



**Dénes Csala**  
Try something new. Everyday.

## Graduate Research Assistant Sociotechnical Sustainable Transitions

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## Co-founder Workshops, Modeling

**ARC initiative**  
*Engineering System Design through  
Participation · Collaboration · Sustainability*

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## Blogger Data Visualization

**Personal Website**  
English data blog  
Hungarian data blog

*Data Science  
Dataactivism  
Social Networks*

### journal articles

1. Sgouridis, Csala, Bardi: *The Sower's Way: Quantifying the Narrowing Net-Energy Pathways to a Global Energy Transition*, **Environmental Research Letters** (IF 4.13), accepted August 2016  
pre-print | published (open access) | simulation model | research website
2. Sgouridis and Csala: *A framework for defining sustainable energy transitions: principles, dynamics, and implications*, **Sustainability** (IF 1.34) 6, no. 5 (2014): 2601-2622.  
pre-print | published (open access) | simulation model
3. Sgouridis, Kaya, Csala: *Switching Economics for Physics and the Carbon Price Inflation: Problems in Integrated Assessment Models and their Implications*, **Climatic Change** (IF 3.34), under review  
pre-print
4. Sgouridis, Bardi, Csala: *A net energy-based analysis for a climate-constrained sustainable energy transition*. arXiv preprint arXiv:1503.06832 (2015) | pre-print

### conference papers

1. Csala, Sgouridis: *Visualizing the Energetic Sustainability of Global and National Agricultural and Food Systems*, **First Mediterranean Conference on Food Supply and Distribution Systems in Urban Environments**, Rome, Italy (2015) | presentation | research website
2. Sgouridis and Csala: *Renewable Energy Investment Ratio: A Critical Parameter for the Global Energy Transition*, **34th International Energy Workshop hosted by IRENA**, Abu Dhabi, UAE (2015)  
presentation
3. Zurita, Jayyousi, Csala, Eom, Hamadeh: *Natural Gas Shortage Dynamics in Argentina*, **The 1st Asia-Pacific System Dynamics Conference**, Tokyo, Japan (2014) | paper
4. Csala, Sgouridis: *Modeling Dynamic Transitions in the Global Air Transportation System*, **The 31st International Conference of the System Dynamics Society**, Cambridge, MA, USA (2013) | paper
5. Csala, Sgouridis: *The Global Aviation Industry Dynamic Transition (GAIDT) Model: A system dynamics tool for competitive industry assessment*, **MIT TPP Technology, Management and Policy Student Symposium**, Cambridge, MA, USA (2013) | presentation | simulation model

### other resources



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