

Emergipublicationer med anknytning till Skandinavien 1994-2018

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1. Emergipublicationer med anknytning till Danmark

(kronologisk ordning)

S. Ulgiati, C. Cialani. 2005. Environmental and thermodynamic indicators in support of fair and sustainable policy making. Investigating equitable trade among Latvia, Denmark and Italy. Pages 101–124 in W. Leal Filhos, A. Ubelis (Eds.), *Baltic Sea Region Sharing Knowledge Internally, Across Europe and Worldwide*. Series on Environmental Education, Communication and Sustainability, vol. 23, Peter Lang Publisher, Frankfurt am Main, Germany

Rydberg T, Haden AC. 2006. Energy evaluations of Denmark and Danish agriculture: Assessing the influence of changing resource availability on the organization of agriculture and society. *Agriculture, Ecosystems & Environment* 117(2–3):145–158

Coppola F, Bastianoni S, Østergård H. 2009. Sustainability of bioethanol production from wheat with recycled residues as evaluated by Energy assessment. *Biomass and Bioenergy* 33(11):1626–1642

Ulgiati S, Ascione M, Zucaro A, Campanella L. 2011. Energy-based complexity measures in natural and social systems. *Ecological Indicators* 11:1185–1190

Østergård H, Markussen MV. 2011. Energy Self-sufficiency from an Energy Perspective Exemplified by a Model System of a Danish Farm Cooperative, in *Energy Synthesis 6, Theory and Application of the Energy Methodology*, eds M. T. Brown and S. Sweeney

- (Gainesville, FL: The Center for Environmental Policy, Department of Environmental Engineering Sciences, University of Florida), 311–322.
- Kamp A, Østergård H. 2013. How to manage co-product inputs in energy accounting exemplified by willow production for bioenergy. *Ecological Modelling* 253:70-78
- Markussen MV, Kulak M, Smith LG, Nemecek T, Østergård H. 2014. Evaluating the Sustainability of a Small-Scale Low-Input Organic Vegetable Supply System in the United Kingdom. *Sustainability* 6(4), 1913-1945
- Seghetta M, Østergård H, Bastianoni S. 2014. Energy analysis of using macroalgae from eutrophic waters as a bioethanol feedstock. *Ecological Modelling* 288:25-37
- Wright C, Østergård H. 2015. Scales of renewability exemplified by a case study of three Danish pig production systems. *Ecological Modelling* 315:28-36
- Kamp A, Morandi F, Østergård H. 2016. Development of concepts for human labour accounting in Energy Assessment and other Environmental Sustainability Assessment methods. *Ecological Indicators* 60: 884-892
- Kamp A, Østergård H. 2016. A Systematic Approach to Explorative Scenario Analysis in Energy Assessment with Emphasis on Resilience. *Biophysical Economics and Resource Quality* 1(1):1-11
- Kamp A, Østergård H. 2016. Environmental sustainability assessment of fruit cultivation and processing using fruit and cocoa residues for bioenergy and compost. Case study from Ghana. *Journal of Cleaner Production* 129, 329-340
- Kamp A, Østergård H, Bolwig S. 2016. Environmental assessment of integrated food and cooking fuel production for a Village in Ghana. *Sustainability* 8(5): 404
- Morandi F, Perrin A, Østergård H. 2016. Miscanthus as energy crop: Environmental assessment of a miscanthus biomass production case study in France. *Journal of Cleaner Production* 137:313-321
- Wright C, Østergård H. 2016. Renewability and energy footprint at different spatial scales for innovative food systems in Europe. *Ecological Indicators* 62:220-227
- Nimmanterdwong P, Chalermsinsuwan B, Østergård H, Piumsomboon P. 2017. Environmental performance assessment of Napier grass for bioenergy production. *Journal of Cleaner Production* 165:645-655
- Perrin A, Wohlfahrt J, Morandi F, Østergård H, Gabrielle B. 2017. Integrated design and sustainable assessment of innovative biomass supply chains: A case-study on miscanthus in France. *Applied Energy* 204:66-77
- Ghaley BB, Kehli M, Mentler A. 2018. Energy synthesis of conventional fodder maize (*Zea mays* L.) production in Denmark. *Ecological Indicators* 87:144-151

2. Doktorsavhandlingar Sverige

(där hela eller delar av avhandlingen bygger på energi-metodik.)

- Lagerberg C. 1999. *Emergy analysis of the resource use in greenhouse crop production and of the resource basis of the Swedish economy*. Doctoral thesis, Acta Universitatis agriculturae Sueciae, Agraria 191, Department of Horticulture, Swedish University of Agricultural Sciences, Alnarp, Sweden.
- Björklund J. 2000. *Emergy analysis to assess ecological sustainability. Strengths and weaknesses*. Doctoral thesis, Acta Universitatis agriculturae Sueciae, Agraria 242, Department of Ecology and Crop Production Science, Swedish University of Agricultural Sciences, Uppsala, Sweden.
- Andresen N. 2000. *The Foraging Pig Resource utilisation, interaction performance and behaviour of pigs in cropping systems*. Acta Universitatis Agriculturae Suecia, Agraria 227, Swedish University of Agricultural Sciences, Uppsala.
- Geber U. 2000. *Integration of wastewater treatment in agro-ecosystems*. Doctoral thesis, Acta Universitatis agriculturae Sueciae, Agraria 217, Department of Ecology and Crop Production Science, Swedish University of Agricultural Sciences, Uppsala, Sweden.
- Grönlund E. 2004. *Microalgae at wastewater pond treatment in cold climate - an ecological engineering approach*. Doctoral thesis 2004:61, Dept. of Environmental Engineering, Luleå University of Technology, Luleå, Sweden.
- Cuadra M. 2005. *Assessment of the natural resource base of Nicaragua and case studies of its use in agricultural production and export*. Doctoral thesis, Sveriges lantbruksuniv., Acta Universitatis agriculturae Sueciae 2005:25, Uppsala, Sweden.
- Johansson S. 2005. *The Swedish footprint*. Doctoral thesis, Sveriges lantbruksuniv., Acta Universitatis agriculturae Sueciae 2005:56 Uppsala, Sweden.
- Hagström P. 2006. *Biomass potential for heat, electricity and vehicle fuel in Sweden*. Doctoral thesis, Sveriges lantbruksuniv., Acta Universitatis agriculturae Sueciae 2006:11, Uppsala, Sweden.
- Brolin J. 2007. *The Bias of the World: Theories of Unequal Exchange in History*. Doctoral Thesis, Human Ecology Division, Lund University, Lund, Sweden.
- Bergquist DA. 2008. *Colonised Coasts. Aquaculture and energy flows in the world system: Cases from Sri Lanka and the Philippines*. PhD thesis, Geografiska Regionstudier 77, Dept. of Social and Economic Geography, Uppsala University Uppsala, Sweden.
- Eksvård K. 2009. *Exploring new ways*. Doctoral thesis, Sveriges lantbruksuniv., Acta Universitatis agriculturae Sueciae 2009:44 Uppsala, Sweden.

3. Licentiatavhandlingar Sverige

(där hela eller delar av avhandlingen bygger på energi-metodik.)

Levin A. 2011. *Att mäta och kommunicera hållbart. En analys av ett svenskt lantbruk.* Licentiatavhandling vid Kulturgeografiska institutionen, Forskarskolan i Geografi, Uppsala Universitet, Uppsala.

4. Emergipublicationer med data från Sverige

i. Vetenskapliga artiklar och rapporter (kronologisk ordning)

- Sundberg U, Lindegren J, Odum HT, Doherty SJ. 1994. Forest energy basis for Swedish power in the 17th century. *Scandinavian journal of forest research Supplement no1.*
- Nilsson D. 1997. Energy, exergy and energy analysis of using straw as fuel in district heating plants. *Biomass and Bioenergy* **13**(1-2): 63-73.
- Lagerberg C, Brown MT. 1999. Improving agricultural sustainability: the case of Swedish greenhouse tomatoes. *Journal of Cleaner Production* **7**(6): 421-434.
- Lagerberg, C. Doherty, S. & Nilsson, P. O. 1999. Evaluation of the resource efficiency and sustainability of the Swedish economy using energy based indices. In: Lagerberg, C. 1999. *Energy analysis of the resource use in greenhouse crop production and of the resource basis of the Swedish economy.* Acta Universitatis Agriculturae Sueciae. Agraria no 191. Swedish University of Agricultural Sciences, Alnarp.
- Lagerberg, C, Gertsson, U. Larsen, R. & Gäredal, L. 1999. Energy evaluation of five greenhouse tomato production systems. In: Lagerberg, C. 1999. *Energy analysis of the resource use in greenhouse crop production and of the resource basis of the Swedish economy.* Acta Universitatis Agriculturae Sueciae. Agraria no 191. Swedish University of Agricultural Sciences, Alnarp.
- Andrésen N, Björklund J, Rydberg T. 2000. Ecological and conventional pig production - an analysis of resource flows and environmental dependency on farm scale level. Paper I. In Andresen N: *The Foraging Pig Resource utilisation, interaction performance and behaviour of pigs in cropping systems*, p. 22. Acta Universitatis Agriculturae Suecia, Agraria 227, Swedish University of Agricultural Sciences, Uppsala.
- Björklund J, Geber U, Rydberg T. 2001. Energy analysis of municipal wastewater treatment and generation of electricity by digestion of sewage sludge. *Resources, Conservation and Recycling* **31**(4): 293-316.
- Doherty SJ, Nilsson PO, Odum HT. 2002. Energy evaluation of forest production and industries in Sweden. Rapport 15, Inst. f. bioenergi, SLU, Uppsala, Sweden.
- Geber U, Björklund J. 2002. The relationship between ecosystem services and purchased input in Swedish wastewater treatment systems -- a case study. *Ecological Engineering* **19**(1): 97-117.
- Rydberg T, Jansén J. 2002. Comparison of horse and tractor traction using energy analysis. *Ecological Engineering* **19**(1): 13-28.

- Eksvård K, Rydberg T. 2010. Integrating Participatory Learning and Action Research and Systems Ecology: A Potential for Sustainable Agriculture Transitions. *Systemic Practice and Action Research* 23(6): 467-486.
- Björklund J, Johansson B. 2012. Assessing multifunctionality in relation to resource use: a holistic approach to measure efficiency, developed by participatory research. Pages 161-173 in Marta-Costa, A. A. & Soares da Silva (eds.): *Methods and procedures for building sustainable farming systems*. E. L. D. G.: Springer, Dordrecht, Netherlands.
- Rydberg T. 2012. Land is a prerequisite for food production. Pages 16-18 in Christine Jakobsson (ed): *Ecosystem health and sustainable agriculture 1*, Baltic University Press, Uppsala.
- Russo, T., Buonocore, E., & Franzese, P. P. (2014). The Urban Metabolism of the City of Uppsala (Sweden). *Journal of Environmental Accounting and Management*, 2(1), 1-12.

ii. Konferenspublikationer (kronologisk ordning)

- In Brown, M.T. 2001 (ed). *Energy Synthesis 1: Theory and Applications of the Energy Methodology*. Proceedings of the 1st Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville. 319 pages.
- Johansson S, Doherty S, Rydberg T. 2001. Sweden Food System Analysis.
 - Lagerberg C. 2001. Energy Analysis of Tomato Production Systems.
- In Brown, M.T.E. Bardi, D.E. Campbell, V. Comar, S. Huang, T. Rydberg, D. Tilley and S. Ulgiati (eds). 2005. *Energy Synthesis 3: Theory and Applications of the Energy Methodology*. Proceedings of the 3rd Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville. 652 pages.
- Brandt-Williams SL, Lagerberg Fogelberg C. Nested Comparative Energy Assessments Using Milk Production as a Case Study
 - Grönlund E, Klang A, Vikman P-Å. Energy and Socio-Ecological Principles in Sustainability Assessment: Methodological Considerations from a Wastewater Treatment Case Study
 - Hagström P, Nilsson PO. Energy Evaluation of the Swedish Economy Since the 1950's
- In Brown, M.T.E. Bardi, D.E. Campbell, V. Comar, S. Huang, T. Rydberg, D. Tilley and S. Ulgiati (eds). 2007. *Energy Synthesis 4: Theory and Applications of the Energy Methodology*. Proceedings of the 4th Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville. 483 pages.
- Rydberg T, Gustafson G, Boonstra W. Farming in a Prosperous Way Down - A Systems Ecology Approach

BIWAES 2010. *Can we break the addiction to fossil fuel energy? Proceedings of the 7th Biennial International Workshop Advances in Energy Studies* (BIWAES), Barcelona, Spain 19-21 October 2010

- Levin A. Communicating emergy analysis as footprint and emergy profile

In Brown, M.T., S. Sweeney, D.E. Campbell, S. Huang, E. Ortega, T. Rydberg, D. Tilley and S. Ulgiati (eds). 2011. *Emergy Synthesis 6: Theory and Applications of the Emergy Methodology*. Proceedings of the 6th Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville. 610 pages.

- Cavalett O, Rydberg T. Critical Analysis of the Swedish Biofuel Policy using Emergy Synthesis
- Buonocore E, Franzese PP, Rydberg T, Ulgiati S. Emergy Evaluation of an Integrated Bioenergy Production System - The Case Study of Enköping (Sweden)
- Rydberg T, Cavalett O, Friman E, Gallardo G. Energy Systems Diagramming and Discourse Analysis - the Case of Large-Scale Biofuel Production

iii. Master- och kandidatuppsatser (kronologisk ordning)

Kindberg, Anna. 2007. *Energy evaluation of a Swedish nuclear power plant*. Uppsala : Uppsala University.

Carstensen, Anna-Maria. 2009. *A method for energy analysis using electricity as basis of evaluation: applied to a Swedish nuclear power plant*. UPTEC ES 09022, Självständigt arbete på avancerad nivå (yrkesexamen), 20 poäng / 30 hp, Institutionen för fysik och astronomi, Uppsala University, Uppsala.

Jarméus, Christoffer. 2013. *Energy analysis of biodiesel and biogas production from Baltic Sea macro algae*. Självständigt arbete på avancerad nivå (masterexamen), 20 poäng / 30 hp. Industrial Ecology, Royal Institute of Technology (KTH), Stockholm.

Kilander, Sara. 2017. *Emergianalys av ett Gotländskt jordbruk: En fallstudie av ekobonden Gunnar Bolins produktioner av betor och spannmål*. TRITA IM-KAND 2017:36, Självständigt arbete på grundnivå (kandidatexamen), 15 hp, Inst. f. Hållbar utveckling, miljövetenskap och teknik, Skolan för arkitektur och samhällsbyggnad (ABE), KTH, Stockholm.

iv. Populärvetenskapliga publikationer (kronologisk ordning)

Lagerberg Fogelberg, C. Björklund, J. & Helander, C.-A. 2004. Att mäta naturens tjänster. *Fakta Jordbruk*. SLU. Nr 8.

Lagerberg Fogelberg, C. 2003. Bränsletyp avgör tomatodlingens hållbarhet. *Fakta Trädgård*. SLU. Nr 5.

Lagerberg, C. 2001. Metoder att mäta uthållighet – som man ropar får man svar. *Kungl. Skogs- och lantbruksakademiens tidskrift* 140(12), 55-59.

5. Emergipublicationer av svenska forskare utan data från Sverige

i. Vetenskapliga artiklar och rapporter (kronologisk ordning)

- Lefroy E, Rydberg T. 2003. Emergy evaluation of three cropping systems in southwestern Australia. *Ecological Modelling* **161**(3): 195-211.
- Cuadra M, Rydberg T. 2006. Emergy evaluation on the production, processing and export of coffee in Nicaragua. *Ecological Modelling* **196**(3-4): 421-433.
- Rydberg T, Haden AC. 2006. Emergy evaluations of Denmark and Danish agriculture: Assessing the influence of changing resource availability on the organization of agriculture and society. *Agriculture, Ecosystems & Environment* **117**(2-3): 145-158.
- Bergquist DA. 2007. Sustainability and Local People's Participation in Coastal Aquaculture: Regional Differences and Historical Experiences in Sri Lanka and the Philippines. *Environmental Management* **40**(5):787-802.
- Cuadra M, Björklund J. 2007. Assessment of economic and ecological carrying capacity of agricultural crops in Nicaragua. *Ecological Indicators* **7**(1): 133-149.
- Rótolo GC, Rydberg T, Lieblein G, Francis C. 2007. Emergy evaluation of grazing cattle in Argentina's Pampas. *Agriculture, Ecosystems & Environment* **119**(3-4): 383-395.
- Franzese PP, Rydberg T, Russo GF, Ulgiati S. 2009. Sustainable biomass production: A comparison between Gross Energy Requirement and Emergy Synthesis methods. *Ecological Indicators* **9**(5): 959-970.
- Johansson S, Rydberg T. 2017. Is an increased use of biofuels the road to sustainability? *The European Physical Journal Plus* **132**(2): 66.
- Bergquist DA, Cavalett O, Rydberg T. 2012. Participatory energy synthesis of integrated food and biofuel production: a case study from Brazil. *Environment, Development and Sustainability* **14**(2): 167-182.
- Grönlund E, Fröling M, Skytt T. 2016. *Energy, emergy, and the city*. Ecotechnology working paper 2016-1c, Mid Sweden University, Östersund, Sweden.
- Chen Y, Feng L, Wang J, Höök, M. 2017. Emergy-based energy return on investment method for evaluating energy exploitation. *Energy* **128**:540-549
- Grönlund E, Billgren C, Tonderski KS, Raburu PO. 2017. Emergy Assessment of a Wastewater Treatment Pond System in the Lake Victoria Basin. *Journal of Environmental Accounting and Management* **5**(1): 11-26.

ii. Konferenspublicationer (kronologisk ordning)

- In Brown, M.T. 2001 (ed). *Emergy Synthesis 1: Theory and Applications of the Emergy Methodology*. Proceedings of the 1st Biennial Emergy Conference. Center for Environmental Policy, University of Florida, Gainesville. 319 pages.

- Björklund J. 2001. Transformity and Potential Effect of Feedback in Human Dominated Systems - Using Wastewater as an Example.
- Cuadra M, Rydberg T. 2001. Emergy Evaluation of the Environment and Economy of Nicaragua.

BIWAES 2001. *Advances in Energy Studies, Exploring Supplies, Constraints, and Strategies. Proceedings of the 2nd Biennial International Workshop Advances in Energy Studies* (BIWAES), Porto Venere, Italy may 23-27, 2000. SGE Editoriali, Padova.

- Lagerberg C. 2001. Using the Best of the Best – Some Thoughts on the Integration of Environmental Assessment Tools

BIWAES 2003. *Advances in Energy Studies, Reconsidering the Importance of Energy. Proceedings of the 3rd Biennial International Workshop Advances in Energy Studies* (BIWAES), Porto Venere, Italy September 24-28, 2002. SGE Editoriali, Padova.

- Doherty S, Rydberg T, Björklund J. Comparison of environmental assessment tools using a living systems framework

In Brown, M.T.E. Bardi, D.E. Campbell, V. Comar, S. Huang, T. Rydberg, D. Tilley and S. Ulgiati (eds). 2005. *Emergy Synthesis 3: Theory and Applications of the Emergy Methodology. Proceedings of the 3rd Biennial Emergy Conference*. Center for Environmental Policy, University of Florida, Gainesville. 652 pages.

- Grönlund E. Why Is Emergy So Difficult to Explain to My Environmental Science Friends?
- Grönlund E, Hedin D, Eriksson P-O. Is Emergy Best Suited for Ecological Economics, Environmental Economics, or with an Economic Context of Its Own?
- Grönlund E, Salomonsson M. Ecosystem Services in Relation to the Local Renewable Emergy Sources - Experiences from a Case Study in Northern Sweden
- Mangoyana RB, Grönlund E. Sustainable Growth: Dominating Debate and an Emergy View
- Rydberg T, Cuadra M. It's About Getting Value for Your Money - But How Fair Are the Resource Flows?

Garde S, Hullin CM, Chen R, Schuler T. 2007. Towards Sustainability of Health Information Systems: How Can We Define, Measure and Achieve it? Pages 1179-1183 in Kuhn, KA; Warren, JR; Leong, TY (eds.): MEDINFO 2007: Proceedings of the 12th World Congress on Health (Medical) Informatics, Brisbane, Australia, Aug. 20-24, 2007. IOS Press.

Alarcón, C. Bergquist, D. Bjureby, E. Friman, E. Gallardo, G. Hajdu, F. Jacobson, K. Johansson, S., Lagerberg Fogelberg, C. & Rydberg, T. 2008. Understanding global patterns of production and consumption: prospects of an interdisciplinary approach. Frostell, B. Danielsson, Å. Hagberg, L. Linnér, B.-O. & Lisberg Jensen, E. (eds.). *Science for Sustainable Development - The Social Challenge with emphasis on conditions for change. Proceedings of the 2nd VHU Conference*, Linköping 6-7 sept 2007, 15-21.

In Brown, M.T., S. Sweeney, D.E. Campbell, S. Huang, E. Ortega, T. Rydberg, D. Tilley and S. Ulgiati (eds). 2009. *Emergy Synthesis 5: Theory and Applications of the Emergy Methodology*. Proceedings of the 5th Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville. 612 pages.

- Bergquist D, Rydberg T. Towards a Transdisciplinary Understanding of Emergy Accumulation

Bergquist DA. 2009. Sustainable Urban Life Beyond Peak Oil. In: *Key elements for a sustainable world: energy, water and climate change*. 2nd international workshop, Advances in cleaner production, May 20th-22nd, 2009, Sao Paulo, Brazil.

Hellstrand S, Skånberg K, Drake R. 2009. The Relevance of Ecological and Economic Policies for Sustainable Development. *Environment, Development and Sustainability* 11 (4):853-870.

In Brown, M.T., S. Sweeney, D.E. Campbell, S. Huang, E. Ortega, T. Rydberg, D. Tilley and S. Ulgiati (eds). 2011. *Emergy Synthesis 6: Theory and Applications of the Emergy Methodology*. Proceedings of the 6th Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville. 610 pages.

- Bergquist DA. Emergy Synthesis of Urban Agriculture in Rio de Janeiro, Brazil
- Lagerberg Fogelberg C, Bergquist DA. Small-Scale Community Based Management of Marine Resources vs. Large-Scale Industrial Aquaculture in Chile
- Bergquist DA, Ingwersen W, King Liebenow D. Emergy in Labor - Approaches for Evaluating Knowledge

BIWAES 2015. *Energy and Urban Systems, Proceedings of the 9th Biennial International Workshop Advances in Energy Studies* (BIWAES), Stockholm 4-7 May 2015, (ed. O Kordas, S Ulgiati). Verlag der Technischen Universität Graz, Graz.

- Grönlund E, Fröling M, Skytt T. Energy, emergy and the city.

In Brown, M.T., S. Sweeney, D.E. Campbell, S. Huang, T. Rydberg, and S. Ulgiati (eds). 2017. *Emergy Synthesis 9: Theory and Applications of the Emergy Methodology*. Proceedings of the 9th Biennial Energy Conference. Center for Environmental Policy, University of Florida, Gainesville.

- Rydberg T, Bergquist D, Berg PG, Hedfors, P. Emergy Applications in Urban Planning and Regenerative Systems Landscape Design.

iii. Master- och kandidatuppsatser (kronologisk ordning)

Maassen, Jacinda. 2017. *Emergy of an Urban Food Production System: a Case Study of Urban Agriculture in Detroit, Michigan*. Självständigt arbete på avancerad nivå (masterexamen), 30 hp. Dept. Of Earth Sciences, 2017/35, Uppsala University

