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### 1. REFEREES

#### **Dr. Heinz Schandl**

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#### **Prof. Mario Giampietro**

ICREA Research Professor, Institute for Environmental Science and Technology, Autonomous University of Barcelona, 08193 Bellaterra, Spain.

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#### **Prof. Joan Martinez Alier**

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### 2. CURRENT EMPLOYMENT

Rector at Universidad Regional Amazónica IKIAM.

### 3. CURRENT EMPLOYER

Universidad Regional Amazónica IKIAM, km. 7 via Muyuna-Atacapi, Tena, Ecuador, CP 150102. Tel: +593 6 3700040

### 4. EDUCATIONAL QUALIFICATIONS

2001-2005: **PhD in Environmental Sciences (Ecological Economics)** at Autonomous University of Barcelona (Spain). Title of the Thesis: “*Complex systems and exosomatic energy metabolism of human societies*”. Completed *cum laude*.

2000-2001: **MPhil** at Keele University (UK). Topic of the dissertation: “Analysing Energy Metabolism of Societies from a Complex-Systems Perspective”. Scholarship given by Caja de Ahorros del Mediterraneo (CAM, Savings Bank of the Mediterranean) and the British Council.

1999-2000: **MA in “Environmental Politics”** at Keele University (UK). Topic of the dissertation: “Equity issues regarding the CO<sub>2</sub> emissions property rights under the FCCC”. Scholarship given by Caja de Ahorros del Mediterraneo (CAM, Savings Bank of the Mediterranean) and the British Council.

1998-1999: **MSc in “Ecological Economics, Territory and Environmental Management”** at the Autonomous University of Barcelona. My research and dissertation focused on Climate Change, mainly GHGs abatement measures in the Metropolitan Area of Barcelona through Joint Implementation projects.

1992-1996: **“Economics” degree** (Development and International Economics) at the Autonomous University of Barcelona.

## 5. LANGUAGES

**Spanish** and **Catalan** are my mother tongue. I am fluent in reading, writing and speaking in both **English** and **Italian**, and I spent two years working and living in the UK, two years in Italy, and one year in Austria.

## 6. WORK EXPERIENCE

Since September 2016: **Rector** at Universidad Regional Amazónica IKIAM.

July – September 2016: **Researcher** at Universidad Nacional de Educación. Coordinación de Investigación.

January - June 2016: **Researcher** at FLACSO Ecuador. Ecological economics and societal metabolism.

July 2015 – December 2015: **Professor** at Centro de Prospectiva Estratégica, Instituto de Altos Estudios Nacionales, Ecuador. Professor of Ecological Economics. Research activities focused on biophysical prospective planning. Coordination of teaching activities and publication strategy.

May 2014 – June 2015: **Dean** of the Centro de Prospectiva Estratégica, Instituto de Altos Estudios Nacionales, Ecuador. Management of a research team of 18 people. Research activities focused on biophysical prospective planning. Coordination of teaching activities and publication strategy.

September 2008 – August 2014: **Assistant Professor** at the Department of Economics and Economic History, Autonomous University of Barcelona. Undergraduate teaching comprises courses on: a) Natural resources economics; b) Economic models of the environment; and c) Human uses of system Earth. Postgraduate teaching includes: a) Foundations of Ecological Economics and b) Introduction to environmental economics for non-economists. I also supervise master and PhD students and lead research projects.

June 2008: **Lecturer** of the course “Ecological Economics”, 4 ECTS, in the Master Study Programme Social and Human Ecology, at the Institute of Social Ecology, Klagenfurt University, Vienna, Austria.

November 2007: **Lecturer** of the course “Economics and Natural Resources:

Methodological Issues”, 4 ECTS, in the Joint European Master in Environmental Studies (JEMES), Autonomous University of Barcelona.

September 2007 – September 2008: **Assistant Professor** at the Department of Applied Economics, Autonomous University of Barcelona.

June 2007: **Lecturer** of the course “Ecological Economics”, 4 ECTS, in the Master Study Programme Social and Human Ecology, at the Institute of Social Ecology, Klagenfurt University, Vienna, Austria.

May 2007: **Lecturer** of the course “Economics and Natural Resources: Methodological Issues”, 4 ECTS, in the Master of Environmental Studies, Autonomous University of Barcelona.

May 2007 – September 2007: **Juan de la Cierva researcher** at the Institute for Environmental Science and Technology, Autonomous University of Barcelona.

May 2006 – May 2007: **Main researcher and coordinator** of the project “Analysis of the Energy Metabolism of the Catalan Economy”, commissioned by the Catalan Government’s Advisory Council for Sustainable Development. Avinguda de Sarrià 30, 1er 3a, 08029 Barcelona, Tel: +34 933633867, <http://www.cat-sostenible.org>

May 2005 – April 2006: **Researcher and lecturer** at the Institute for Social Ecology, Faculty for Interdisciplinary Studies of the University of Klagenfurt, Austria. My main duties were twofold. From a research perspective, I was member of the Transition Studies Group, where I contributed to data analysis, publishing, report drafting and fund raising activities for research in the fields of energy and integrated assessment of sustainability (like in the Nicobar Islands project mentioned below). From an institutional/administrative perspective I coordinated all the activities of the EU-funded IP project Matisse, comprising of reporting to the EU and communicating with partners. My position also included representing the Institute to our Latin American partners.

September 2003 – April 2005: **Researcher** at the Istituto Nazionale di Ricerca per gli Alimenti e la Nutrizione (Italian National Institute of Research on Food and Nutrition), Roma, Italy. I was both coordinator of the Work Package Participatory Integrated Assessment of the use of GMOs in agriculture, and main researcher. This involved organising focus groups with stakeholders; monitoring and analysing data from surveys; coordinating two internal collaborators; coordinating the participation of five external collaborators; maintaining the website of the project, and other communication strategies; and reporting.

October – December 2002: Online course on “Ecological Economics” for the Department of Economics and Economic History of the Autonomous University of Barcelona.

August 2002: **Assistant lecturer** of “Ecological Economics” and “Economics and Politics of Climate Change” at Latin American Faculty of Social Sciences (Facultad Latinoamericana de Ciencias Sociales, FLACSO), in Quito, Ecuador. I gave an introductory course on Ecological Economics, from which three master theses dealing with material and energy flows in Ecuador resulted, with myself acting as either supervisor (in two of them) or reviewer (one of them).

February 2002 – September 2011: **Founding partner and Manager** of the environmental consultancy ENT Environment and Management (<http://www.ent-consulting.com>). My duties in the company comprise of representing, public relations, human resource management (7 employees), as well as payroll, accountancy and general administration. Moreover, I acted as renewable energy and energy policy consultant, in some of the projects.

October 2000 – September 2003 and October 1998 - September 1999: **assistant lecturer** of the degree course subject “Economics of Natural Resources” to both Economics and Environmental Sciences students at the Autonomous University of Barcelona. My tasks comprised of lecturing, advising students on research topics, re-drafting the syllabus of the subject for the University, and supervising final degree’s dissertations.

August 1998: **Co-ordinator and lecturer** of the subject “Environmental Management Systems”, in the Summer Courses of the Open University of Catalonia (Universitat Oberta de Catalunya), dealing with the relationship between the environment and firms in general, and the environmental standards EMAS and ISO 14001 in particular. My tasks included developing the course materials to be distributed online, acting as consultant for the students and supervisor for their final assignments and developing the structure of the online platform to be used.

March-June 1998: **assistant lecturer** of the degree course subject “Economics of Natural Resources” in the framework of the “New Project of Joint Subjects in Videoconference between the Polytechnic University of Madrid and the Autonomous University of Barcelona”. My main task was to develop multimedia contents for supporting the courses, as well as monitoring and assessing the students of the Polytechnic University of Madrid.

February-June 1998: **Rugby instructor** in some primary and secondary schools of Santa Coloma de Gramenet, within the Rugby Sport Club Puig Castellar and Santa Coloma City Council Joint Programme on “Initiation and Promotion of Rugby in Primary Schools 1998”.

March-April 1998: **Co-author and chairperson** of the virtual discussion forum on “Industry and the Environment” in the Open University of Catalonia (Universitat Oberta de Catalunya) web page within the framework of the ECOCAMPUS project.

## 7. LIST OF PUBLICATIONS

*33 publications indexed in SCOPUS with 485 citations and an h-index = 12*

### A) GUEST EDITORSHIPS

[2] Energy, Volume 37, Issue 1 (January 2012), 7th Biennial International Workshop “Advances in Energy Studies”,  
<http://www.sciencedirect.com/science/journal/03605442/37/1>

[1] Ecological Modelling, Volume 223, Issue 1 (December 2011), Can We Break the Addiction to Fossil Energy? Special Issue, 7th Biennial International Workshop “Advances in Energy Studies”, Barcelona, Spain, 19-21 October 2010,

## **B) REFEREED JOURNAL PAPERS**

[30] Cevallos, J., **Ramos-Martin, J.** (2018): "Spatial assessment of the potential of renewable energy: the case of Ecuador". *Renewable & Sustainable Energy Reviews*, Vol. 81 (1): 1154-1165. <http://dx.doi.org/10.1016/j.rser.2017.08.015>

[29] **Ramos-Martin, J.**, Falconi, F., Cango, P. (2017): "The concept of caloric unequal exchange and its relevance for food system analysis: The Ecuador case study", *Sustainability*, Vol 9(11), 2068. <http://www.mdpi.com/2071-1050/9/11/2068/pdf> and <http://dx.doi.org/10.3390/su9112068>

[28] Viteri-Salazar, O., **Ramos-Martin, J.** (2017): "Organizational structure and commercialization of coffee and cocoa in the northern Amazon region of Ecuador", *Revista NERA, Núcleo de Estudos, Pesquisas e Projetos de Reforma Agrária*, Nro. 35: 266-287. <http://revista.fct.unesp.br/index.php/nera/article/view/4895/3692>

[27] **Ramos-Martin, J.** (2017): "Esta vez es diferente. La importancia de la energía explicada a expertos de otras áreas", en *Investigación y Ciencia* n°487: 94-95, Abril 2017. <http://www.investigacionyciencia.es/files/27630.pdf>

[26] Ponce, J., **Ramos-Martin, J.** (2017): "Impact of two policy interventions on dietary diversity in Ecuador", *Public Health Nutrition*, <https://doi.org/10.1017/S1368980017000052>

[25] Falconí, F., **Ramos-Martin, J.**, Cango, P. (2017): "Caloric unequal exchange in Latin America and the Caribbean", *Ecological Economics.*, Vol. 134: 140-149. <http://dx.doi.org/10.1016/j.ecolecon.2017.01.009>

[24] Ginard-Bosch, F.J., **Ramos-Martin, J.** (2016): "Energy metabolism of the Balearic Islands (1986-2012)", *Ecological Economics*, Vol. 124: 25-35. <http://dx.doi.org/10.1016/j.ecolecon.2015.12.012>

[23] Velasco-Fernández, R., **Ramos-Martín, J.**, Giampietro, M. (2015): "The energy metabolism of China and India between 1971 and 2010: Studying the bifurcation", *Renewable and Sustainable Energy Reviews*, Vol. 41: 1052-1066. <http://dx.doi.org/10.1016/j.rser.2014.08.065> IF (2014): 5.901, Q1 *Energy & Fuels*

[22] Arizpe, N., **Ramos-Martin, J.**, Giampietro, M. (2014): "An assessment of the metabolic profile implied by agricultural change in two rural communities in the North of Argentina", *Environment, Development and Sustainability*, Vol. 16 (4): 903-924. <http://dx.doi.org/10.1007/s10668-014-9532-y>

[21] Ariza-Montobbio, P., Farrell, K.N., Gamboa, G., **Ramos-Martin, J.** (2014): "Integrating energy and land-use planning: socio-metabolic profiles along the rural-urban continuum in Catalonia (Spain)", *Environment, Development and Sustainability*, Vol. 16 (4): 925-956. <http://dx.doi.org/10.1007/s10668-014-9533-x>

[20] Scheidel, A., Farrell, K.N., **Ramos-Martin, J.**, Giampietro, M., Mayumi, K. (2014): "Land poverty and emerging ruralities in Cambodia: Insights from Kampot province", *Environment, Development and Sustainability*, Vol. 16 (4): 823-840.

<http://dx.doi.org/10.1007/s10668-014-9529-6>

[19] Muradian, R., Arsel, M., Pellegrini, L., Adaman, F., Aguilar, B., Agarwal, B., Corbera, E., Ezzine de Blas, D., Farley, J., Froger, G., Garcia-Frapolli, E., Gómez-Baggethun, E., Gowdy, J., Kosoy, N., Le Coq, J.F., Leroy, P., May, P., Méral, P., Mibielli, P., Norgaard, R., Ozkaynak, B., Pascual, U., Pengue, W., Perez, M., Pesche, D., Pirard, R., **Ramos-Martin, J.**, Rival, L., Saenz, F., Van Hecken, G., Vatn, A., Vira, B. and Urama, K. (2013): Payments for ecosystem services and the fatal attraction of win-win solutions, *Conservation Letters*, Vol. 6 (4): 274-279. <http://dx.doi.org/10.1111/j.1755-263X.2012.00309.x> IF (2013): 5.032, Q1 Biodiversity Conservation

[18] Scheidel, A., Giampietro, M., **Ramos-Martin, J.** (2013): “Self-sufficiency vs. super-surplus: Conflicting local and national rural development goals in Cambodia”, *Land Use Policy*, 34: 342-352.  
<http://dx.doi.org/10.1016/j.landusepol.2013.04.009> IF (2013): 3.134, Q1 [Environmental Studies](#)

[17] Mayumi, K., Giampietro, M., **Ramos-Martin, J.** (2012): “Reconsideration of dimensions and curve fitting practice in view of Georgescu-Roegen’s epistemology in economics”, *Romanian Journal of Economic Forecasting*, Vol. 15 (4): 17-35. [http://www.ipe.ro/rjef/rjef4\\_12/rjef4\\_2012p17-35.pdf](http://www.ipe.ro/rjef/rjef4_12/rjef4_2012p17-35.pdf) IF (2012): 0.394, Q4 Economics

[16] Giampietro, M., **Ramos-Martin, J.**, Ulgiati, S. (2012): “Can we break the addiction to fossil energy?”, *Energy*, Vol. 37 (1): 2-4. <http://dx.doi.org/10.1016/j.energy.2011.11.001> IF (2012): 3.651, Q1 Energy & Fuels, Q1 Thermodynamics

[15] Recalde, M., **Ramos-Martin, J.** (2012): “Going beyond energy intensity to understand the energy metabolism of nations: The case of Argentina”. *Energy*. Vol. 37 (1): 122-132. <http://dx.doi.org/10.1016/j.energy.2011.07.011> IF (2012): 3.651, Q1 Energy & Fuels, Q1 Thermodynamics

[14] **Ramos-Martin, J.**, Giampietro, M., Ulgiati, S. (2011): “Can we break the addiction to fossil energy?” *Ecological Modelling*. 223 (1): 1-3, <http://dx.doi.org/10.1016/j.ecolmodel.2011.10.024> IF (2011): 2.326, Q2 Ecology

[13] Arizpe, N., Giampietro, M., **Ramos-Martín, J.** (2011): “Food security and fossil energy dependence: an international comparison of the use of fossil energy in agriculture (1991-2003)”, *Critical Reviews in Plant Sciences*, Vol.30: 45-63. <http://dx.doi.org/10.1080/07352689.2011.554352> IF (2011): 4.659, Q1 Plant Sciences

[12] **Ramos-Martín, J.**, Cañellas-Boltà, S., Giampietro, M., Gamboa, G. (2009): “Catalonia’s energy metabolism: using the MuSIASEM approach at different scales”, *Energy Policy*, Vol. 37 (11): 4658-4671, <http://dx.doi.org/10.1016/j.enpol.2009.06.028> IF (2009): 2.436, Q1 [Environmental Studies](#)

[11] Giampietro, M., Mayumi, K., and **Ramos-Martin, J.** (2009): “Multi-scale

integrated analysis of societal and eco system metabolism (MuSIASEM): Theoretical concepts and basic rationale”, *Energy*, Vol. 34 (3): 313-322. <http://dx.doi.org/10.1016/j.energy.2008.07.020> IF (2009): 2.952, Q1 Energy & Fuels, Q1 Thermodynamics

[10] **Ramos-Martin, J.**, Giampietro, M., and Mayumi, K. (2007): “On China’s exosomatic energy metabolism: an application of multi-scale integrated analysis of societal metabolism (MSIASM)”, *Ecological Economics*, Vol. 63(1): 174-191. <http://dx.doi.org/10.1016/j.ecolecon.2006.10.020> Reprinted in Martínez-Alier, J., and Røpke, I. (editors) (2008): *Recent Developments in Ecological Economics*, Edward Elgar, Cheltenham, 1336 pp. ISBN: 9781843767831 IF (2007): 1.549, Q1 Economics, Q1 Environmental Studies

[9] Giampietro, M., Mayumi, K., and **Ramos-Martin, J.** (2007): “How serious is the addiction to oil of developed society? A multi-scale integrated analysis based on the concept of societal and ecosystem metabolism: Part 2”, *International Journal of Transdisciplinary Research*, Vol. 2 (1): 42-92.

[8] Eisenmenger, N., **Ramos-Martin, J.**, and Schandl, H. (2007):” Análisis del metabolismo energético y de materiales de Brasil, Chile y Venezuela”, *Revista Iberoamericana de Economía Ecológica*, Vol 6: 17-39.

[7] Giampietro, M., Mayumi, K., and **Ramos-Martin, J.** (2006): “Can biofuels replace fossil energy fuels? A multi-scale integrated analysis based on the concept of societal and ecosystem metabolism: Part 1”, *International Journal of Transdisciplinary Research*, Vol. 1, num. 1: 51-87.

[6] **Ramos-Martin, J.**, and Giampietro, M. (2005): “Multi-Scale Integrated Analysis of Societal Metabolism: Learning from trajectories of development and building robust scenarios”, *International Journal of Global Environmental Issues*, Vol. 5 Num. 3/4: 225-263. <http://dx.doi.org/10.1504/IJGENVI.2005.007993>

[5] Giampietro, M., and **Ramos-Martin, J.** (2005): “Multi-Scale Integrated Analysis of Sustainability: a methodological tool to improve the quality of narratives”, *International Journal of Global Environmental Issues*, Vol. 5 Num. 3/4: 119-141. <http://dx.doi.org/10.1504/IJGENVI.2005.007989>

[4] **Ramos-Martin, J.** (2003c): “Empirismo en economía ecológica: una visión desde la teoría de sistemas complejos” [Empiricism in ecological economics: a vision from complex systems theory], *Revista de Economía Crítica*. Vol. 1: 75-93.

[3] **Ramos-Martin, J.** (2003b). “Intensidad energética de la economía española: una perspectiva integrada” [Energy intensity of the Spanish economy: an integrated perspective], *Revista de Economía Industrial*. Number 351(III): 59-72.

[2] **Ramos-Martin, J.** (2003a): “Empiricism in Ecological Economics: A Perspective from Complex Systems Theory”, *Ecological Economics* Vol 46/3 pp 387-398. [http://dx.doi.org/10.1016/S0921-8009\(03\)00191-5](http://dx.doi.org/10.1016/S0921-8009(03)00191-5) IF (2003): 1.230, Q1 Economics

[1] **Ramos-Martin, J.** (2001a): "Historical analysis of energy intensity of Spain: from a "conventional view" to an "integrated assessment", *Population and Environment*, 22 (3): 281-313. <http://dx.doi.org/10.1023/A:1026672513730> IF (2001): 0.240, Q3 Demography

### C) BOOKS AND EDITED BOOKS

[6] Giampietro, M., Aspinall, R.J., **Ramos-Martin, J.**, Bukkens, S.G.F (Eds.)(2014): *Resource Accounting for Sustainability Assessment: The Nexus between Energy, Food, Water and Land Use*, Routledge Explorations in Sustainability and Governance, Routledge. ISBN 978-0-415-72059-5.

[5] **Ramos-Martin, J.**, Giampietro, M., Ulgiati, S., Bukkens, S.G.F. (Eds.) (2011): *Can We Break the Addiction to Fossil Energy? Proceedings of the 7<sup>th</sup> Biennial International Workshop Advances in Energy Studies*. Universitat Autònoma de Barcelona, Bellaterra, Spain.

[4] Mestre, M., Ortega, M., Musoles, L., **Ramos, J.** (2011): *Conflictos socio-ambientales de la acuicultura del camarón en Centroamérica. Un análisis desde la justicia ambiental*. Colección DOCS Núm.1. Vilanova i la Geltrú: Fundació Ent.

[http://www.lulu.com/items/volume\\_70/10779000/10779483/1/print/Num.1\\_DOC\\_S.pdf](http://www.lulu.com/items/volume_70/10779000/10779483/1/print/Num.1_DOC_S.pdf)

[3] **Ramos-Martin, J.** (Coord.) (2009): *Ús de l'energia a Catalunya. Anàlisi del Metabolisme energètic de l'Economia Catalana (AMEEC)*. Informes del CADS, número 8, volum 2. Consell Assessor per al Desenvolupament Sostenible. Generalitat de Catalunya, Barcelona.

[http://www15.gencat.cat/cads/AppPHP/images/stories/publicacions/informespecials/2009/informe\\_complet\\_def.pdf](http://www15.gencat.cat/cads/AppPHP/images/stories/publicacions/informespecials/2009/informe_complet_def.pdf)

[2] Iraegui, J., and **Ramos-Martin, J.** (2004). *Gestió Local de l'Energia [Local Energy Management]*. Fundació Pi i Sunyer i Diputació de Barcelona.

[1] **Ramos-Martin, J.**, Russi, D., Puig, I., Ortega, M., and Ungar, P. (2003): *Deuda Ecològica. ¿Quién debe a quién? [Ecological Debt. Who owes whom?]* Icaria Editorial, Barcelona. Also published in Catalan by the same Publisher, and in Italian (DEBITO ECOLOGICO Chi deve a chi? Editrice Missionaria Italiana. 2003).

### D) BOOK CHAPTERS

[21] Cango, P., **Ramos-Martin, J.**, Falconí, F.(2017): "The regional political economy of knowledge and environment", in E.A. Vivares (Ed.): *Regionalism, Development and the Post-Commodities Boom in South America*. Palgrave Macmillan: Cham, pp: 197-215. ISBN: 978-3-319-62550-8.

[20] **Ramos-Martin, J.**, Vázquez, J.P. (2017): "¿Pueden ser compatibles y armónicamente relacionales una sustentabilidad social y una sustentabilidad ambiental en sociedades periféricas y bajo el contexto de la búsqueda del desarrollo? Reflexiones y experiencias desde el caso ecuatoriano. Una



conversación entre Jesús Ramos Martín y Juan Pablo Vásquez", en F. Estenssoro (Ed.): *El Medio Ambiente y los Recursos Naturales como variables Estratégicas y Geopolíticas de América Latina en el Siglo XXI*. Santiago de Chile.

[19] **Ramos-Martín, J.** (2017): "Prólogo", en Azamar, A.; Escobar, D.; Peniche, S. (coords.): *Perspectivas de la economía ecológica en el nuevo siglo*, Universidad de Guadalajara, Zapopan, México, ISBN: 978-84-17075-48-4, pp: 7-9.

[18] González, A.C., Sastre, S., **Ramos-Martín, J.** (2015): El metabolismo socioeconómico de Cataluña, 1996-2010, in Carpintero, O. (dir): *El metabolismo económico regional español*, Madrid: FUHEM Ecosocial, 2015, 1127 p., ISBN: 978-84-606-6564-9, available online at [https://www.fuhem.es/media/cdv/file/biblioteca/Metabolismo/El\\_metabolismo\\_economico\\_regional\\_espanol.pdf](https://www.fuhem.es/media/cdv/file/biblioteca/Metabolismo/El_metabolismo_economico_regional_espanol.pdf)

[17] Giampietro, M., Aspinall, R.J., Ramos-Martín, J., Bukkens, S.G.F. (2014): "Resource accounting for sustainability assessment", in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.) *Resource Accounting for Sustainability: The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 15, pages 214-220.

[16] Diaz-Maurin, F., Cadillo-Benalcazar, J., Kovacic, Z., Madrid, C., Serrano-Tovar, T., Giampietro, M., Aspinall, R.J., Ramos-Martín, J., Bukkens, S.G.F. (2014): "The Republic of South Africa", in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.) *Resource Accounting for Sustainability: The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 14, pages 194-213.

[15] Madrid-Lopez, C., Cadillo-Benalcazar, J., Diaz-Maurin, F., Kovacic, Z., Serrano-Tovar, T., Gomiero, T., Giampietro, M., Aspinall, R.J., Ramos-Martín, J., Bukkens, S.G.F. (2014): "Punjab State, India", in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.) *Resource Accounting for Sustainability: The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 13, pages 181-193.

[14] Serrano-Tovar, T., Cadillo Benalcazar, J., Diaz-Maurin, F., Kovacic, Z., Madrid, C., Giampietro, M., Aspinall, R.J., Ramos-Martín, J., Bukkens, S.G.F. (2014): "The Republic of Mauritius", in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.) (2014). *Resource Accounting for Sustainability: The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 12, pages 163-180.

[13] Giampietro, M., Bukkens, S.G.F., Aspinall, R.J., Ramos-Martín, J. (2014): "The Sudoku effect within MUSIASEM", in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.) *Resource Accounting for Sustainability: The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 11, pages 147-160.

[12] Kovacic, Z., Ramos-Martín J. (2014): "Accounting for human activity and socio-economic characteristics", in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.) *Resource Accounting for Sustainability:*

*The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 6, pages: 61-72.

[11] Giampietro, M., Aspinall, R.J., Ramos-Martin, J., Bukkens, S.G.F. (2014): “Addressing the complexity of integrated resource assessment”, in Giampietro, M., Aspinall, R.J., Ramos-Martín, J. and Bukkens, S.G.F. (Eds.). *Resource Accounting for Sustainability: The Nexus between Energy, Food, Water and Land Use*. London: Routledge, 250 pp. Chapter 1, pages 1-8.

[10] Giampietro, M., Mayumi, K., and **Ramos-Martin, J.** (2013): Two conceptual tools for Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM): “Multi-Purpose Grammars” and “Impredicative Loop Analysis”, in Farrell, K.; Luzzati, T; van den Hove, S.; (eds.): *Beyond Reductionism: A passion for interdisciplinarity*, Routledge, London, 352 pp. Chapter 8, pages 179-217. [ISBN: 978-0-415-47014-8](#)

[9] Gowdy, J., Giampietro, M., **Ramos-Martin, J.**, Mayumi, K. (2009): “Incorporating biophysical foundations in a hierarchical model of societal metabolism”, in Holt, R.P.F., Spash, C.L., and Pressman, S. (Eds.) *Post Keynesian and Ecological Economics: Confronting Environmental Issues*. Cheltenham: Edward Elgar, 224 pp. [ISBN: 978-1-84720-668-8](#) pp. 203-220.

[8] **Ramos-Martín, J.** (2009): “Metabolisme energetic de l’economia catalana”, in Universitat Internacional de la Pau (Ed.): *Conflictes pel control de l’energia*. Sant Cugat del vallès, UIP, 294 pp. ISBN: 9-788461-325627, pages 241-265.

[7] **Ramos-Martin, J.**, Cañellas-Boltà, S. (2008): “Why Catalonia will see its energy metabolism increase in the near future: an application of MuSIASEM”, in H. Schnitzer, S. Ulgiati, (Eds.): *Advances in Energy Studies: Towards a Holistic Approach Based on Science and Humanity*. Graz University of Technology, Graz, Austria. 604 pp. ISBN: 978-3-85125-018-3. Pages 380-389.

[6] Eisenmenger, N., **Ramos-Martin, J.**, and Schandl, H. (2007): Transition in a changed context: patterns of development in a globalizing world. In M. Fischer-Kowalski and H. Haberl (Editors): *Socio-Ecological Transitions and Global Change. Trajectories of Societal Metabolism and Land Use*. Edward Elgar, Cheltenham, 384pp. [ISBN 978 1 84720 340 3](#) pp. 179-222.

[5] Eisenmenger, N., **Ramos-Martin, J.**, Schandl, H. (2005): “The environmental pillar of sustainability”, in Schoder, T., et al. (Eds.) *MARS: Monitoring the Alpine Regions’ Sustainability*. BAK Basel Economics, Switzerland.

[4] **Ramos-Martin, J.** (2004b): “La perspectiva biofísica de la relació home-natura: Economia Ecològica” [The biophysical perspective in the relationship between human beings and nature: Ecological Economics], in J. Valdivielso (Ed.), *Les dimensions socials de la crisi ecològica [The Social Dimensions of the Ecological Crisis]*, Edicions UIB, Palma de Mallorca, Spain, 2004.

[3] **Ramos-Martin, J.** (2004a): “La perspectiva biofísica del proceso económico: Economía Ecológica” [The biophysical perspective in the economic process: Ecological Economics]. In F. Falconi, M. Hercowitz, R. Muradian (Eds.):

*Globalización y Desarrollo en América Latina [Globalisation and Development in Latin America]*. FLACSO, Quito, Ecuador, pp. 19/47.

[2] Falconí, F., **Ramos-Martin, J.** (2003). “Societal Metabolism of Societies: The bifurcation between Spain and Ecuador”. In: *Advances in Energy Studies. Reconsidering the Importance of Energy*, S. Ulgiati, M.T. Brown, M. Giampietro, R.A. Herendeen, and K. Mayumi, Editors. SGE Publisher Padova, Italy, 2003, pp.45/61.

[1] **Ramos-Martin, J.** (2001b): “Non-linearity in energy metabolism of Spain: “Attractor Points” for the Development of Energy Intensity”, in S. Ulgiati et al. (eds), *Advances in Energy Studies. Exploring Supplies, Constraints, and Strategies*, Padova (Italy), SGE Editoriali. Pp: 535-542.

### **E) NON-REFEREED JOURNAL PAPERS**

[12] **Ramos Martín, J.** (2015): "Base material de la economía del conocimiento", *América Latina en Movimiento*, No. 507: 8-10.

[11] Sorman, A.H., Martínez, C., **Ramos-Martin, J.**, Giampietro, M. (2014): “Necesidad de un análisis integrado del metabolismo de las Islas Galápagos”, *Sector-e, Gestión Emergente y Opinión*, núm. 2: 10-13.

[10] Viteri, H.O., **Ramos-Martin, J.** (2014): “La institucionalidad de las organizaciones asociativas en la Amazonía del Ecuador: riesgos y problemas”, *Sector-e, Gestión Emergente y Opinión*, núm. 2: 6-9.

[9] **Ramos-Martin, J.** (2013): "Jordi Roca Jusmet (Coord.), Vicent Alcántara, Iñaki Arto, Emilio Padilla y Mònica Serrano (2013): La responsabilidad de la economía española en el calentamiento global", *Revista de Economía Crítica*, nº 16: 355-359.

[8] **Ramos-Martin, J.** (2012): “Economía Biofísica”, *Investigación y Ciencia*, junio: 68-75.

[7] **Ramos-Martin, J.** (2011): “La insostenibilidad energética del “Gran Dragón”: China 1985-2009”, *PAPELES de relaciones ecosociales y cambio global*, Nº 115: 49-63. <http://www.fuhem.es/revistapapeles/index.aspx?numero=115>

[6] Giampietro, M. and **Ramos-Martin, J.** (2010): *Algunes reflexions sobre el futur del cotxe elèctric*, *Tecnodebats*, núm. 5: 8-13.

[5] **Ramos-Martín, J.** (2009): Review of the book “El final de la era del petróleo barato, por Joaquim Tempere y Enric Tello (Coords.), Icaria, Barcelona, 2007”, *Revista de Economía Crítica*, Vol. 8: 206-209, [http://econpapers.repec.org/article/retecocri/rec08\\_5f15.htm](http://econpapers.repec.org/article/retecocri/rec08_5f15.htm)

[4] **Ramos-Martin, J.** (2008): “Consumo de recursos naturales en China y su impacto en el debate sobre el decrecimiento”, *Ecología Política*. Núm. 35: 105-107. <http://www.ecologiapolitica.info/ep/35.pdf>

[3] **Ramos-Martin, J.** (2001c): “De Kyoto a Marrakech: historia de una

flexibilización anunciada” [From Kyoto to Marrakech: history of a flexibilisation foretold], *Ecología Política* 22: 45-56.

[2] **Ramos-Martin, J.** (1999a): “Breve comentario sobre la desmaterialización en el estado español” [Brief comment on dematerialisation in Spain], *Ecología Política*, 18: 61-64.

[1] **Ramos-Martin, J.** (1999b): “New role of Flexibility Mechanisms for improving equity under a new burden sharing scheme”, *Joint Implementation Quarterly*, Vol. 5 (4).

## 8. RESEARCH PROJECTS

2016 – 2017: **Researcher** at the project “Caloric Unequal Exchange in Ecuador”, FLACSO Ecuador FDA 2016-2017.

2014 – 2017: **Researcher** at the project *European-Brazilian Network on Energy Planning (NETEP)*, funded by the European Commission, Grant Agreement Number: FP7-PEOPLE-2013-IRSES-612263.

2013 – 2016: **Researcher** at the project *Participatory Integrated Assessment of Energy systems to promote Energy Access and Efficiency (PARTICIPIA)*, an Edulink II project funded by EuropeAid, contract number: DCI-AFS/2013/320-333.

2012 – 2015: **Researcher** at the project *Global and Local food chain Assessment: a Multidimensional performance-based approach (GLAMUR)*, funded by the European Commission, Grant Agreement Number: FP7-KBBE-2012-6-311778, <http://www.glamur.eu/>.

2012 – 2015: **Researcher** at the project *Material Advanced Recovery Sustainable Systems (MARSS)*, funded by the European Commission DG Environment, program: LIFE+ Environment Policy and Governance, Grant Agreement Number: LIFE11 ENV/DE/343, <https://sharepoint.ecampus.rwth-aachen.de/units/iar/marss/public/SitePages/Homepage.aspx>.

2012 – 2013: **Researcher** at the project *Application of MuSIASEM approach to three cases in the agrifood sector*, funded by FAO, Contract Number: GCP/GLO/445/GER(GIZ), <http://www.fao.org/energy/81320/en/>

2012 – 2013: **Researcher** at the project *Consultancy on subsidies, incentives and ecological footprint in the Galapagos Islands*, funded by WWF, Agreement Number: FV62.

2012: **Principal Investigator and Coordinator** at the project *Rio + 20 a la UAB. Què vol dir desenvolupament sostenible al Segle XXI?* funded by the Fundació Autònoma Solidària.

2011 – 2012: **Principal Investigator** at the project *Fortalecimiento académico-investigativo del Grupo de Desarrollo Institucional y Gestión Comunitaria en Recursos Hídricos y Ambiente, del Instituto Cinara de la Universidad del Valle*,

funded by the Spanish Agency for Cooperation, AECID, contract AP/039278/11.

2011 – 2013: **Researcher** at the project *Salud, alimentación y Mortalidad: Los niveles de vida en España, SS. XIX-XX (Health, food and mortality: living standards in Spain XIX and XX centuries)*, funded by the Spanish Ministry of Science and Innovation, contract HAR2010-20684-C02-01.

2010-2011: **Principal Investigator and coordinator** of the project *Anàlisi i propostes per a la resolució de conflictes socio-ambientals pesquers a Centreamèrica (Analysis and proposals for resolution of fishery-related socio-environmental conflicts in Central America)*, funded by the Institut Català per a la Pau (Catalan Institute for Peace), contract 2009-RICIP-00002.

2009-2010: **Principal Investigator and coordinator** of the Special Action of the Spanish Ministry for Science and Innovation *IV Congreso Iberoamericano sobre Desarrollo y Ambiente (CISDA IV)*, ECO2009-06555-E.

2009-2014: **Researcher** of the project *UHE: Institucions Econòmiques, Nivells de Vida i Medi Ambient (Economic Institutions, Quality of life and the environment)*, Generalitat de Catalunya, 2009SGR962.

2007 – 2010: **Coordinator of ICTA-UAB activities** in the EU-funded cooperation project “Sustainable Use of Photosynthesis Products & Optimum Resource Transformation (SUPPORT)”, EuropeAid Co-operation Office, *alfa* project, academic co-operation between the EU and Latin America. Contract number: AML/19.0901/06/18414/II-0545-FA-FCD-FI

2007 – 2010: **Researcher** at the EU-funded project, “Synergies in Multi-scale Inter-Linkages of Eco-social systems (SMILE)”, under the supervision of Dr. Mario Giampietro. Contract number: 217213-FP7-2007-SSH-1.

2005 – 2008: **Researcher** at the project “Nivells de vida, alimentació i economia ecològica” [Quality of life, food and ecological economics], funded by the Government of Catalonia, SGR2005-00571.

2006 - 2007: **Main researcher and project coordinator** of the project “Analysis of the Energy Metabolism of the Catalan Economy”, commissioned and funded by the Advisory Council for Sustainable Development of the Catalan Government.

2005: **Researcher** for the project “The meaning of natural resources for explaining economic growth, REXECO”, funded by the Austrian national Bank science fund.

2005: **Researcher and Work Package leader** for the EU funded project “MATISSE: Methods and Tools for Integrated Sustainability Assessment”. Contract no.: 004059 (GOCE) MATISSE

2005: **Researcher** for the EU funded project (INTERREG IIIB Programme) “MARS: Monitoring the Alpine Region’s Sustainability”.

2005: **Researcher** for the project “Practicing Sustainability. An Application of Integrated Analysis in the Nicobar Archipelago”, funded by the Austrian National

Bank science fund.

2003-2004: **Researcher** for the Italian Ministry of Agriculture project “Developing procedures for improving the quality of scientific information used for diffusion on GMOs”.

2002-2003: **Researcher** for the EU funded project “Development and application of a multi-criteria software decision analysis tool for renewable energy sources”, contract NNE5-1999-NNE5/273/2001.

2002: Special Action of the Spanish Ministry of Science and Education, contract number REN2002-10168-E (Acción Especial, Semana Iberoamericana de Desarrollo y Medio Ambiente).

2002: Integrated Action between the Spanish Ministry for Science and Technology and the Austrian Government, contract HU2000-0025: “Integración del análisis de flujos de materia y energía en el análisis multicriterial (Integrating materials and energy flows analysis into multicriteria analysis)”.

2002: EASY-ECO (Evaluation of Sustainability in Europe), coordinated by the University of Economics and business Administration of Vienna, and funded by the European Commission (Contract HPCF-CT-2001-00286).

1999-2002: “Evaluación económico-ambiental en un marco internacional (Environmental-economic evaluation in an international framework)”, funded by the Spanish Ministry of Education and Science, DGICYT (Sectorial Program of General Promotion of Knowledge), contract P98-0868.

## 9. CONFERENCES AND WORKSHOPS

21<sup>st</sup>-23<sup>th</sup> May 2015: Plenary “La necesidad de una planificación prospectiva biofísica”, at the **I Congreso de la Sociedad Andina de Economía Ecológica**, organized by Universidad del Valle, Cali, Colombia.

7th May 2015: Plenary “La base material de la economía del bioconocimiento”, at the **I Seminario Redes de Bioconocimiento: Una alternativa para el desarrollo**, organized by the Departamento de Desarrollo, Ambiente y Territorio, FLACSO, Quito, Ecuador.

18th December 2014: Plenary “La planificación prospectiva, enfoque de los metabolismos social y ecológico”, at the workshop **Planificación prospectiva nacional y retos de investigación**, organized by SENPLADES, Quito, Ecuador.

10th December 2014: Plenary “Planificación prospectiva biofísica”, at the **Seminario Internacional de Planificación para América Latina y el Caribe**, organized by Red de Planificación de América Latina y el Caribe ([REDEPLAN](#)), Quito, Ecuador.

27th August 2014: Plenary “Retos del siglo XXI en planificación y ordenamiento territorial de largo plazo”, en el **Conversatorio Prospectiva Regional Territorial**

**Participativa**, celebrado en Loja, Ecuador y organizado por el [Plan Binacional de Desarrollo de la Región Fronteriza Ecuador-Perú](#).

11<sup>th</sup> December 2013: Seminar “Societal Metabolism”, at the Curso de Economía Ecológica, organized by FLACSO, Quito, Ecuador.

12<sup>th</sup> –13<sup>th</sup> December 2013, one Plenary Session and three oral presentations at the **VI Congreso Iberoamericano de Desarrollo y Ambiente (CISDA VI)**, Quito, Ecuador. Titles: Plenary – Closure Session; Oral Presentations – a) An assessment of the metabolic profile implied by agricultural change in two rural communities in the North of Argentina, with Nancy Arizpe and Mario Giampietro; b) Principales patrones de uso del suelo como generadores de ingresos económicos de los pequeños productores de café y cacao en la Amazonía norte del Ecuador, with Oswaldo Viteri; and c) Integrando la planificación energética y territorial: Explorando tipologías de metabolismo energético a lo largo del continuo urbano-rural en Cataluña, España, with Pere Ariza, Katherine Farrell and Gonzalo Gamboa.

26<sup>th</sup> – 27<sup>th</sup> November 2012, Workshop on Water Metabolism. **Seminario sobre Metabolismo Hídrico: “Analizando los patrones de uso del agua en sistemas complejos”**. Instituto CINARA, Universidad del Valle, Cali, Colombia.

17<sup>th</sup> – 21<sup>st</sup> September 2012, **7th Liphe4 Summer School on Integrated Analysis of Sustainability**. Title: “Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM): Applications to Different Topics”. Casa de Convalescència, Universitat Autònoma de Barcelona, Spain.

16<sup>th</sup> December 2011, 1 keynote speech at the workshop **El futur de l’alimentació en risc. De la crisi energètica a la crisi alimentària**, organized by Fundació Autònoma Solidària. Title: “Perspectivas en la evolución del precio de la energía”. Barcelona.

12<sup>th</sup> – 14<sup>th</sup> September 2011, 1 poster, 1 oral communication and 1 plenary session at the **V Congreso Iberoamericano sobre Desarrollo y Ambiente (CISDA V)**. Poster with Marina Recalde entitled “Más allá de la intensidad energética: Un análisis del metabolismo energético Argentino”. Oral communication with Nancy Arizpe and Mario Giampietro entitled “Caracterización integral y manejo sustentable de recursos en dos comunidades afectadas por la expansión de la soja”. Plenary sesión with the title “Conclusiones del congreso y “Declaración de Santa Fe”. Universidad Nacional del Litoral, Santa Fe, Argentina.

14<sup>th</sup> – 17<sup>th</sup> June 2011, 2 oral presentations at the **9<sup>th</sup> International Conference of the European Society for Ecological Economics: Advancing Ecological Economics**. With Mario Giampietro and Kozo Mayumi “The Multi-Scale Integrated Assessment of Societal and Ecosystem Metabolism approach: Theoretical relevance and practical applications within different environmental realms”. With Nancy Arizpe, “Could mechanization be a solution for poverty in a Mayan community? Mennonite’s vs Maya’s agricultural production systems”. Bogazici University, Istanbul, Turkey.

19<sup>th</sup> – 21<sup>st</sup> October 2010, poster presented at the **7th Biennial International Workshop: Advances in Energy Studies 2010: Can we break the addiction to**

**fossil energy?**, Title: “On why Argentina is increasing its energy intensity: a multi-scale integrated analysis of its energy metabolism”, jointly with Marina Recalde. Universitat Autònoma de Barcelona, Spain.

21<sup>st</sup> October 2009, seminar at the course **Climate Change and Business: Challenges and opportunities in a decarbonising future**. Title: “Energy trends, economic growth and technology”. Universitat Pompeu Fabra, Barcelona, Spain.

9<sup>th</sup> – 10<sup>th</sup> October 2009, presentation given at the **IV Congreso Iberoamericano sobre Desarrollo y Ambiente “Construyendo modelos alternativos de desarrollo”**. Título: “El análisis de usos del tiempo y suelo para el estudio del conflicto de la expansión de la soja en dos comunidades de Formosa, Argentina”, jointly with Nancy Guadalupe Arizpe Ramos. Universidad Pontificia Javeriana, Bogotá, Colombia.

7<sup>th</sup> – 8<sup>th</sup> October 2009, **Curso Internacional de Economía Ecológica. La economía ecológica como propuesta analítica a la crisis ambiental y al modelo de desarrollo**. Title: “Análisis integrado multiescalar del metabolismo social”. Universidad Nacional, Bogotá, Colombia.

14<sup>th</sup> – 18<sup>th</sup> September 2009, **II Curso de verano de Economía Ecológica: ¿Es posible otra interpretación de la crisis económica? La visión desde la economía ecológica**. Title: “Análisis integrado del metabolismo social”. Universidad Pablo de Olavide, Carmona, Spain.

13<sup>th</sup> – 17<sup>th</sup> October 2008, **6<sup>th</sup> Liphe4 Fall School on Integrated Analysis of Sustainability**. Title: “Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM): Examples of applications”. West University of Timisoara, Romania.

17<sup>th</sup> – 23<sup>rd</sup> July 2008, presentation given at the **XXIII Summer Course of the Universitat Internacional de la Pau, “Conflictes pel control de l’Energia”**. Title: “Metabolisme energètic de l’economia catalana”. Universitat Internacional de la Pau, Sant Cugat del Vallès, Spain.

14<sup>th</sup> – 18<sup>th</sup> July 2008, presentation given at the **5<sup>th</sup> Liphe4 Summer School on Integrated Analysis of Sustainability**. Title: “Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM): Examples of applications”. Universitat Autònoma de Barcelona, Bellaterra, Spain.

1<sup>st</sup> July 2008, presentation given at the **6<sup>th</sup> Biennial International Workshop Advances in Energy Studies “Towards a holistic approach based on science and humanity”**, held in Graz, Austria, from June 29<sup>th</sup> to July 2<sup>nd</sup>. Title: “Why Catalonia will see its energy metabolism increase in the near future: an application of MuSIASEM”, jointly with Sílvia Cañellas-Boltà.

1<sup>st</sup> December 2007, presentation given at the workshop **Canvi climàtic i crisi energètica: sol·lucions comunes [Climate change and the energy crisis: common solutions]**, organised by OCEAS (Observatori de la crisi energètica i les alternatives de societat). Title: “El metabolisme energètic de Catalunya, l’informe AMEEC” [The energy metabolism of Catalonia, the AMEEC report].



26<sup>th</sup> April 2007, presentation given at the **workshop “L’energia è nelle nostre mani” [Energy is at our hands]**, University of Pisa, Italy. Title: “Energia e limiti: il metabolismo sociale” [Energy and limits: social metabolism].

27<sup>th</sup> February 2007, presentation given at the conferences cycle **Aula d’Ecologia 2007**, organised by the City Council of Barcelona. Title: “Metabolisme energetic i economia” [Energy metabolism and the economy].

15<sup>th</sup> – 18<sup>th</sup> December 2006, 3 papers presented jointly with Mario Giampietro and Kozo Mayumi at the **9<sup>th</sup> Biennial Conference of the International Society for Ecological Economics, “Ecological Sustainability and Human Well-Being”**, Delhi, India. Titles: “Multi-Scale Integrated Analysis of Societal Metabolism (MSIASM): an overview of rationale and theory”, “An Application of MSIASM to Chinese exosomatic energy metabolism”, “Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MSIASSEM): An application to viability of large scale biofuels production”.

12<sup>th</sup> – 16<sup>th</sup> September 2006, 2 presentations jointly with Mario Giampietro and Kozo Mayumi and 1 presentation with Nina Eisenmenger and Heinz Schandl at the **5<sup>th</sup> Edition of the Biennial International Workshop Advances in Energy Studies, “Perspectives on Energy Future”**, Portovenere, Italy. Titles: “The energy metabolism of China, India and other world countries in relation to the Kyoto protocol and the possible role of biomass and other alternative energy sources”, “Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MSIASSEM) for checking the feasibility and desirability of alternatives to fossil energy. How serious is the addiction to oil of modern societies?”, and “Multi-scale Integrated Assessment of Sustainability in Latin America – a comparison of different trajectories of development for different countries”.

10<sup>th</sup> – 14<sup>th</sup> July 2006, 2 presentations at the Universitat Rovira i Virgili **summer course “Energia i Sostenibilitat: del canvi climatic al pic del petroli”**. Titles: “Desenvolupament economic i consum d’energia. El miratge del desacoblament energetic i la paradoxa de Jevons”, and “Metabolisme energetic exosomatic de les societats. Comparació entre països desenvolupats i en desenvolupament, i perspectives de futur”.

17<sup>th</sup> – 23<sup>rd</sup> July 2005, presentation at the **2<sup>nd</sup> Liphe4 Summer School on Participatory Integrated Assessment of Sustainability**. Title: “Multi-Scale Integrated Analysis of Societal Metabolism (MSIASM): Examples of applications at the national level”.

June 2005, 2 presentations jointly with Mario Giampietro and Kozo Mayumi at the **6<sup>th</sup> International Conference of the European Society for Ecological Economics “Science & Governance: The Ecological Economics Perspective”**, held in Lisbon 14<sup>th</sup> to 17<sup>th</sup> June 2005. Titles, “Using quantitative analysis to improve the quality of the narratives about sustainability: Multi-Scale Integrated Analysis of Societal Metabolism (MSIASM)”, and “Addressing the Implications of Scales when analysing the evolution of economies using Multi-Scale Integrated Analysis of Societal Metabolism (MSIASM): The case of China”.

20<sup>th</sup> – 27<sup>th</sup> August 2004, presentation at the **Liphe4 Summer Workshop on**

**Participatory Integrated Assessment of Sustainability.** Title: “Multi-Scale Integrated Analysis of Societal Metabolism”.

17<sup>th</sup> – 20<sup>th</sup> March 2004, paper presented at the **International Conference “Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Multi-Scale Assessments”** within the activities of the **UN Millennium Ecosystem Assessment** held in Alexandria, Egypt. Title: “Multi-Scale Integrated Analysis of Societal Metabolism: Learning from Trajectories of Development and Building Robust Scenarios”.

3<sup>rd</sup> March 2004, **seminar at the University of Pisa** (Italy) on “Multi-Scale Integrated Analysis of Societal Metabolism: The Theory and Practice”

27<sup>th</sup> – 28<sup>th</sup> November 2003, **seminar given at the International Workshop “Interfaces between Science & Society”**, organised by the **Joint Research Centre of the European Commission** at Ispra, held in Milano. Title: “Multiple-Scale Integrated Analysis of Societal Metabolism: Examples of Applications”.

12<sup>th</sup> to 15<sup>th</sup> of February 2003, paper presented jointly with Miquel Ortega Cerdà at the **ESEE Conference Frontiers 2**, held in Tenerife, Spain. Title: “Non-linear relationship between energy intensity and economic growth”.

18<sup>th</sup> - 20<sup>th</sup> of November 2002, paper presented at the **Encuentro Nacional Rio + 10: II Cumbre de la Tierra** held at the University of Almeria. Title: "Johannesburg '02: La política ambiental en venta".

6<sup>th</sup> and 7<sup>th</sup> of June 2002, paper presented jointly with Miquel Ortega Cerdà at **the IX Symposium on Economic History held at the Autonomous University of Barcelona**. Title: “Energy intensity and economic growth: attractor points for both developed and developing countries”.

25<sup>th</sup>-29<sup>th</sup> of April 2002, seminar given at the workshop **SOCIAL METABOLISM**. Physical indicators of unsustainability Universitat Autònoma de Barcelona. Title: “Multiple-Scale Integrated Assessment of Societal Metabolism”.

From 6<sup>th</sup> to 9<sup>th</sup> March 2002, two papers given at the **7<sup>th</sup> Biennial Conference of the ISEE (International Society for Ecological Economics)**, held in Sousse, Tunisia. Titles: “Grandfathering vs. equitable allocations: The case for CO<sub>2</sub> emission rights”, and “Integrated assessment of development trajectories: the two sides of the bifurcation of economic development (Spain versus Ecuador)”, this latter jointly with Fander Falconí.

30<sup>th</sup>- 31<sup>st</sup> August 2001, paper given at the **Conservation and Sustainable Development – Comparative Perspectives workshop, held at the Yale Center for Comparative Research**, Yale University, New Haven, USA. Title: “Empiricism in Ecological Economics: A Vision from Complex Systems Theory”.

From 4<sup>th</sup> to 7<sup>th</sup> of July 2001, paper given with John Proops at the **EC High Level Scientific Conference, “Frontiers 1: Fundamental Issues of Ecological Economics”**, organised by the ESEE (European Society for Ecological Economics), Cambridge, UK. Title: “Empiricism in ecological economics: can there be a

predictive ecological econometrics?”.

From 18<sup>th</sup> to 22<sup>nd</sup> of June 2001, paper given at the **Tercera Convención Internacional sobre Medio Ambiente y Desarrollo. Tercer Congreso de Economía y Medio Ambiente**. La Habana, Cuba. Title: “Empirismo en economía ecológica: una visión desde la teoría de los sistemas complejos”.

From 23<sup>rd</sup> to 27<sup>th</sup> of May 2000, poster presented at the **Second International Workshop Advances in Energy Studies “Exploring Supplies, Constraints, and Strategies”**. Porto Venere, Italy. Title: Non-linearity in energy metabolism of Spain: “Attractor Points” for the Development of Energy Intensity.

From 3<sup>rd</sup> to 6<sup>th</sup> of May 2000, 2 communications presented at the **Third International Conference of the European Society for Ecological Economics “Transitions to a Sustainable Europe: Ecology-Economy-Policy”**, University of Vienna, Austria. Titles: “The Role of the Different Groups of Countries in the International Negotiations on Climate Change”, and “Brief comment on dematerialization and the energy intensity in Spain”.

From 12<sup>th</sup> to 16<sup>th</sup> July 1999: communication, jointly with Professor Joan Subirats “Ejercicio de simulación de las negociaciones de Cambio Climático. Negociación de un protocolo que limite las emisiones de gases de efecto invernadero”, at the *I Curs Internacional d'Estiu de Medi Ambient. Medi i societat: noves tendències*, Canillo, Andorra. Organised by the Institut d'Estudis Andorrans.

January 1999: “Workshop on Complex Systems Analysis, European Project “Environmental Valuation in Europe”. Barcelona.

## 10. ORGANISATION OF EVENTS

Member of the **Scientific Committee** of the VIII Congreso Iberoamericano sobre Desarrollo y Ambiente (CISDA), Universidad de Panamá, Panamá, 7-9 November 2017.

Member of the **International Organizing Committee** of the X Biennial International Workshop “Advances in Energy Studies”: Energy futures, environment and well-being, Università degli Studi di Napoli Parthenope, Naples, Italy, 25-28 September 2017.

Member of the **Scientific Committee** of the IX Simposio Nacional de Agroecología, Universidad Nacional, Sede Palmira, Colombia, 17-23 October 2016.

Member of the **Scientific Committee** of the IV International Congress on Economics, Universidad de Cuenca, Cuenca, Ecuador, 21-23 Septiembre 2016.

Member of the **Organizing Committee** of the I Foro de Educación Superior de Ecuador: Estado y Prospectiva de la Investigación Ecuatoriana en las Universidades

Emblemáticas, Universidad Nacional de Educación, Azogues, Ecuador, 22nd July 2016.

Member of the **Scientific Committee** of the Conferencia Internacional de Desarrollo Sostenible, of the Andean Network SDSN, Quito, Ecuador, 30<sup>th</sup> June-1<sup>st</sup> July 2015.

Member of the **Organizing Committee** of the VI Congreso Iberoamericano de Desarrollo y Ambiente (CISDA VI), Quito, Ecuador, 12<sup>th</sup> –13<sup>th</sup> December 2013 (<http://www.vicisda.org/>).

Member of the **Organizing Committee** of the 8th Liphe4 Summer School on *Developing Toolkits for Analyzing the Nexus between Land, Water, Food, Energy and Population across Scales*, held in Bellaterra, Spain, from 8<sup>th</sup> to 12<sup>th</sup> of July 2013.

Member of the **Organizing Committee** of the 7th Liphe4 Summer School on *Integrated Analysis of Sustainability*, held in Barcelona, Spain, from 17<sup>th</sup> to 21<sup>st</sup> of September 2012.

Member of the **International Organizing Committee** of the 8<sup>th</sup> Biennial International Workshop *Advances in Energy Studies*, Energy Security and Development – The Changing Global Context, held in Mumbai, India, 25<sup>th</sup>-27<sup>th</sup> October 2012 (<http://www.igidr.ac.in/conf/AES2012/>).

Member of the **Organizing Committee** of the V Congreso Iberoamericano de Desarrollo y Ambiente (CISDA V), Santa Fé, Argentina, 12<sup>th</sup> –14<sup>th</sup> September 2011 (<http://fich.unl.edu.ar/CISDAV/index.php>).

Member of the **Scientific Committee** of the 9th International Conference of the European Society for Ecological Economics: *Advancing Ecological Economics, Theory and Practice*, Bogazici University, Istanbul, 14<sup>th</sup>-17<sup>th</sup> June 2011 (<http://www.esee2011.org/>).

Member of the **Organizing Committee** of the 7th Biennial International Workshop *Advances in Energy Studies*, Can we break the addiction to fossil energy?, Universitat Autònoma de Barcelona, Bellaterra, Spain, 19<sup>th</sup>- 21<sup>st</sup> October 2010 (<http://www.societalmetabolism.org/aes2010.html>).

Member of the **Scientific Committee** of the “Cuartas Jornadas de la Asociación Argentino-Uruguay de Economía Ecológica, ASAUEE, *Nuevos escenarios globales y alternativas para un desarrollo local sostenible. La Economía Ecológica como oportunidad*, San Miguel de Tucumán, Argentina, 27 - 28 de November 2009 (<http://www.ungs.edu.ar/ecoeco>).

Member of the **Organising Committee** of the Fourth *Iberoamerican Congress on Development and Environment* (CISDA IV), Bogotá, Colombia, 5 - 10 October 2009 (<http://www.cisdaiv.unal.edu.co/>).

Member of the **Organising Committee** of the Third *Iberoamerican Congress on Development and Environment*, Heredia, Costa Rica, 5<sup>th</sup>-9<sup>th</sup> November 2007 (<http://www.una.ac.cr/redibec-cisda/>).

Member of the **Organising Committee and main Organiser** of the 3<sup>rd</sup> Liphe4 *Summer School on Developing Toolkits on Integrated and Participatory Analyses of Sustainability* ([www.liphe4.org/school.html](http://www.liphe4.org/school.html)), held in Sangonera la Verde (Murcia, Spain), from 16<sup>th</sup> to 22<sup>nd</sup> July 2006.

Member of the **Organising Committee and main Organiser** of the 2<sup>nd</sup> Liphe4 *Summer School on Participatory Integrated Assessment of Sustainability*, held in Sangonera la Verde (Murcia, Spain), from 17<sup>th</sup> to 23<sup>rd</sup> July 2005.

Member of the **Scientific Committee** of the 6<sup>th</sup> *International Conference of the European Society for Ecological Economics* (<http://www.esee2005.org/>), held in Lisbon, 14<sup>th</sup>-17<sup>th</sup> June 2005.

Member of the **Scientific Committee** of the International Conference *Complexity, Science & Society* ([http://www.liv.ac.uk/ccr/2005\\_conf/](http://www.liv.ac.uk/ccr/2005_conf/)), organised by the Center for Complexity Research, The University of Liverpool, held in Liverpool, 11th-14th September 2005.

Member of the **Organising Committee** of the Second *Iberoamerican Congress on Development and Environment*, held in Puebla, Mexico, 24<sup>th</sup>-28<sup>th</sup> October 2005.

Member of the **Organising Committee** of the Liphe4 *Summer Workshop on Participatory Integrated Assessment of Sustainability* ([www.liphe4.org/school](http://www.liphe4.org/school)), held in Deutschlandsberg (Austria), from 20<sup>th</sup> to 27<sup>th</sup> August 2004.

Member of the **Organising Committee and main Organiser** of the *Iberoamerican Congress on Development and Environment* (<http://www.ent-consulting.com/cidma>), held in Quito, Ecuador, from 9<sup>th</sup> to 12<sup>th</sup> April 2003.

## 11. SCIENTIFIC ASSOCIATIONS AND REVIEWING

**Reviewer of research proposals** for the French Agence Nationale de la Recherche, 2011 call.

**Reviewer of research proposals** for the Spanish National Plan on R+D, Agencia Nacional de Evaluación y Prospectiva (ANEP), 2011, 2012 and 2013 calls.

**Reviewer of research proposals** for the EU call NEST, march 2006.

**Reviewer of research proposals** for The Asia-Pacific Network for Global Change Research, 2005-2006, 2007-2008, 2010-2011.

**Member of the Consolidated Research Group** on Economic Institutions, Quality of Life and the Environment, SGR2005 – 00571.

**Member of the Academic Council** of the *I Diplomado de Economía Ecológica*, FLACSO Guatemala.

**Member of the Board** of the European Society for Ecological Economics (2003-2006).

Member of the International Society for Ecological Economics.

Member of the European Working Group “Multiple Criteria Decision Aiding”.

**Founding member** of the Asociación Hispano Portuguesa de Economía de los Recursos Naturales (Portuguese-Spanish Association of Natural Resource Economics), AERNA.

**Founding member** of the Red Iberoamericana de Economía Ecológica (Iberoamerican Network for Ecological Economics), REDIBEC.

**Founding member and Vice-President** of the Scientific Society LIPHE<sup>4</sup>

**Member of the Editorial Board** of *Frontiers in Energy Systems and Policy*, *Revista Iberoamericana de Economía Ecológica* (Iberoamerican Journal of Ecological Economics), *Estudios Ambientales* (Environmental Studies) and of *Ecología Política* (Political Ecology).

**Reviewer** for the journals *Ecological Economics*; *Energy Policy*; *Energy*; *Journal of Industrial Ecology*; *Journal of Cleaner Production*; *Journal of Environmental Management*; *Ecological Modelling*; *Environment, Development and Sustainability*; *Ecological Indicators*; *International Journal of Global Environmental Issues*; *Sustainability: Science, Practice, and Policy*; *The Philippine Scientist*; *Revista Iberoamericana de Economía Ecológica*; *Historia Agraria*; *Ecología Política*; *Íconos*.

## 12. PHD THESES SUPERVISED

**Raül Velasco**, *The pattern of Socio-Ecological Systems A focus on Energy, Human Activity, Value Added and Material Products*, September 22nd, 2017, Universitat Autònoma de Barcelona. Co-directed with Mario Giampietro

**Antonio Malo Larrea**, [\*El Metabolismo Social, el Sumak Kawsay y el Territorio: El caso de Cuenca, Ecuador\*](#), January 15th, 2015, Universitat Autònoma de Barcelona.

**Cristina Madrid López**, *The water metabolism of socio-ecosystems. Epistemology, methods and applications*. November 28, 2014. Co-supervised with Mario Giampietro and Vicent Alcántara.

**Eduardo Tarik Serrano Tovar**, [\*Spatial analysis in MuSIASEM. The use of Geographic Information Systems and Land Use applied to the integrated analysis of rural systems' metabolism\*](#). May 29, 2014. Co-supervised with Mario Giampietro.

**François Diaz-Maurin**, *The viability and desirability of Alternative Energy Sources. Exploring the controversy over nuclear power*. October 25, 2013. Universitat Autònoma de Barcelona. Co-supervised with Mario Giampietro.

**Héctor Oswaldo Viteri Salazar**, *Evaluación de la Sostenibilidad de los Cultivos*

*de Café y Cacao en las Provincias de Orellana y Sucumbíos – Ecuador*. October 4, 2013. Universitat Autònoma de Barcelona. Co-supervised with Tiziano Gomiero.

**Arnim Scheidel**, *Poverty, Human Health and Environment in Rural Areas of Developing Countries: Understanding the Linkages and Designing Analytical Tools for Rural Development Policy Makers*, June 28, 2013. Universitat Autònoma de Barcelona. Co-supervised with Mario Giampietro and Katharine Farrell.

**Pere Ariza-Montobbio**, *Urbanisation as a socio-ecological process and the “glocal” politics of “rurban” metabolism: How can we learn for a “low energy future” territorial planning?* June 27, 2013. Universitat Autònoma de Barcelona. Co-supervised with Joan Martínez Alier and Giorgos Kallis.

**Nancy Guadalupe Arizpe Ramos**, *The Multiscale Integrated Analysis of society and ecosystem metabolism in the science of local governance*, November 21, 2012, Universitat Autònoma de Barcelona. Co-supervised with Mario Giampietro and Joan Martínez Alier.

**Paola María Ungar Ronderos**, *Planear en el trópico. Conocimiento y acción en la gestión de parques nacionales en Colombia: el caso del Parque Nacional Natural Amacayacu*, May 25, 2012, Universitat Autònoma de Barcelona. Co-supervised with Roger Strand.

### 13. PHD THESES UNDER SUPERVISION

**Maria Calaf Forn**, *Economic instruments for waste management at the local and regional levels*, co-supervised with Emilio Padilla.

**Geovanna Lasso**, *De la agricultura campesina agroecológica a la agroindustria: impactos socio-economicos y biofísicos de distintos modelos agroproductivos*, co-supervised with Mario Giampietro.

### 14. MASTER THESIS SUPERVISED

**Muriel Prieto Botella**, *La reducció de la jornada de treball: anàlisi d’escenaris de redistribució de jornada laboral a Catalunya*, September 2014, Universitat Autònoma de Barcelona.

**Nina Fàbrega Domènech**, *Energy, economic growth and debt in Europe: A growing conflict in times of economic crisis*, June 2013, Universitat Autònoma de Barcelona.

**Raúl Velasco Fernández**, *Dos senderos diferenciados de metabolismo energético: China e India*, September 2012, Universitat Autònoma de Barcelona.

**Camilo Martínez Iglesias**, *Caracterización del consumo energético de las Islas Galápagos para un análisis del metabolismo social y ecosistémico*, September 2012, Universitat Autònoma de Barcelona.

**Xavier Ginard Bosch**, *Introducción a los flujos de materiales de la economía de las Islas Baleares (1997-2008)*, June 2011, Universitat Autònoma de Barcelona.

**Antonio Malo Larrea**, *Orígen y uso del agua en la ciudad de Cuenca, Ecuador*, September 2010, Universitat Autònoma de Barcelona.

**Hyerim Yoon**, *Climate Justice Quo Vadis? The Case of South Korea in International Climate Change Politics*, September 2010, Universitat Autònoma de Barcelona.

**Arturo Andersen Chinbuah**, *International comparison of the exosomatic energy metabolic profile of developed economies*, September 2010, Universitat Autònoma de Barcelona.

**Héctor Oswaldo Viteri Salazar**, *Evaluación de la sostenibilidad de los cultivos de café y cacao en las provincias de Orellana y Sucumbíos, Ecuador*, June 2010, Universitat Autònoma de Barcelona.

**Pere Ariza-Montobbio**, *Impact of biodiesel plantations on livelihood and food sovereignty in South India*, September 2008, Universitat Autònoma de Barcelona.

**Martha Moncada**, *Tras el invernadero. Un análisis de la industria florícola ecuatoriana desde el enfoque de la economía ecológica*, June 2005, Facultat