

- ▶ interconnected geo-distributed Ecovisors
  - carbon intensity different from region to region
  - carbon information services such as Electricity Maps <sup>1</sup>
- enable carbon-efficiency optimizations such as Let's Wait Awhile or Cucumber from Wiesner et al. [2, 3]

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<sup>1</sup><https://www.electricitymaps.com/>

-  A. Souza, N. Bashir, J. Murillo, W. Hanafy, Q. Liang, D. Irwin, and P. Shenoy, “Ecovisor: A virtual energy system for carbon-efficient applications,” *arXiv preprint arXiv:2210.04951*, 2022.
-  P. Wiesner, I. Behnke, D. Scheinert, K. Gontarska, and L. Thamsen, “Let's wait awhile,” in *Proceedings of the 22nd International Middleware Conference*, ACM, dec 2021.
-  P. Wiesner, D. Scheinert, T. Wittkopp, L. Thamsen, and O. Kao, “Cucumber: Renewable-aware admission control for delay-tolerant cloud and edge workloads,” in *Euro-Par 2022: Parallel Processing*, pp. 218–232, Springer International Publishing, 2022.