

CURRICULUM VITAE

November 2016

ANIL MARKANDYA

UK Address: 57 Prior Park Road
Bath BA2 4NF
United Kingdom
Tel.: 44 1225 336978
Email: anil.markandya@bc3research.org

Place of Birth: Lahore, Pakistan.

Nationality: British

Education:

| | |
|-----------|---|
| 1960-1964 | Friends School, Great Ayton, Teeside, Yorks. 'O' and 'A' Levels |
| 1964-1967 | University of York, York, England. B.A. (Honours) in Economics |
| 1967-1968 | London School of Economics, M.Sc. in Econometrics |
| 1975 | London School of Economics, Ph.D. in Economics |

Honorary Appointments (Prizes etc.):

- Fellow of the **Royal Society of Arts** (1991-).
- Winner of **Mazzotti Prize** (Venice) for contributions to economics and ecology (1991).
- Special Mention by **UNEP** for contributions to protection of the ozone layer (1995)
- Several awards at the **World Bank** for designing and implementing innovative projects and promoting sustainable development (2000-2005).
- Share in **Nobel Peace Prize** 2007 as Lead Author of **IPCC 3rd and 4th Assessments**, WGII and WGIII.
- **2nd Prize from the World Energy Council** for Paper Presented at the 2007 WEC Conference in Rome.
- Member, Editorial Board, **Environmental & Resource Economics**, (Kluwer Academic Publishers) (1990-2010); **Environment & Development** (Cambridge University Press) (1993-2008), **Journal of Resources Energy and Development**, 2011-.
- Listed as one of the **World's Top 50 Sustainability Thought Leaders by University of Cambridge** Programme for Industry (2008).
- Member Scientific Council, Spanish-Portuguese Association of Environmental and Resource Economics (**AERNA**) **2011**.
- Honorary Professor, **University of Bath**, 2011-
- Lead Author **IPCC 5th Assessment** WGII, 2011-2015
- Elected President of the **European Association of Environmental and Resource Economists**, 2012.
- The Basque Centre for Climate Change, of which I am director, was selected as the **Best Climate Change Think Tank in Europe** in 2012 and 2013.
- Elected member Scientific Council, **European Environment Agency**, 2013-2017
- Appointed **Distinguished Ikerbasque Professor**, 2014-.
- Recognized as an example of **Best Practice** in Cost Benefit Analysis by the **World Bank** for a study I conducted on Macroeconomic analysis: impact of a large project in a small country – The Moropule B Project in Botswana (2016).

MAJOR APPOINTMENTS HELD (Listed chronologically by first association with each institution. A star indicates that my association with that institution is still active):

A. MAJOR FULL TIME APPOINTMENTS

- (a) Economic Assistant with the **Department of Employment and Productivity**, UK, 1968-1969.
- (b) Assistant Lecturer in Economics at the **London School of Economics**, 1969-1970.
- (c) Visiting Lecturer in Economics and Public Affairs, **Woodrow Wilson School, Princeton University**, 1975-1976.
- (d) Lecturer in Economics in the Department of Economics, **University College London**, 1970-1985. Senior Lecturer, 1985-1990. Reader in Economics, 1990-92.
- (e) Visiting Professor, **University of California, Berkeley**, 1982.
- (f) Director, **Metroeconomica**, a consultancy company I founded. The company has undertaken more than 120 projects in the last 26 years, covering energy, environment, macroeconomic assessment, financial assessments etc., 1984-.
- (g) Research Associate, **Harvard Institute for International Development**, Harvard University, September, 1992-1994. Duties include lecturing at the Kennedy School of Government and providing advisory services to various developing countries in Asian, Latin America and Africa.
- (h) Senior Environmental Policy Advisor, **Government of Russia** under the USAID NIS program on environmental economics in Russia, 1995-1996. Areas covered included forestry, air and water projects and public finance.
- (i) Professor of Economics, **University of Bath**, UK, January 1, 1996-2011. Duties included being Head of Department, 1997-2000. Now Honorary Professor 2012-*
- (j) Lead Economist, **World Bank**, Working in the Eastern Europe and Central Asia (ECA) Region, Department for Environment and Sustainable Development, 2000-2004 and Financial Resources Mobilization (FRM), 2004-2005. I was part of a small team responsible for the IDA replenishment in 2005 (ca. US\$28 billion).
- (k) Director, Sustainable Indicators and Environmental Valuation and Applied Research, **Fondazione Eni Enrico Mattei**, Milan, Italy, 2005-2008. Fellow of the Fondazione: 2009-*
- (l) Scientific Director, **Basque Centre for Climate Change**, Bilbao, Spain, 2008-*

B. ADVISORY PRIVATE SECTOR AND RESEARCH POSITIONS

- (i) Economic consultant to the **Australian Government** on the Sydney Airport Study Scheme, 1973-1974.
- (ii) Consultant to the **Italian Confederation of Industry** (Confindustria), based in Rome, 1977-1979.
- (iii) Economic Consultant to the **Asian Development Bank** working on Korea, dealing with Urban, Environmental and Social Developments in that country, 1980; Sustainable Development Policies, 1989-90, Environmental Training, 1990; Energy and the Environment, 1992, Environmental Indicators, 1994-5.
- (iv) Consultant to the **Committee of Kuwaiti Banks** on a Medium Term Economic Model of Kuwait, 1984, and to the Commercial Bank of Kuwait, 1988.
- (v) Consultant to the **World Bank**, Policy Divisions: Projects 1985, Economics and Policy Division, 1989, Environment Department, 1991-; EDI, 1994-1998.

- (vi) Director, Economic Impact Study, Kalabagh Dam Project, Pakistan. **United Nations Development Program (UNDP)**, 1986-1987.
- (vii) Consultant Economist to the UK **National Institute of Economic and Social Research**, UK, 1985-1986.
- (viii) Consultant to the **World Bank**, Operations Divisions: Pakistan, 1986-1989, Turkey, 1986-, Nepal, 1988-91; Somalia, 1989-90; Poland, 1990; Ukraine, 1992; Bulgaria, 1994.
- (ix) Consultant to **UNDP** on the ARUN III Energy Project and the Karnali Hydropower/Irrigation Impact Studies in Nepal, 1987-1991 (in collaboration with EDF International).
- (x) Advisor to the **Organisation for Economic Cooperation and Development (OECD)** (Environment Directorate) on Environmental Benefit Estimation, Compensation for Environmental Damage, Uses of Benefit Estimation, 1986-1989. Nuclear Energy, 1994.
- (xi) Consultant to **Mathtech** on USAID Technical Assistance Project in Pakistan attached to the Planning Commission (Energy Wing), Islamabad, 1987-1989.
- (xii) Advisor to the UK **Overseas Development Administration (ODA)** on Discount Rates and Project Appraisal; Hydro Dams in the Tropics; CFC Costs of Substitution, 1992-1994, Biodiversity Financing in Kenya, 1987-1991, Biodiversity convention, 1992-4, CFCs, 1992-.Methyl Bromide (1997), Economic Options Committee of the Montreal Protocol (1998).
- (xiii) Economic Advisor on the Nepal Environmental Impact and Policy Program funded by the **ODA**, UK, 1988-1989.
- (xiv) Consultant to **United Nations Environment Program (UNEP)** on Environmental Accounting; Environmental Issues in Kuwait and Nepal; CFC Control Under the Montreal Protocol; Biodiversity; Desertification, GEF Projects, 1988-93; Environmental Valuation, 1995.
- (xv) Economist/Econometrician on the Sudan Gum Rehabilitation Project, by the **Arab Fund**, 1988-1990.
- (xvi) Visiting Professor at the **Universities of Bergamo and Bocconi**, Italy, 1991.
- (xvii) Chairman of the UK **Interagency Research Panel on Climate Change**, Socio-economic Aspects, 1990.
- (xviii) Associate Director, **London Environmental Economics Centre**, set up under the auspices of the International Institute for Environment and Development and University College London. Advisor on various environmental projects, funded by international and bilateral agencies (AFSED, DoE, IBRD, IUCN, OECD, ODA, SIDA, UNEP), 1988-1991.
- (xix) Consultant to **International Labour Organisation (ILO)** on Technology, Employment and the Environment, 1990.
- (xx) Consultant to **Food and Agricultural Organisation (FAO)** on the Environment and Structural Adjustment, and on Economic Instruments for Environmental Protection, Agriculture & the Environment, 1990-91; Sustainable Agriculture; 1992-96.
- (xxi) Advisor to the **Government of Switzerland** on the Social Costs of Transport (Project under the Direction of the University of Neuchatel), 1990-2; on tradable permits, 1994.
- (xxii) Consultant to the **FRG Environment Ministry (Umweltbundesamt)** on Environmental Benefit Estimation, 1990.

- (xxiii) Consultant to the **UK Department of the Environment** on Global Emissions Targets, 1990, SO₂ reduction strategies in Europe.
- (xxiv) Advisor to **International Fund for Agricultural Development (IFAD)** on Grant Financing for Environmental Projects in Poor Countries, 1990; Guidelines for Sustainable Agriculture, 1993-94; Convention on Desertification, 1995.
- (xxv) Advisor to the **Inter-American Development Bank** on Environmental Valuation, 1990-1991.
- (xxvi) Jean Monnet Professor at the **European University of Florence**, Italy, 1992.
- (xxvii) Member, **Beijer Institute Centre of Ecological Economics**, Royal Swedish Academy of Sciences, Stockholm, 1991-.
- (xxviii) Member, **European Science Foundation**, Environment Science and Society Programme, 1990-1992.
- (xxix) Visiting lecturer at **INSEE**, Paris and **ENGREF**, Paris, 1992-1996.
- (xxx) Advisor to the **European Commission DG 12** on Research Priorities in the 1990s, DGXII, 1990; on EXTERNE as chief economist, 1992-1997; on Green Accounting, 1994-1996.
- (xxxi) Advisor to the **European Commission DG 11** on policy for controlling CFCs, 1991 (in collaboration with Coopers Deloitte). On the Economics of Water in the EU, 1997-1999. On Approximation of Costs of Compliance for Countries seeking Accession to the EU, 1997-1999. Advisor to DG2/DG11 on trade impacts of the Montreal Protocol, 1996-97.
- (xxxii) Advisor to **European Commission, DGVIII** on the environmental costs of the Lomé Convention, 1994-98.
- (xxxiii) Advisor to **Burson Marsteller** on Environmental Policy and Business Strategy, 1990-1992.
- (xxxiv) Resource Person, **African Development Bank**, Environmental and Social Impacts of Agricultural Practices in Africa, and Environmental Costs and Project Appraisal 1990-1992.
- (xxxv) Advisor to **United Nations Industrial Development Organisation (UNIDO)** on Ecologically Sustainable Industrial Development, 1991.
- (xxxvi) Advisor to the **United Nations Conference on Environment and Development on Trade and the Environment (UNCED)**, 1991.
- (xxxvii) Advisor to **UNCTAD** on Trade and the Environment, Geneva, 1992-98.
- (xxxviii) Expert advisor to the **Inter Parliamentary Union** on Financing Sustainable Development, 1992.
- (xxxix) Consultant to the **Commission for Sustainable Development**, United Nations, on Financing Sustainable Development, 1993-.
- (xl) Chief Reviewer, Ganga River Action Plan, and Gomti River Action Plan DFID and **Government of India**, 1995-1998.
- (xli) Advisor on environment and development indicators, **EUROSTAT**, Luxembourg, 1995-98.
- (xlii) Advisor to **UNDP** on Capacity 21 a programme to build capacity for sustainable development in developing countries, 1997.
- (xliii) Consultant to IPCC working group on Mitigation and Adaptation Cost Assessment, **UNEP Collaborating Centre on Energy and the Environment, Risø**, 1996-1999.
- (xliv) Member, **UK Government Advisory Committee on Air Pollution and Health**, 1997-1999.

- (xlv) Member, International Panel on Climate Change (**IPCC**), Working Group III, 3rd Assessment Report. Convening Lead Author, 1998-2001.
- (xlvi) Senior Economist, Maharashtra Water Demand Assessment Study, **DFID**, 1998.
- (xlvii) Member ESCOR Committee, **DFID**, 1998-2001.
- (xlviii) Advisor, Environmental Impacts of the Financial Crises: A Study of Thailand, **Asian Development Bank**, 1998.
- (xlix) Advisor, Impacts of Hydropower Dams in the Tropics, **Asian Development Bank**, 1998-99
- (l) Nominated Expert, **North American Free Trade Association (NAFTA), Commission for Environmental Cooperation**, 1998-1999.
- (li) Rapporteur, **OECD Labour Management Programme**, on *Mineral Investment and its Effects on Development*, 1998.
- (lii) Research Programme Reviewer, **Ministry of Environment**, Paris, France, (1998-1999).
- (liii) Advisor, International Energy Markets, **Fondazione Eni Enrico Mattei**, Milan, Italy, (2002-2005).
- (liv) Advisor, **Government of the Basque Country** on Climate Change and Energy, 2004-
- (lv) Consultant **Asian Development Bank** on Organic Agriculture and Biofuels, 2006-2008. Fujian PES Project, China, 2008-2009.
- (lvi) Member, Sustainability Panel, **Wessex Water**. 2007-2012.
- (lvii) Member Expert Panel, **South West Regional Development Association**, UK, 2008-2010
- (lviii) Advisor to the **Government of Korea** on the Economics of Climate Change in Korea. 2010-2011
- (lix) Lead Author, **IPCC**, 5th Assessment, WG II, Chapter 17 on the Economics of Climate Change. 2011-2014
- (lx) Scientific Advisor, **Nordic Council**, Top Level Research Initiative, 2011-2015.
- (lxi) Expert, **European Commission**, Impact Assessment of the 8th EU Research and Innovation Programme. 2011; Horizon 2020 Societal Challenge 5 strategic programming for 2016-2017, 2014
- (lxii) Panel Member, to establish a **German Research Centre for Integrative Biodiversity Research**. 2011.
- (lxiii) Advisor, **World Bank**, **Costs of Environmental Degradation, Gulf Countries (Bahrain, Kuwait and Saudi Arabia)**, 2012. **Resilience to Climate Change, South Asia, Climate Change Strategy, Romania, Climate and Water Technical Paper**, 2014-2015.
- (lxiv) Advisor, **UNEP**, **Adaptation Gap Report**, 2014-2015.

PUBLICATIONS: (Excluding book reviews and journalistic contributions)

Key: Refereed Journal Article: (J), Edited or Authored Book or Monograph (B), Contribution to Book (CB).

1973

1. "Complexity and Adjustment in Input-Output Systems", (with S. Robinson) Bulletin of the Oxford Institute of Economics and Statistics 35, 2, 119-134. (J)

1974

2. "Pollution and Optimal Taxation - a Static Analysis", (with W. Beckerman), Journal of Environmental Economics and Management 1, 43-52. **(J)**

1975

3. "Vasectomy Bonuses and Completed Family Size in Rural India", (with N.J. Rau), Journal of Public Economics 4, 319-334. **(J)**

1978

4. "The Quality of Current Approximation to the Measurement of Compensation Cost", Oxford Economic Papers 30, 3, 423-434. **(J)**

1979

5. "Optimum Towns and Environmental Externalities", Journal of Economic Theory 21, 3, 445-464. **(J)**

1982

6. "Intergenerational Exchange Mobility and Economic Welfare", European Economic Review 17, 307-324. **(J)**

7. "The Measurement of Earnings Mobility among Occupational Groups", Scottish Journal of Political Economy 29, 1, 75-88. **(J)**

1983

8. "Headship Rates and the Household Formation Process in Great Britain", Applied Economics 15, 6, 821-830. **(J)**

1984

9. "The Welfare Measurement of Changes in Economic Mobility", Economica 51, 457-471. **(J)**

10. "The Demand for Housing, Household Headship Rates and Household Formation: An International Analysis", (with K. Rosen, P. Ullmo and L. Smith), Urban Studies 21, 407-414. **(J)**

1985

11. "The Market for New Housing in the U.K.", Economic Review 2, 4, 37-41. **(J)**

12. "The Interpretation of Capitalised Hedonic Prices in a Dynamic Environment", (with P. Abelson), Journal of Environmental Economics and Management 12, 195-206. **(J)**

13. "Medium Term Planning in Oil Based Economies", (with M. Pemberton), OPEC Review IX, 4, 351-368, (1985). **(J)**

1986

14. "Disequilibrium Models with Rational Expectations: An Application to the U.K. Labour Market", (with S.G. Hall, S.G.B. Henry and M. Pemberton), Economic Letters 21, 215-220. **(J)**

15. "The U.K. Labour Market - Equilibrium or Disequilibrium?", (with S.G. Hall, S.G.B. Henry and M. Pemberton), Lloyds Bank Review 165, 27-39. **(J)**

16. *The Economic Benefits of Environmental Improvement*, (with D.W. Pearce), The Environmental Research Trust, Romford, England, 64pp (1986). **(B)**

1987

17. "Marginal Opportunity Cost as a Planning Concept in Natural Resource Management", (with D.W. Pearce), Annals of Regional Science XXI, 3, 18-32, (1987). Adapted and reprinted in J. Armitage and G. Schramm (eds.), Environmental Issues in Economic Development, Johns Hopkins University Press, Baltimore (1988). Also adapted and reprinted in J. Kozub (ed.) Agriculture Meets Ecology: Readings for Land and Water Ecosystems Management, Economic Development Institute, Washington DC. **(J)**
18. "Economic Policy with Fluctuating Oil Revenues", (with M. Pemberton), OPEC Review XII, I, 23-36. **(J)**
19. Environmental Considerations and the Choice of the Discount Rate in Developing Countries, (with D.W. Pearce), The World Bank, Washington, Environment Department, 79pp (1987). Also adapted and reprinted in J. Kozub (ed.) Agriculture Meets Ecology: Readings for Land and Water Ecosystems Management, Economic Development Institute, Washington DC. **(CB)**

1988

20. "Sustainable Future: Natural Environments and the Social Rate of Discount", (with D.W. Pearce), Project Appraisal 3, 1, 2-12. **(J)**
21. "Pricing and the Environment", (with D.W. Pearce), OECD Observer 151, 23-26. **(J)**
22. "Sustainable Development in the Sahel: An Economic Perspective", (with D.W. Pearce), in IUCN: Sahel Status Report, IUCN, Geneva. **(CB)**
23. "Environmental Economics and Decision Making", (with D.W. Pearce and E. Barbier) in P. Fröhling (ed.), Recovery in Africa, Swedish Ministry of Foreign Affairs, Stockholm, 271-290. **(CB)**

1989

24. "The UK Labour Market: Expectations and Disequilibrium", (with S. Hall, S.G.B. Henry and M. Pemberton), Applied Economics 21, 11, 1509-1523. **(J)**
25. "Measuring the Social Costs of Smoking: the Issue of Addiction ", (with D.W. Pearce), British Journal of Addiction 84, 1139-1150. **(J)**
26. Blueprint for a Green Economy (with D.W. Pearce and E. Barbier), Earthscan Publications, London, 192pp. **Winner of the Premio Gambrinus Mazzotti for literature on ecology. (B)**
27. "The Residential Pricing of Electricity in Developing Countries", (with M. Pemberton and A. Sarhan), Egyptian Computer Science Journal 12, 2, 74-96. **(J)**
28. "*The Benefits of Environmental Policy*", (with D.W. Pearce), OECD, Paris, 83pp. **(B)**
29. "Shadow Prices and Energy Planning in Pakistan", (with I. Elwan), Proceedings of the IAEA Regional Workshop on WASP/MAED, Kuala Lumpur, International Atomic Energy Agency, Vienna. **(CB)**

1990

30. "Non-Linear Prices and Energy Demand", (with M. Pemberton) Energy Economics 10, 27-34. **(J)**
31. "The Conditions for Achieving Environmentally Sustainable Development", (with E. Barbier), European Economic Review 34, 659-669. **(J)**
32. "Sustainable Agricultural Development and Project Appraisal", (with E. Barbier and D.W. Pearce), European Review of Agricultural Economics 17, 181-196. **(J)**
33. "Environmental Costs and Power Systems Planning", Utilities Policy 1, 1, 13-28. **(J)**

34. "Environmental Sustainability and Cost-Benefit Analysis", (with E. Barbier and D.W. Pearce), Environment and Planning 22, 1259-1266. **(J)**
35. *Sustainable Development: Economics and Environment in the Third World* (with E. Barbier and D.W. Pearce), Elgar Publishing, Hants., UK., 217pp. **(B)**
36. *Economic Policies for Sustainable Development*, Asian Development Bank, (contributed to the volume edited by S. Hansen), Manila, 253pp. **(CB)**

1991

37. "The Economics of Tropical Deforestation", (with E. Barbier and J. Burgess), Ambio, 20, 2, 55-58. **(J)**
38. "Development, Environment and the Rate of Discount", (with D.W. Pearce), World Bank Research Observer, 6, 2, 137-150. **(J)**
39. "Managing the Impacts of Large Hydropower Dams in the Tropics", (with J. Furtado, D.W. Pearce, D. Butcher and J. Mitchell), 13th Annual Scientific Forum on Energy, 203-224, Inderscience Enterprises Ltd. **(J)**
40. *The Economic Appraisal of Projects: The Environmental Dimension*, Inter-American Development Bank, Washington DC, pp. 115. **(B)**
41. *Blueprint 2: The Global Environment* (ed. D.W. Pearce) (Chapters 4 and 5). Earthscan Publications, London, 232pp. **(CB)**
42. "Long Term Tradeoffs for Sustainability Policies in the Area of Environmental Toxicology: An Economic Analysis of the NIMBY Syndrome: A Comment", in H. Opschoor and D.W. Pearce (eds.) *Economic Analysis for Environmental Toxicology*, Kluwer Academic Publishers, 157-158 Amsterdam. **(CB)**
43. "Environmental Benefit Estimation and Decision-Making: The Case of the United Kingdom", (with R. Kerry Turner and D.W. Pearce), in J-P Barde and D.W. Pearce (eds.), *Benefits Estimates and Environmental Decision-Making*, OECD, 203-235, Paris. **(CB)**
44. "The Road to Ecologically Sustainable Industrial Development (with R.U. Ayres), Proceedings of the Conference on Ecologically Sustainable Industrial Development, Copenhagen, Denmark, UNIDO, Vienna. **(CB)**
45. "Technology, Environment and Employment: A Survey", World Employment Programme, 2-22, ILO, Geneva, 61pp. **(CB)**
46. "Criteria, Instruments and Tools for Sustainable Agricultural and Rural Development", FAO Conference on Agriculture and the Environment, FAO, Rome, 36pp. **(CB)**
47. "Technological Substitution Options for Controlling Greenhouse Gas Emissions", in J. Poterba and R.M. Dornbush (eds.), Global Warming Economic Policy, 147-154, (Section on CFCs) MIT Press. **(CB)**
48. "Barriers Facing the Achievement of Ecologically Sustainable Industrial Development (with R.U. Ayres and N. Petringa), Proceedings of the Conference on Ecologically Sustainable Industrial Development, Copenhagen, Denmark, UNIDO, Vienna. **(CB)**

1992

49. "Environment and Sustainable Development", FEEM Newsletter, 4-8. **(J)**
50. *Readings in Environmental Economics* (with J. Richardson), Earthscan Publications, London, 469pp. **(B)**
51. *Integrated Energy-Environment Planning: Towards Developing a Framework*, Asian Development Bank, (With T. Siddiqi and M. Postle), Manila, 76pp. **(B)**

52. "What Value Do We Place On Our Environment?" in POLMET 91: Pollution in the Metropolitan Urban Environment, 293-308, Hong Kong Institution of Engineers, Hong Kong. **(CB)**
53. "Natural Resource Management in Southern Africa: A Primer for Policy Analysis" (with J. Bishop, A. Tomasin, and J. Richardson), London, Environmental Economics Centre, pp. 398. **(CB)**
54. *Structural Adjustment and the Environment* (ed. D. Reed) (Chapters 3-6 pp 49-160) (with J. Richardson and J. Bishop), Westview Press. **(CB)**

1993

55. "A Method for the Economic Valuation of Non Timber Forest Products", Economic Botany, 47, (3), 220-233 (with R. Godoy, and R. Lubowski). **(J)**
56. "The External Costs of Nuclear Power: Ex Ante Damages and Lay Risks", American Journal of Agricultural Economics, 75, 1273-1279. (with A.J. Krupnick, E. Nickell) **(J)**
57. "Trade and the Environment: Some Issues", Pacific Asian Journal of Economics, 3, 1, 103-110. **(J)**
58. "Economic Development and the Environment in Africa: The African Development Bank's Role", (with C. Munoz) in M. Munasinghe (ed.) *Environmental Policy and Development*, World Bank, Washington DC. **(CB)**
59. A. Markandya and C. Costanza (eds.). "Environmental Accounting: A Review of the Current Debate" UNEP Environmental Economic Series, #8, UNEP, Nairobi, Kenya. **(CB)**

1994

60. "Is Free Trade Compatible with Sustainable Development?", UNCTAD Review, 1994, pp 9-22. **(J)**
61. Environmental Taxation: A Review of OECD Countries Experience and Prospects for Economies in Transition, Paper No.1, (with Z. Lehoczki) Regional Environmental Centre, Budapest. **(B)**
62. *Essays in Sustainable Development*, (ed.) FAO (ISSN 0259-2460), Rome, 268pp. **(B)**
63. "Measuring the External Costs of Fuel Cycles", in O. Hohmeyer and R.L. Ottinger (eds.) *External Environmental Costs of Electric Power*, Springer-Verlag. **(CB)**
64. "Joint Implementation: Way Forward or a Negotiator's Nightmare?", in P.Ghosh and J. Puri (ed.) *Joint Implementation of Climate Change Commitments*, Tata Energy Research Institute New Delhi. **(CB)**
65. *Estimating Fuel Cycle Externalities: Analytical Methods and Issues*, Report 2, Oakridge National Laboratory and Resources for the Future, McGraw Hill, New York. (with several contributors). **(CB)**

1995

66. "Industrial Pollution Control Policies in Asia: How Successful are the Strategies?", Asian Journal of Environmental Management, (with A. Shibli). **(J)**
67. *ExternE: Externalities of Fuel Cycles: Volume 2: Economic Valuation..* European Commission, Brussels. **(CB)**
68. "Employment and Environment: A Survey" in I. Ahmad, *Employment and Sustainable Development*, Macmillian **(CB)**
69. "Air Pollution and Energy Policies in Developing Countries", in C. Carraro (ed.) *The International Dimensions of Environmental Policy*, Kluwer. **(CB)**

70. *The Phaseout of Ozone Depleting Substances: Economic Options Report*, (Chapters 3 and 6), UNEP, Nairobi. **(CB)**
71. "International Experience with the Economic Aspects of National Biodiversity Planning", *Biodiversity Economics Workshop*, Moscow: Ministry of Environment. **(CB)**
72. "Trade and Environment: Issues Related to Sustainable Development" in (A. Agarwal (ed.), *Environment and Economics*, Centre for Science and Environment, New Delhi, India. **(CB)**
73. "Market Based Instruments and the ENRAP" in *The Philippine Environment and Natural Resources Project* Proceedings of an International Workshop, Tagaytay City, Philippines **(CB)**

1996

74. *Environmental Valuation for Sustainable Natural Management*. International Fund for Agricultural Development, Rome. **(B)**
75. "International Experience in Creating Informational Systems for the Management of Natural Resources", in *Issues of Natural Resources Accounting, Social and Economic Assessment*, Ministry of Environment, Russian Federation, Moscow. **(CB)**
76. "Green Accounting in Europe: The Role of Benefit Estimation" 51st International Congress of Applied Econometrics Association (AEA), *Econometrics of Environment and Transdisciplinarity*, AEA, Geneva **(CB)**
77. "The Avoided Costs of Using Wind Energy", in *The Economics of Wind Energy*, Proceedings of EWEA Conference, Finland. **(CB)**
78. "Economics and Environment: English-Russian Glossary" (with R. Perlet). OECD, Paris. **(CB)**
79. "The Internalisation of the Environmental Costs of Electricity Generation" in *Power-Gen in Europe '96: Where the Industry Connects*, Volume 1, pp 247-264, PennWell Conferences, Utrecht, Holland. **(CB)**
80. "External Costs of Electricity: Valuation of Health Impacts" in *Electricity, Health and the Environment: Comparative Assessment in Support of Decision-Making*, pp 199-214, IAEA, Vienna. **(CB)**

1997

81. "Ecolabelling: An Introduction and A Review", in S. Zarilli, V. Jha and R. Vosennaar (eds.) *Eco-labelling*, Macmillian, London. **(CB)**
82. "Quantifying the Risks of Nuclear Electric Energy" in O. Hohmeyer and R.L. Ottinger and K. Rennings (eds.) *Social Costs and Sustainability* Springer-Verlag. **(CB)**
83. "Pollution Charges in Russia: The Experience of the Last Five Years Charges" (with M. Kozletsev in *Implementation of Pollution Charge Systems in Transition Economies*, in: (R. Bluffstone and B. Larson (eds.)) Edward Elgar, Cheltenham. **(CB)**
84. "What Have We learned About Market-based Instruments?" in C. Jeanrenaud (ed.) *Environmental Policy: Between Regulation and Market* Birkhauser. **(CB)**
85. "Economic Instruments: Accelerating The Move From Concepts to Practical Application", in J. Holst, P. Koudal and J. Vincent, (eds.), *Financing for Sustainable Development*, United Nations: New York. **(CB)**
86. "Case Study for El-Salvador, Jamaica and Venezuela", in *Structural Adjustment, The Environment and Sustainable Development*, D. Reed (editor), Earthscan Publications, London. **(CB)**

87. “Economic Instruments and Fiscal Reform” in *New Electricity Markets and the Environment*, CEC, Brussels **(CB)**

1998

88. “Poverty, Income Distribution and Policy-making”, *Environmental and Resource Economics*, 11, (3-4), 459-472. **(J)**
89. “Trade and Industrial Impacts of Multilateral Environmental Agreements: A Case Study of the Montreal Protocol”. Trade and Environment Report DGII/B4, Commission of the European Communities (with I. Milborrow), *European Economy*, 1998, 1, 31-90. **(J)**
90. “The Costs of Environmental Regulation in Asia: Command and Control versus Market Based Instruments” *Asian Development Review*, 16, 1, 1-30. **(J)**
91. *The Indirect Costs and Benefits of Greenhouse Gas Emissions*, UNEP, ISBN87-5502458-0, UNEP Collaborating Centre, Riso, Denmark. **(B)**
92. “The Role of Economic Valuation in Decision Making About Air Pollution”. Paper presented at the NATO Advanced Research Workshop on “Air Pollution in the Ural Mountains,” Magnitogorsk, Russia, May 26th-30th 1997. NATO ASI Series Kluwer Academic Publishers (with I. Milborrow). **(CB)**
93. “Sustainable Development and Economic Transition in Russia: What Issues? What Agenda?” in *The Environment in the 21st Century: Environment, Long-term Governance and Democracy*, Millon, Paris. **(CB)**
94. “Bilateral Technical Assistance and Environmental Sustainability: Lessons from the Russian Experience” in I. Linkov and R. Wilson (eds.) *Strategies for Environmental Sustainability: Lessons from International Cooperation*, NATO Advanced Workshop, Kluwer Academic Publishers. **(CB)**
95. “Green Accounting Research Project” pp 169-189 in P. Vaze (ed.), *UK Environmental Accounts 1998*, London: The Stationery Office. **(CB)**
96. “Cost Analysis Principles” in Sathaye, J and Christensen, J (Eds.) *Mitigation and Adaptation Cost Assessment: Concepts, Methods and Appropriate Use*. (with K. Haslnaes and I. Milborrow). UNEP. **(CB)**
97. “Mineral Investment and Its Effects on Development”, *OECD Labour Management Programme*, OECD, Paris. **(CB)**
98. “Improvement of the Assessment of the External Costs of Severe Nuclear Accidents” (with N. Dale and T. Schneider), Centre D’Etude Sur L’Evaluation De La Protection Dans Le Domaine Nucléaire, (CEPN) Report N^o 260, Paris. **(CB)**

1999

99. “The Valuation of Health Impacts in Developing Countries” in *Planejamento e Politicas Publicas*, 18, 119-154. **(J)**
100. “Evaluating the Health Effects of Air Pollution: How and Why?” (with P. Mason) *Economic Review*, 17, 2, 2-15. **(J)**
101. *Green Accounting in Europe: Four Case Studies*, (With M. Pavan), Kluwer Academic Publishers. 369 pp. **(B)**
102. *Reconciling Trade and the Environment* (With V. Jha and R. Vossenaar), Edward Elgar, Cheltenham 359pp. **(B)**.
103. “Green Accounting in China: The Role of Damage Estimation”. in A. Lanza, (ed). *Resources Accounting in China*, pp 21-52 (With I. Milborrow), Kluwer Academic Publishers. **(CB)**

104. “Preferential Trading Arrangements between Kenya and the EU: A Case Study of the Environmental Effects of the Horticulture Sector” pp 83-100. in P. Fredriksson (ed.) *Trade, Global Policy and the Environment*, (With L. Emmerton and S. Mwale). World Bank and Johns Hopkins Press, Washington DC. **(CB)**
105. *Economic Options Committee: 1998 Assessment Report on Phaseout of Substances that Deplete the Ozone Layer*, (Lead Author for Chapters 4 and 8), UNEP, (1999).
106. *Economic Appraisal of the Health Effects of Air Pollution*, (Contributing Author) HMSO. **(CB)**
107. *The Indirect Costs and Benefits of Greenhouse Gas Limitation: Mauritius Case Study*. Report for the UNEP Collaborating Centre on Energy and the Environment, Roskilde, Denmark. **(CB)**
108. “Risk Rationality and the Consumption of Tobacco”, in C. Jeanrenaud and N. Soguel (ed.) *The Social Costs of Tobacco Consumption*, Kluwer Academic Publishers, pp 171-187. **(CB)**
109. *Economic Options Committee: 1998 Assessment Report on Phaseout of Substances that Deplete the Ozone Layer*, (Lead Author for Chapters 4 and 8), UNEP. **(CB)**
110. *Economic Appraisal of the Health Effects of Air Pollution*, (Contributing Author) HMSO. **(CB)**
111. *The Indirect Costs and Benefits of Greenhouse Gas Limitation: Mauritius Case Study*. Report for the UNEP Collaborating Centre on Energy and the Environment, Roskilde, Denmark. **(CB)**

2000

112. “Employment and Environmental Protection: The Tradeoffs in an Economy in Transition”, Environmental and Resource Economics, 15:297-322. **(J)**
113. “Economic Transition in a Large Resource-Rich Country: The Case of Russia” Environment and Planning, 27, 349-363. (With A. Averchenkova). **(J)**
114. “Why Developing Countries Should Worry about 2050 and Beyond”, Journal of International Development, 12, 601-612. (with P.Mason). **(J)**
115. “The General Framework for Cost Assessment for Climate Change” Pacific Asian Journal of Economics. **(J)**
116. “The Treatment of Discounting in the Assessment for Climate Change” Pacific Asian Journal of Economics. **(J)**
117. *Cleaning Rivers in Developing Countries: A Cost Benefit Analysis of the Ganga River Action Plan*, (With M.N. Murty (ed.)) OUP, Oxford and New Delhi. 300pp. **(B)**
118. “Economic Instruments for Sustainable Tourism Development”, in. A. Fossati and G. Panella (eds.) *Tourism and Sustainable Economic Development*, Kluwer Academic Publishers. **(CB)**
119. “Measuring The Indirect Costs And Benefits Of Greenhouse Gas Mitigation Options: Methodology And A Case Study From Hungary”, *FEEM Working Paper*, Milan. **(CB)**
120. “The Ancillary Benefits and Costs of Climate Change Mitigation: A Conceptual Framework”, (with A. Krupnick and D. Burtraw), in *Ancillary Benefits and Costs of Greenhouse Gas Mitigation*, OECD. **(CB)**

2001

121. *A Dictionary of Environmental Economics* (With R. Perelet, P. Mason and T. Taylor), Earthscan: London. 196pp. **(B)**

122. *Towards a European System of Environmental Pressure Indices: The Peer Essay Collection*, Edward Elgar, Cheltenham 352pp. (With N. Dale (eds)). **(B)**
123. *Transport and the Global Environment: Accounting for GHG Reductions in Policy Analysis* (with K. Halsnaes, and J. Saythaye), UNEP, Paris. **(B)**.
124. "Poverty, Environment and Development" in H. Folmer, L. Gabel S. Gerking and A. Rose, *Frontiers of Environmental Economics*, Edward Elgar, Cheltenham, UK. **(CB)**
125. "The Essentials for Allocating Global Environmental Goods" in *The Economics of International Environmental Problems*, Institute für Weltwirtschaft an der Universität Kiel. **(CB)**
126. "Reforming a Large Resource Rich Country: The Case of Russia" (With A. Averchenkova), in R. Auty (ed), *Environmental Capital, Export and Human Capital Accumulation Problems of Resource Based Growth Models*, Oxford University Press. **(CB)**
127. *Environmental External Costs of Transport*, (R. Friedrich and P. Bickel (eds.)), Springer, Berlin. **(CB)**
128. "The Valuation of Health Impacts in Developing Countries" in R. Seroa Da Motta (ed.) *Environmental Economics and Policy Making in Developing Countries Current Issues* Edward Elgar, Cheltenham. **(CB)**
129. "Costing Methodologies" in B. Metz, O. Davidson, R. Swart and J Pan (eds.) *Climate Change 2001: Mitigation*, Cambridge University Press, 2001. This is one of 3 volumes which give the definitive statement of all aspects of climate change and was produced by 900 scientists worldwide. I was lead author for one chapter. **(CB)**

2002

130. "Policy And Economic Instruments Schemes For Phase Out Of Substances That Deplete The Ozone Layer Under The International Agreement Of The Montreal Protocol" (with I. Galarraga and P. Mason), *Ekonomiaz.* **(J)**
131. *Environmental Economics for Sustainable Growth* (With P. Harou, L. Bellù and V. Cistulli). Edward Elgar, Cheltenham 567pp. **(B)**
132. *Climate Change and Sustainable Development*, (with K. Halsnaes (eds.)), Earthscan: London 291pp. **(B)**
133. "Promoting Private Sector Participation in the Financing of Sustainable Development" (With P. Francis) in *Finance for Sustainable Development: Testing New Policy Approaches*, United Nations: New York. **(CB)**
134. "Upgrading Environmental Standards", in (B. Funk (ed.)) *Expenditure Policies Toward EU Accession*, World Bank Technical Paper No. 533, Washington DC. **(CB)**

2003

135. "The Analysis of the Welfare Effects of an Environmental Product Tax: An Application to the Taxation of Automobile Tires in Hungary", (with I. Galarraga). *Fiscal Studies*, 24, 1, 97-114. **(J)**
136. "Efficiency and Affordability Considerations in the Pricing of Energy For Households", (with D. Streimikiene), *Economic Journal of Development Issues*, 3, 2, 1-14. **(J)**
137. "Climate Change Considerations on Energy Policy: The Case of Russia" (with A. Golub and E. Strukova), *International Journal of Global Environmental Issues*, X, 1-15. **(J)**

138. “Экономика: окружающей среды и природных ресурсов”, (with A. Golub, E. Strukova, P. Mason, Y. Savonov and A. Hunt), Higher School of Economics, Moscow. **(B)**
139. “Expected External Costs and their Structure Characterizing Electricity Options and their Role in the Strategic Assessment of these Options, in *Electric Power Supply Strategy in the 21st Century*, Conference Proceedings, Warsaw. **(CB)**
140. “Meeting the Millennium Development Goals in Europe and Central Asia”, ECSSD, The World Bank. **(CB)**
141. “Analytical framework” (with A. Hunt and T. Morgan) in ‘Energy Subsidies: Lessons Learned in Assessing their Impacts and Designing Policy Reforms’ UNEP, Geneva **(CB)**

2004

142. “Cost Benefit Analysis of Cleaning Ganges: Some Emerging Environment and Development Issues”, (with M.N. Murty), *Environment and Development*, 9, 1, 61-82. Reprinted in *Indian Economy and Society in the Era of Globalization and Liberalization*, 2005. **(J)**
143. “Demand Systems For Goods That Are Close Substitutes: The Quantity Based Demand System (QBDS): A Case Study for Fair Trade Coffee in the United Kingdom” (with I. Galarraga), *Economía Agraria and y Recursos Naturales*, 4, 7, 109-134. **(J)**
144. “Ancillary Benefits of Climate Policy” (with D. Rübhelke), *Jahrbücher für Nationalökonomie und Statistik*, 224, 4, 488-503. **(J)**
145. “Millennium Development Goals and Lithuania, *Environmental Research, Engineering and Management*, 2(28), 65-75 (with D. Stremikiene). **(J)**
146. *CDM: Sustainable Development Impacts*, (with A. Olhoff, K. Halsnaes, and T. Taylor). UNEP Risø Centre on Energy Climate and Sustainable Development: Roskilde Denmark. **(B)**
147. “Analytical Framework and Methodological Approaches to Analysing Energy Subsidy Reform” in (A. Von Moltke, C. McKee and T. Morgan (eds.)) *Energy Subsidies: Lesons Learnt in Assessing Their Impact and Designing Policy Reforms*, ,UNEP, Greenleaf Publishing, Sheffield, UK. **(CB)**
148. “Developing Countries and Climate Change” (with K.Halsnaes) in (A. Owen and N. Hanley (eds.)), *The Economics of Climate Change*, Routledge. **(CB)**
149. “Tajikistan Pamir Private Power Project” (with R. Sharma) in: *Reducing Poverty and Sustaining Growth*, Proceedings of a Conference on Scaling Up Poverty Reduction, Shanghai, China, World Bank, Washington DC. **(CB)**
150. “Teoretyczne podstawy ekologicznej reformy podatkowej” in: J. Sleszynski (ed.), *Ekologiczna Reforma Podatkowa*, Wydawnictwo Ekonomia I Srodowisko, Bialystok. **(CB)**

2005

151. “Turkey: The Environmental Acquis” in S. Togan and B. Hoekman (eds), *Turkey Toward EU Accession: World Bank and CEPR*. **(CB)**
152. *The Economics of Tourism and Sustainable Development: Edward Elgar, Cheltenham, UK* (with A. Lanza and F. Pigliaru (eds.)) **(CB)**
153. “Socialiniai energetikos rinkos trūkumai ir būdų jiems įveikti tyrimas Lietuvoje”, (with D. Stremikiene), *forthcoming Ekonomikos Zurnalui*. **(J)**

154. “Policy Failures as a Cause of Environmental Degradation”, in *The Handbook of Environmental Economics*, (Karl-Goran Maler and Jeffery Vincent eds.), General Editors: Kenneth Arrow and Michael Intriligator, Amsterdam: North Holland/Elsevier Science. **(CB)**
155. “Environmental Fiscal Reform: What Should be Done and How to Achieve It” (Acknowledged Contributor, with several others), The World Bank, Washington DC. **(CB)**
156. “ExternE: Externalities of Energy: Methodology 2005 Update” (with several contributors), European Commission, Brussels. ISBN 92-79-00423-9. **(CB)**

2006

157. “Poverty Alleviation and Sustainable Development: Implications for the Management of Natural Capital” in Marcello Basili, Maurizio Franzini and Alessandro Vercelli (eds.), *Environment, Inequalities and Collective Action*, London: Routledge. **(CB)**
158. “Energy Intensity in Transition Economies: Is There Convergence Towards The EU Average?” (with S. Pedroso and D. Stremikiene), *Energy Economics*, 28, 1, 121-145. **(J)**
159. *Green Accounting in Europe: The GARPII Project* (with M.L. Tamborra), Edward Elgar, Cheltenham. **(B)**
160. Willingness to Pay To Reduce Mortality Risks: Evidence from a Three-Country Contingent Valuation Study (with A. Alberini and A. Hunt), *Environment and Resource Economics*, 33, 2, 251-264. **(J)**
161. “Gains of Regional Cooperation: Environmental Problems and Solutions” in R. Auty (ed.) *Energy Resources, Governance and Welfare in the Caspian Sea Basin*, Routledge. **(CB)**
162. “Valuing River Characteristics Using Combined Site Choice and Participation Travel Cost Models” (with C. Johnstone), *Journal of Environment Management*, 80, 3, 237-247. **(J)**
163. “Aiutare chi, aiutare cosa, aiutare quando?”, *Equilibri*, X, 1, 17-22. **(J)**
164. “Water Quality Issues in Developing Countries” in R. Lopez and M. A. Toman (eds.) *Economic Development and Environmental Sustainability*, Columbia University Press. **(CB)**
165. “Empirical Analysis of National Income and SO₂ Emissions in Selected European Countries”, (with A. Golub and S. Pedroso-Galinato) *Environment and Resource Economics*, 35, 3, 221-257. **(J)**
166. “Does the Kyoto Protocol Cost Too Much and Create Unbreakable Barriers for Economic Growth”, *Contemporary Economic Policy*, 24, 4, 507-519. **(J)**
167. *Where is the Wealth of Nations: Measuring Capital for the 21st Century*, World Bank, Washington DC. **(B)**
168. “Estimating the benefits from the conservation of provisioning ecosystem services – case study on valuing alternative clam fishing practices in the lagoon of Venice.” in M. Kettunen and P. ten Brink (eds.), “Value of Biodiversity: Documenting Examples Where Biodiversity Loss Has Led to the Loss of Ecosystem Services”, Institute for Europe Environmental Policy, Brussels. **(CB)**
169. “A proposal to correct external effects in the coffee market: a tax on regular coffee and tea to subsidise the fair trade coffee”. (With I. Galarraga). *Economía Agraria y Recursos Naturales*, Vol. 12. **(J)**

2007

170. “Security of Energy Supply: Comparing Scenarios From a European Perspective” (with V. Costantini, F. Gracevea and G. Vicini). Energy Policy, 35, 210-226. **(J)**
171. “International Trade, Sustainable Development and the Environment: Implications for Trade Liberalization and Changes in Trading Rules and Environmental Standards” in Klaus Dieter John and Dirk T.G. Rübhelke (eds.), *Development Aid and Environmental Protection*: Peter Lang, Frankfurt. **(CB)**
172. “Consigli sulla biodiversità e la qualità dell’acqua” (with Carlo Giupponi, Alessandra Gorla, Alessandra Sgobbi., Equilibri, XI, 1, 19-34 **(J)**
173. “Tourism, Environment and Sustainable Development: An Environmental Economics Perspective” in A. Chandra and D. Nigam (eds.), *Tourism, Environment and Ecology*, Shree Publishers, New Delhi. **(CB)**
174. “How Substitutable is Natural Capital?” (with S. Pedroso-Galinato), Environment and Resource Economics, 37,; 297-312 **(J)**.
175. “Electricity Generation and Health” (with P. Wilkinson), The Lancet, 370, 979-990. **(J)**
176. “Framing Issues”, in B. Metz et al. *IPCC WGIII 4th Assessment Report*, Cambridge University Press (Lead Author to Chapter 2). **(CB)**.

2008

177. “The Volatility of Growth and Tourism Earnings”, (with S. Pedroso-Galinato), in R. Brau, A. Lanza and S. Usuai (eds.), *Tourism and Sustainability*, Edward Elgar, Cheltenham. **(CB)**.
178. “The internalization of Externalities in the production of electricity: Willingness to pay for the attributes of a policy for renewable energy” (with A. Longo and M. Petrucci), Ecological Economics, 67,1, 140-152. **(J)**
179. “Il Mercato Del Carbonio: Overview Sui Principali Carbon Funds Esistenti E Sui Progetti Finanziati” ENEA, Energia, Ambiente e Innovazione, 54, pp 4-11. **(J)**
180. “Economic Value of Damage Caused by Marine Bio-invasions: Lessons from Two European Case Studies”, (with P.A.L.D. Nunes) Journal of Marine Science, 65, pp.775-780. **(J)**.
181. “Organic Crops of Energy Crops? Options for Rural Development in Cambodia and the Lao People’s Democratic Republic”, (with Sununtar Setboonsarng), Discussion Paper 101, Asian Development Bank Institute, Tokyo, 2008. **(J)**
182. “Water and the Rural Poor: Interventions for Improving Livelihoods in Sub-Saharan Africa” (acknowledged contributor), FAO, Rome. **(B)**
183. “Poverty Alleviation and the Road to Sustainability in Economies in Transition” in L. Mariani, M. Mascia and D. Signorini (eds.), *Business Styles and Sustainable Developmenti*: Padova, Gregoriana Libreria Editrice **(CB)**.
184. “JESP Symposium: Climate Change and Social Policy”(with I. Gough, J. Meadowcroft, J. Dryzek, N. Gerhards, H. Lengfeld and R.A. Ortiz), Journal of European Social Policy, 18: 353-365. **(J)**
185. “Counting the cost of vulture declines – an appraisal of the human health and other benefits of vultures in India”, (several authors), Ecological Economics, 67, 2, 194-204. **(J)**.

186. “Protecting Coastal Zones In The Mediterranean: An Economic and Regulatory Analysis” (with S. Arnold, M. Cassinelli and T. Taylor), Journal of Coastal Conservation, 12:145-159. **(J)**
187. “Notes on Environment and Growth”, (with A. Golub), International Journal of Global Environmental Issues, 335-354 **(J)**.
188. “Estimating The Value of Safety With Labor Market Data: Are the Results Trustworthy?” (with A. Alberini and B. Hintermann), Applied Economics, 1-16 iFirst. **(J)**
189. “Restraining the Golden Weed: Taxation and the Regulation of Tobacco: A Comment”, Finanzarchiv/Public Finance Analysis, 64, 502-505. (also reprinted in S. Cnossen ed.) Taxation and regulation of Smoking, Drinking and Gambling in the European Union, CPB, The Hague, Netherlands. **(J)**
190. “The Economic Value of Marine Ecosystems: Lessons from the Millennium Ecosystem Assessment”, (with Paulo Nunes, H. Ding) CIESM Workshop Monographs, n°37, pp. 23-34. 2008. **(J)**

2009

191. “Modeling Environment-Improving Technological Innovations under Uncertainty” (with A. Golub eds.), Routledge 331pp. **(B)**
192. “Can Transition Economies Implement a Carbon Tax and Hope For A Double Dividend? The Case of Estonia” (With O. Kiula), Applied Economics Letters, 16, 7, 705-709. **(J)**
193. “Valuing Climate Change Impacts on Human Health: Empirical Evidence from the Literature” (with A. Chiabai), Int. J. Environ. Res. Public Health, 6, 759-786. **(J)**
194. “El cambio climático, a debate” (con Elías Fereres, Juan Rojo y Félix Goñi), cicNetwork, pp. 32-42. **(J)**.
195. “Beyond GDP: Measuring Progress, True Wealth and the Wellbeing of Nations”, 19-20 November 2007 Conference Proceedings, European Commission, Luxemburg. **(CB)**.
196. “Econometric Models for Oil Price Forecasting: a Critical Survey” (with G. Frey, M. Manera, and E. Scarpa), forthcoming, CESifo Forum, 1, 29-44, March, 2009, **(J)**.
197. “Willingness to Pay for Mortality Risk Reduction Associated with Air Pollution in Sao Paulo”, (with R.A. Ortiz and A. Hunt), Revista Brasileira de Economica, 63(1), p. 3-22. **(J)**.
198. “Agriculture for Development: The World Development Report 2008: Making Agricultural Systems More Environmentally Sustainable”, Rivista Dell’Associazione Rossi-Doria, 1, 25-31. **(J)**
199. “Climate Change: Alternative Perspectives”, in B. Lomborg (ed.) Global Crises, Global Solution 2nd Edition, Cambridge: Cambridge University Press. pp298-304 **(CB)**
200. “Concienciación pública y aceptabilidad de medidas para la reducción de emisiones de gases de efecto invernadero: el caso de País Vasco” (with D. Hoyos and A. Longo), Papeles De Economía Española, 121, 68-78. **(J)**
201. “Analysis of Tax Incentives for Energy Efficient Durables in the EU” (with R. Ortiz, S. Mudgal and B. Tinetti), Energy Policy, 37, 5662-5674. **(J)**
202. “A Pilot Study on Payment for Ecological and Environmental Services in Lashihai Nature Reserve, China”, (with A. Sgobbi, A. Goria and C. Giuponi), Payments for Environmental Services: Ecological Economics and Human Wellbeing, New Delhi: Oxford University Press. **(CB)**.

203. “Public health benefits of strategies to reduce greenhouse-gas emissions: low carbon electricity generation” (with B. Armstrong, S. Hales, A. Chiabai, P. Criqui, SA. Mima, C. Tonne and P. Wilkinson), The Lancet, Volume 374, Issue 9707, Pages 2104 - 2114. 2009. **(J)**
204. “Public health benefits of strategies to reduce greenhouse-gas emissions: overview for policy makers” (with A. Haines, A. McMichael, K. Smith, J. Woodcock, B. Armstrong, D. Cambell-Lendrum, A. Dangour, M. Davies, N. Bruce, C. Tonne, M. Barrett and P. Wilkinson), The Lancet, Vol. 374 No. 9706 pp 2006-2015. **(J)**
205. “Can Climate Change Be Reversed Under Capitalism?” Development and Change. 40,6,1139-1152. **(J)**
206. “The Economics of Access and Benefit Sharing” (with P. Nunes) In TEEB – The Economics of Ecosystems and Biodiversity for National and International Policy Makers (2009) 72pp. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety: Berlin. Also accessible at www.teebweb.org **(CB)**
207. “Cambio climatico y su importancia socioeconomica” (with I. Gallaraga), Ekonomiaz, 71, 2, 1-14. **(J)**
208. “Are China and Europe Converging?” (with A. Bastianin and C. Cattaneo), China Economist, July-August pp. 94-102. **(J)**

2010

209. The Role of Risk Aversion and Lay Risk in the Probabilistic Externality Assessment for Oil Tanker Routes to Europe, (with A. Bigano, M. Cassinelli and F. Sfera) forthcoming, Journal of Transport Economics and Policy, Volume 44, Part 1, January 2010, pp. 93–118 **(J)**
210. “Energy Security, Energy Modelling and Uncertainty” (with M. Pemberton), Energy Policy 38 (2010) 1609–1613 **(J)**.
211. “The Costs of Achieving the Millennium Development Goals through Adopting Organic Agriculture”, (with Sununtar Setboonsarng, Qiao Yu Hui, Rachanee Songkranok and Adam Stefan.) Discussion Paper 193, Asian Development Bank Institute, Tokyo, 2010. **(J)**
212. “Misurare la Sostenibilità”, Equilibri, 1/2010, 42-48. **(J)**
213. “The Social Costs of Electricity: Scenarios and Policy Implications”, (with Andrea Bigano and Roberto Porchia, eds.), Edward Elgar Publishing. **(B)**
214. “The Economics of Sustainable Tourism” (with Fabio Cerina; and Michael McAleer, eds.), Routledge 192 pp. **(B)**
215. “Costing Adaptation: Preparing for Climate Change in India” (With A Mishra (ed.). TERI Press, New Delhi. 258pp. **(B)**
216. “Tax Incentive Options to Promote Environmentally Friendly Products: The Case of Energy-Efficient Domestic Appliances (with S. Mudgal, B. Tinetti and R. Ortiz). In (C.D. Soares J.E. Milne, H. Ashiabor, K. Kreiser and K. Deketelaere eds.) *Critical Issues in Environmental Taxation: International and Comparative Perspectives*, Volume III. Oxford University Press, Oxford. **(CB)**
217. *Climate Impacts on Energy Systems: Key Issues for Energy Sector Adaptation* (with several authors). ESMAP, The World Bank. **(CB)**
218. “Involving Developing Countries in Global Climate Policies”, in Emilio Cerdá and Xavier Labandeira (eds.) *Climate Change Policies: Global Challenges and Future Prospects*, Edward Elgar Publishing. **(CB)**.

219. “The Economic Costs of Droughts” (with J. Mysiak), in A. López-Francos (ed.), *Options Méditerranéennes: Economics of Drought and Drought Preparedness in a Climate Change Context*, CIHEAM, Zaragoza. **(CB)**

2011

220. “What are the Links between Aid Volatility and Growth?” (with V. Ponczek and S. Yi), *Journal of Developing Areas*, 44, 2, pp. 41-68. **(J)**
221. “Environmental Taxation: What Have We Learnt in the Last 30 years?”, *Rivista di Politica Economica*, VII-IX, pp. 11-58. **(J)**
222. “Green Taxes on Aviation: The Case of Italy: The Proposal of the Green Taxation Matrix” (with E. Ricci), *Rivista di Politica Economica*, VII-IX, 11-58, pp171-210. **(J)**
223. “Rewarding Benefits Through Payments and Markets” (with several authors) in Patrick Ten Brink (ed.) *The Economics of Ecosystems and Biodiversity in National and International Policy Making*. London: Earthscan, 352pp. **(CB)**
224. “General introduction to valuation of human health risks” (with R. Ortiz) in: Nriagu J.O. (ed.) *Encyclopaedia of Environmental Health*, volume 2, pp. 871-878 Burlington: Elsevier. **(CB)**
225. “Economic Assessment of Forest Ecosystem Services Losses: Cost of Policy Inaction.” (with Chiabai A, Travisi C, Markandya A, Ding H and Nunes PALD). *Environmental and Resource Economics*. 50, 3, 405-455. **(J)**
226. “Linking Reduced Deforestation and a Global Carbon Market: Implications for Clean Energy Technology and Policy Flexibility” (with V. Bosetti, R. Lubowski, A. Golub), Cambridge University Press 2011 doi:10.1017/ S1355770X10000549 *Environment and Development*. **(J)**
227. “De Cancún a Durban en un largo camino contra el cambio climático” (with I. Galarraga and M. González-Eguino), *Economistas*, 127 XXIX, 61-64. **(J)**
228. “Introduction: Sustainable Development, Energy and Climate Change” (with K. Halsnaes and P. Shukla), *World Development*, 39, 6, 983-986. **(J)**
229. “Equity and Distributional Implications of Climate Change”, *World Development*, 39, 6, 1051-1060. **(J)**
230. “The Role of regional Governments in Climate Change Policy”, (with I. Galarraga ad M. Gonzalez-Eguino), *Environmental Policy and Governance*, 21, 3, 164-182. **(J)**
231. “Setting Targets for Costing Ecosystem Adaptation”, (with E. Ojea, R.K. Ghosh. P.K. Joshi), *International Journal of Ecological Economics and Statistics*, 24, 27-45.
232. “Handbook for Sustainable Energy” (with I. Galarraga and Gonzalez-Eguino), Edward Elgar, Cheltenham. 612pp.**(B)**
233. “Aportaciones desde la economía de la adaptación a la toma de decisiones sobre Cambio Climático: un ejemplo para la Comunidad Autónoma del País Vasco”, *forthcoming*, (with I. Galarraga, N. Osés, A. Chiabai and K. Khatun) *Economía Agraria y Recursos Naturales*, 11,1, 105-128. **(J)**
234. “Air Pollution Costs in Ukraine” (with E. Strukova and A. Golub), (ISSN 1998-6041) *Environmental Economics*, 2, 52-63.
235. “The Costs of Climate Change: A Study of Cholera in Tanzania” (with S Traerup and R.A. Ortiz), *International Journal of Environmental Research and Public Health* 8, 4386-4405.**(J)**

236. "Introduction to Economic Valuation Methods" (with S. Abdullah and P. Nunes) in A:A. Batabyal and P. Nijkamp (eds.) *Research Tools in Natural Resource and Environmental Economics*, World Scientific, Singapore. **(CB)**
237. "Willingness to pay and price elasticities of demand for energy-efficient appliances: combining the hedonic approach and demand systems" (with M. Gonzalez and I. Galarraga), *Energy Economics*, 33, S66-74 **(J)**
238. "Dicer: A Tool for Analyzing Uncertainties in Climate Policy Analysis" (with R. A. Ortiz; A. Golub; O. Lugovoy; and J.Wang) *Energy Economics*, 33, S41-49 **(J)**

2012

239. "Introduction to the Special Issue on the Socio-economics and Management of Bioprospecting" (with P. Nunes), *International Journal of Ecological Economics and Statistics*, 26, 3.**(J)**
240. "The Health Effects of Climate Change: A Survey of Recent Quantitative Research" (with M. Grasso, M. Manera and A. Chiabai), *Int. J. Environ. Res. Public Health* **2012**, 9, 1523-1547. **(J)**.
241. "Wood provisioning in Mediterranean forests: a bottom-up spatial valuation approach" (with E. Ojea, P. Ruiz Benito and Miguel A Zavala), *Forest Policy and Economics*, 2012, 20, 78-88 **(J)**.
242. "Impure Public Technologies and Environment Policy" (with Dirk Ruebbelke), *Journal of Economic Studies*, Vol. 39 Iss: 2 pp. 128 - 143 **(J)**
243. "Is the Value of Bioprospecting Contracts Too Low" (with P. Nunes), *International Journal of Ecological Economics and Statistics*, 26, 3, 84-100 **(J)**
244. "Rural electrification programmes in Kenya: Policy conclusions from a valuation study", (with S. Abdullah), *Energy for Sustainable Development*, 16, 103-110. **(J: 1.65)**
245. "The costs of drought: the 2007-2008 case of Barcelona" (with J. Martin-Ortega and M. Gonzalez), *Water Policy*, 14, 539-560. **(J:0.903)**
246. "Externalities from electricity generation and renewable energy. Methodology and application in Europe and Spain", *Información Comercial Española Cuadernos Económicos*, 83, 85-100. **(J)**
247. "Using meta-analysis and GIS for value transfer and scaling up: Valuing climate change induced losses of European wetlands", (with L. Brander, I. Brauer, H. Gerdes, A. Ghermandi, O. Kuik, S. Navrud, P. Nunes, M. Schaafsma, H. Vos, A. Wagtendonk), *Environment and Resource Economics*, 52 (3), 395-413. **(J:1.8)**
248. "Willingness to pay for ancillary benefits of climate change mitigation" (with A. Longo and D. Hoyos), *Environment and Resource Economics*, 51, 1, 119-140. **(J:1.8)**
249. "Adaptation Approaches to Climate Change in China: An Operational Framework" (with J. Pan and Z. Yan), *forthcoming*, *Economía Agraria y Recursos Naturales*, 11, 1, 99-112. **(J)**
250. "A New Blueprint for a Green Economy" (with E. Barbier) Earthscan from Routledge: London. 200pp. **(B)**
251. "Beyond Current Practices: The Role of the External Costs of Carbon in Climate Decision-Making" (with R.A. Ortiz), *Journal of Industrial Ecology*, 15, 666-668. **(J:2.1)**.
252. "The Montreal Protocol and the Green Economy: Assessing the Economic Impact and Co-benefits of a Multilateral Agreement", (with N. Dale) UNEP, 2012. ISBN 978-92-807-3200-9. **(B)**

2013

253. The role of uncertainty in climate change adaptation strategies—A Danish water management example (with J. C. Refsgaard & K. Arnbjerg-Nielsen & M. Drews & K. Halsnæs & E. Jeppesen, H. Madsen & J. E. Olesen & J. R. Porter & J. H. Christensen), Mitig. Adapt. Strateg. Glob Change, 18, 3, 337/359. **(J)**
254. “Environmental Taxes and Fiscal Reform” (with L. Castellucci (eds.)) in *Central Issues in Contemporary Economic Theory and Policy*: Palgrave Macmillan: Basingstoke, England, 273pp. **(B)**
255. “Energy Efficiency Policy in the USA: The Impact of the Industrial Assessment Centres (IAC) Programme and State and Regional Climate Policy Actions” (with L.M. Abadie, I. Galarraga and R. Ortiz) in V. Costantini and M. Mazzanti (eds.), The Dynamics of Environmental and Economic Systems: Innovation, Environmental Policy and Competitiveness, Springer, Dordrecht 2012. DOI 10.1007/978-94-007-5089-0_4. **(CB)**
256. Reforma Fiscal Ambiental Y Desempleo en España en Presencia de un Sector Informal (with M. Escapa and M. González-Eguino) in E. Álvarez Pelegrý and M. Larrea Basterra (eds.) Energía y Tributacion Ambiental, Marcel Pons, Madrid. **(CB)**
257. “Deforestation in private lands in Brazil and Policy implications for REDD programs: An empirical assessment of land use changes within farms using an econometric model” (with D. Heres and R.A. Ortiz), International Forestry Review, 15 (2), 1-13. **(J)**.
258. “International Side-Payments to Improve Global Public Good Provision When Transfers are Refinanced through a Tax on Local and Global Externalities” (with D. Ruebbelke and M. Altmeyer), International Economic Journal, DOI:10.1080/10168737.2012.759986. Reprinted in *Economics of the Environment: Routledge Books*, 2014. **(J)**
259. “Walking away from a low-carbon economy? Recent and historical trends using a regional decomposition analysis”, (with L. Mundaca and J. Nørgaard), Energy Policy, 61, 1471-1480. **(J)**
260. “Economic Loss of Ecosystem Services from 1900 to 2050” (with A. Chiabai), Chapter 4. In Lomborg B (Ed) *How Much Have Global Problems Cost the World?: A Scorecard from 1900 to 2050*. Cambridge University Press. **(CB)**
261. “The Equivalency Principle for Discounting the Value of Natural Assets: An Application to an Investment Project in the Basque Coast” (with A. Chiabai. I. Galarraga and U. Pascual), Environmental and Resource Economics. doi:10.1007/s10640-012-9589-8. **(J)**
262. “Ecosystems and Biodiversity”. (with Hussain SS, Brander L, McVittie A, de Groot R, Vardakoulias O, Wagtendonk A and Verburg P), in Lomborg B. (ed.) , *Global Problems, Smart Solutions: Costs and Benefits*, Cambridge University Press. **(CB)**
263. “Climate Change Policies: Alternative Perspectives” in Lomborg B. (ed.), *Global Problems, Smart Solutions: Costs and Benefits*, Cambridge University Press. **(CB)**.
264. “From Shadow to Green: Linking Environmental Fiscal Reforms and the Informal Economy”, (With M. Gonzalez and M. Escapa), Energy Economics, 40, 108-118. **(J)**
265. “Ecosystem services and their monetary value” (with I. Liekens, L. De Nocker, S. Broekx and J. Aertsens) Pages 13-28 in (Jacobs, Dendoncker and Keune (eds.)) *Ecosystem Services: Global Issues, Local Practices*, Elsevier. **(CB)**

2014

266. “Low Climate Stabilization under Diverse Growth and Convergence Scenarios (with M. Gonzalez, P. Criqui and S. Mima), Energy Policy, 64, 288-301. (J)
267. Routledge Handbook of the Economics of Climate Change Adaptation (with Ibon Galarraga and Elisa Sainz de Murieta (eds.)), 452 pp., Routledge: London and New York. (B).
268. “Estimating the health effects of greenhouse gas mitigation strategies: addressing parametric, model and valuation challenges”, (Justin V. Remais, Jeremy Hess, Kristie Ebi, Anil Markandya, John Balbus, Paul Wilkinson, Andy Haines, Zaid Chalabi), Environmental Health Perspectives 02/2014; DOI:10.1289/ehp.1306744. (J).
269. “Environment and Development Economics: Past, Present and Future Challenges”, forthcoming in Environment and Development Economics, 19, 2, 328-329. DOI: 10.1017/S1355770X14000333 (J).
270. “The valuation of ecosystem services and their role in decision-making: constraints and ways forward” (with Marta Pascual) in (P. Nunes, P. Kumar and T. Dedeurwaerdere (eds.)). *Handbook on the Economics of Ecosystems and Biodiversity*. Edward Elgar: Cheltenham. (CB)
271. Health Implications of Adopting Nutritious, Low-Carbon Diets in the U.K. (with Green, R., Milner, J., Dangour, A.D., Haines, A., Chalabi, Z., Markandya, A., Spadaro, J.V. and P. Wilkinson). *The FASEB Journal*, 28 (1 Supplement), 255.3 (J).
272. “Policy Instruments to Foster Energy Efficiency” (with X. Labandeira and A. Ramos) in A. Asuategi, I. Galarraga and J. Delgado (eds.). *The Economics of Green Energy and Efficiency*: pp 93-110. Springer (CB).
273. “Summary for Policymakers” in Climate Change 2014: Impacts and Vulnerability Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Drafting author). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA pp 1-32 (CB).
274. “Economics of Adaptation” in Climate Change 2014: Impacts and Vulnerability Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Co-authors: Chambwera, M., G. Heal, C. Dubeux, S. Hallegate, L. Leclerc, A. Markandya, B.A. McCarl, R. Mechler and J.E Neumann, in [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)] Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA pp 945-977 (CB).
275. “Gdyn-E: a Model for the Economic Assessment of Climate Policies” (with Alessandro Antimiania, Valeria Costantini, Anil Markandya, Chiara Martini, Alessandro Palma, Maria C. Tommasino) in Chemical Engineering Transactions, 42, pp115-120. (J)

2015

276. “Sequence effects in the valuation of multiple environmental programs using the contingent valuation method” (with David Hoyos and Alberto Longo), Land Economics, 91, 1, 20-35. Impact Factor 1.4 (J)

277. “Organic Agriculture and Post-2015 Development Goals: Building on the Comparative Advantage of Poor Farmers” (S. Setboonarng and A. Markandya (eds.)). Asian Development Bank Institute: Tokyo and Manila. **(B)**
278. “The potential to reduce greenhouse gas emissions in the UK through healthy and realistic dietary change” (with James Milner; Alan David Dangour; Andy Haines; Rosemary Green, Zaid Chalabi; Anil Markandya; Joseph Spadaro; Paul Wilkinson), Climatic Change, **DOI number: [10.1007/s10584-015-1329-y](https://doi.org/10.1007/s10584-015-1329-y)**. Impact Factor 3.4 **(J)**
279. “Biodiversity: What’s worth saving”? In B. Lomborg (ed.). *The Nobel Laureates’ Guide to the Smartest Targets for the World: 2016-2030*. Copenhagen Consensus Center USA, Inc. **(CB)**.
280. "Health effects of adopting low greenhouse gas emission diets in the UK" (James Milner; Alan David Dangour; Andy Haines; Rosemary Green, Zaid Chalabi; Anil Markandya; Joseph Spadaro; Paul Wilkinson), BMJ Open, 2015;5:e007364.doi:10.1136/bmjopen-2014-007364. Impact Factor 2.3 **(J)**
281. “Climate Change and Economic Development: Analysing Trade-offs in International Policy Options”, (Anil Markandya; Alessandro Antimiani; Valeria Costantini; Chiara Martini; Alessandro Palma; Maria Cristina Tommasino), World Development, Vol. 74, 93-107. **(J)**
282. “Estimating Cost of Environmental Degradation in India”, (Muthukumara Mani, Anil Markandya, Aarsi Sagar, Elena Strukova and Gaurav Joshi) in *Environment and Development Essays in Honour of Dr. U. Sankar*. Sage Publications: Los Angeles, London, New Delhi. **(CB)**.
283. “The role of economic valuation of ecosystem services in an interdisciplinary context” in A. Chiabai (ed.) *Climate Change Impacts on Tropical Forests in Central America: An ecosystem service perspective*. Routledge: Abingdon and New York. **(CB)**.
284. “Value of Biodiversity and Ecosystem Services in South Asia and India: Past, Present and Future” in M. Dev and P.G. Babu (eds.). *Development in India: Micro and Macro Perspectives*: Springer: New Delhi. **(CB)**
285. “Natural Capital and the Rate of Discount”. UNEP Policy Series: Ecosystem Management, Issue No 15. UNEP. **(Monograph)**
286. “Economics, Finance and the Private Sector” (Coordinating Lead author, with R. Schwarz, and P. Meir) in *Climate Change and Cities: Second Assessment Report of the Urban Climate Change Research Network*. Columbia University: New York **(CB)**.

2016

287. "Supplementary feeding and endangered avian scavengers: caveats and controversies" (Cortes-Avizanda, A., Blanco, G, DeVault, T.L., Markandya, A. Virrani, M.Z., Brandt, J and Donázar, J.A.), forthcoming in Frontiers in Ecology and the Environment ISSN: 1540-9295. **(J)**
288. “Climate Policy Instrumentation in Spain” (with M. Gonzalez and L. Rey) in (R. Heffron and G. Little (eds.) *Delivering Energy Policy in the EU and US: A Multi-Disciplinary Reader*, Edinburgh University Press (Scotland, UK). **(CB)**
289. "What Role Can Taxes and Subsidies Play in Changing Diets? An Application from Spain." (A. Markandya, I. Galarraga, L.M. Abadie, J.Lucas-Rueda and J. Spadaro), FinanzArchiv/Public Finance Analysis, 72, 1, 175-201. **(J)**.
290. “The True Cost of Fossil Fuels: Saving On the Externalities of Air Pollution and Climate Change.” (Anil Markandya (Basque Centre for Climate Change), Deger

- Saygin, Asami Miketa, Dolf Gielen and Nicholas Wagner (IRENA)) International Renewable Energy Agency. Abu Dhabi. (2016).
291. “Towards a green energy economy? Tracking the employment effects of low-carbon technologies in the European Union” (A.Markandya, I. Arto, M. Gonzalez and M.V. Roman), Applied Energy Vol. 179, 1342-1350. **(J)**.
292. “Economic and land use impacts of improving water use efficiency in irrigation in South Asia” (Farzad Taheripour, Thomas W. Hertel, Badri Narayanan Gopalakrishnan, Sebnem Sahin, Anil Markandya, and Bijon Kumer Mitra) forthcoming in Journal of Environmental Protection, Vol. 7, 1571-1591. **(J)**.
293. “Assessing regional progress towards a ‘Green Energy Economy’” (with L. Mundaca), Applied Energy, 179, 1372-1394. **(J)**.
294. “Towards a Green Energy Economy? Assessing policy choices, strategies and transitional pathways” (with Luis Mundaca, Lena Neij, Peter Hennicke and Jinyue Yan), 179, 1283-1292, Applied Energy. **(J)**.
295. “Industrial and Terrestrial Carbon Leakage under Policy Fragmentation” (Mikel González-Eguino, Iñigo Capellán-Pérez, Iñaki Arto, Alberto Ansuategi and Anil Markandya), Climate Policy, DOI: 10.1080/14693062.2016.1227955. **(J)**

Forthcoming

296. “Operationalizing the ecosystem approach to resolve mismatches in ocean governance” (with M. Garmendia, E. Ojea and M. Pascual). In P. Kumar, P. Nunes, A. Markandya and L. Svensson eds.), *Handbook on the Economics and Management for Sustainable Oceans*: Edward Elgar, Cheltenham. **(CB)**
297. “Socio-economic impacts of MPAs and MPA networks” (Elena Ojea, Marta Pascual, David March, Joachim Claudet, Margaretta Breil, Paco Melià, Isabella Bitetto and Anil Markandya) in P. Goriup (ed.) *Managing Marine Protected Areas*. John Wiley and Sons. **(CB)**.
298. “Economics, Finance, and the Private Sector”. Authors: (Schwarze, R., P. B. Meyer, A. Markandya, S. Kedia, D. Maleki, M. V. Román de Lara, T. Sudo, S. Surminski In: In C. Rosenzweig, W. Solecki, P. Romero-Lankao, S. Mehrotra, S. Dhakal, and S. Ali Ibrahim (eds.), *Climate Change and Cities: Second Assessment Report of the Urban Climate Change Research Network*. Cambridge University Press. Cambridge, UK and New York, NY, USA, pp. **(CB)**
299. “The distributional effects of carbon-based food taxes” (with Xaquín García, Mikel González and Romero-Jordan Desiderio) *forthcoming*, Journal of Cleaner Production. **(J)**.
300. “Global and Regional Economic Damages from Climate Change” (Anil Markandya, Valeria Costantini, Giorgia Sforna, Elena Paglialunga), *forthcoming* Oxford Encyclopaedia of Environmental Science. OUP: New York.
301. “Climate Finance: Theory and Practice” (Anil Markandya, Ibon Galarraga and Dirk Ruebelleke), *forthcoming* World Scientific: London.

SELECTED ADVISORY REPORTS AND CONFERENCE PAPERS

1. An Economic Evaluation of Aircraft Noise - Compensation vs. Willingness to Pay. Reports Prepared for the Second Sydney Airport Study, Travers Morgan & Partners, Sydney, (1973).

3. "Education, Screening and the Shape of the Size Distribution of Earnings", presented to the Econometric Congress, Vienna, (1977).
4. "A Quarterly Econometric Model of the Italian Economy - 1960-1978", (with G. Chiesa), Prepared for Confindustria. The model was subsequently been used for simulation work both by Confindustria and by the Italian Treasury, (1977).
5. "Alternative Methods of the Finance of Housing in Korea".
"A Survey of Environmental Pollution in Korea".
"Income Distribution in Korea".
Reports prepared for the Asian Development Bank Review, Manila, (1981).
6. "Rents, Prices and Expectations in the Land Market", Paper 82-51, Institute of Business and Economic Research, University of California, Berkeley, (1982).
7. "The International Property Market - A Comparison of Commercial Property Rates of Return in London, New York, Paris, Singapore and Tokyo", presented to Daiwa Bank, Japan, (1984, revised 1988).
8. "An Econometric Model of the Kuwaiti Economy - Estimation and Simulation", (with M. Pemberton), presented to the Kuwaiti Banks Committee, (1984).
9. "Shadow Prices in Pakistan", (with D.W. Pearce and A. Parker) prepared for the UNDP Economic Impact Study of the Kalabagh Dam on the Pakistan Economy, 1986).
10. "The Nigerian Economy: Structure and Industrial Prospects", prepared for the Chon Corporation, Korea, (1986).
11. "Energy Demand Forecasting in Pakistan", prepared for the UNDP Economic Impact Study on Pakistan, (1986). (Used by the Planning Commission in Pakistan to forecast medium term energy demand).
12. "Compensation for Environmental Pollution", for the OECD, 1987.
13. "The Demand for Energy in Turkey", for the World Bank, EM1EG, 1988.
14. "Energy-Economy Linkages in Pakistan", for the Energy Wing, Planning Commission, Pakistan, 1988.
15. "Sustainable Development, Resource Accounting and Project Appraisal", (with D.W. Pearce and E. Barbier) for the Department of the Environment (UK.), 1989.
16. "The Market for Gum Arabic: An Econometric Analysis", for the Government of Sudan, 1989.
17. "The Costs to Developing Countries of Joining the Montreal Protocol", presented to the United Nations Environment Program, Nairobi, Kenya, 1990.
18. "The Role of Benefit Estimation in Environmental Policy - Lessons from the US Experience", prepared for the Umweltbundesamt, Berlin, 1990.
19. "The Debt Crises, Structural Adjustment and the Environment", (with J. Richardson), prepared for WWF International, 1990.
20. "The Environment and Rural Poverty Alleviation", prepared for IFAD, 1990.
21. "Current Financial Support of Biological Diversity Conservation", prepared for UNEP, 1990.
22. "Sharing Global Carbon Emissions Targets", prepared for the IPCC meeting in London, in June 1990, on behalf on the Department of the Environment, UK., 1990.
23. "The Montreal Protocol: Funding the Incremental Costs", prepared for the ODA, 1991, revised, 1992.
24. "Financing Biodiversity in Kenya", prepared for UNEP and the ODA, 1992
25. "The External Costs of Fuel Cycles", prepared for the European Commission (DGXII) (with B. Rhodes), 1992.

26. "The Costs and Benefits of Reducing SO₂ Emissions at Yatagan Thermal Power Station", prepared for the Government of Turkey (with R. Nurick). (Version presented to the UNECE Workshop on the Possibilities for Refurbishing Fossil-Fired Power Stations Taking Account Environmental Requirements', Ankara, 1993.
27. "Environmental Policy, Income Distribution and Equity", (with B. Rhodes). Prepared for the United Nations Research Institute for Social Development, conference on Social Dimensions of Environmental and Sustainable Development, 1992.
28. "Cost Effective Air pollution Policies for the Ukraine", prepared for the World Bank, 1992.
30. "Water Pricing in Latvia", prepared for the Environmental Protection Committee, Riga, Latvia, 1993.
31. Financing Sustainable Development: Agenda 21, prepared for the United Nations Council for Sustainable Development, New York, 1994.
32. Green Accounting in Europe: The Role of Damage Estimation. Report to EC: DGXII, 1996.
33. "Environmental Liability and its Impact on Privatisation, Economic Restructuring, Trade and Investment in Russia", HIID Discussion Paper 95-27.
34. "Rental Incomes and Fees for Natural Resources Use in the Transition Economy" (with A. Golub and E. Strukova). HIID Discussion Paper 95-33.
35. "Forestry and Carbon Sequestration in Russia" HIID Discussion Paper 95-34.
36. "An Environmental Reform Pilot Project in the Russian Federation: The Case of Tula Oblast" (with A. Ignatiev, O. Zrazhevskaya and N. Kasharin). HIID Discussion Paper 95-36.
37. "Public Health in Chapaevsk: Social Factors and Environmental Pollution" (with B. Revich). 36. HIID Discussion Paper 95-46.
38. "Estimation of Compliance Costs for the Approximation of EU Legislation in CEE States: Guidelines for Country Studies", study prepared for DGXI, CEC, September 1997.
39. "Pressure Indicators Project, Final Report", prepared for Eurostat, 1996.
40. External Costs of Electricity: Valuation of Health Impacts, 1996
41. Development Co-operation Objectives and the Beef Protocol, Report for the European Commission, DGVIII, November 1996.
42. Development Co-operation Objectives and the Banana Protocol, Report for the European Commission, DGVIII, November 1996.
43. Assessing the Potential for Western (European) Publicly Funded Assistance Programmes to Create "Tradable Hot Air" in Russia and Ukraine, Report for the European Commission, DGXI/DGI. 1998.
44. Epistemic Communities of Environmental Economists to Shape Development Policies, (with several authors), First World Congress of Environmental Economists, Venice, 1998.
45. Environmental Implications of the Financial Crisis in Thailand, Prepared for the Asian Development Bank, 1998.
46. Maharashtra Water and Environmental Sanitation Project: A Revised Cost Benefit Analysis, prepared for DFID, 1998.
47. Russian Federation Sustainable Forestry Plot Project: An Economic and Financial Analysis, prepared for DFID and the World Bank, 1999.
48. The External Costs of Nuclear Accidents, (with T. Taylor), prepared for the International Atomic Energy Authority, 1999.

49. Valuing Human Health Effects of Routine Atmospheric Releases from Nuclear Facilities, (with R. Boyd), prepared for the International Atomic Energy Authority, 1999.
50. Green Accounting Research Project II, Submitted to the Environment and Climate Programme, European Commission, DGXII. 1999.
51. "Study on the Relationship Between Environment/Energy Taxation and Employment Creation", Report for the European Commission, DGXI. (1999).
52. The Indirect Costs and Benefits of Greenhouse Gas Limitation: Hungary Case Study. Report for the UNEP Collaborating Centre on Energy and the Environment, Roskilde, Denmark (1999).
53. "Costing the Impacts of Climate Change: Technical Guidelines" Report to the Department of Environment, UK (2000).
54. "Economic Growth, Fuel Mix and Air Quality in Russia", Report for Environmental Defense. (2003)
55. "Environmental Protection in Transition Economies", Report for Environmental Defense. (2003).
56. "Market-based Options for Security of Energy Supply", FEEM Working Paper, 117.04. 2004.
57. "Guidelines for Corporate Greenhouse Gas Abatement Cost Curve Study for the Enterprises of the Russian Federation", Report for the Russian Agency For Direct Investments, under the UK FCO Environmental Fund. (2004)
58. "How to Assess the Sustainable Development Impacts of CDM Projects." Report for the UNEP Collaborating Centre on Energy and the Environment, Roskilde, Denmark (2004).
59. "Republic of Peru: Environmental Sustainability: A Key to Poverty Reduction in Peru". Report No 40190-PE, The World Bank, Washington DC. (2005).
60. "Social Cost of Carbon: A Closer Look at Uncertainty" (with Downing, T.E., D.Anthoff, R.Butterfield, M.Ceronsky, M.J.Grubb, J.Guo, C.J.Hepburn, C.W.Hope, A.Hunt, A.Li, A.Markandya, S.Moss, A.Nyong, R.S.J.Tol, and P.Watkiss) (2005) Department of Environment, Food and Rural Affairs, London.
61. "Getting the Most for the Money – How Public Environmental Expenditure Reviews Can Help", Environmental Strategy Note No 16 (with K. Hamilton and E. Sanchez-Triana). The Word Bank, Washington DC, (2006).
62. "Power System Planning in India: Incorporating External Costs and Benefits". Report for the World Bank, South Asia Department (2007).
63. "Assessment of the Advantages and Disadvantages of Various Allocation Methodologies for the Post 2012 EU ETS" Report for DG Enterprise. (2007).
64. "A Pilot Study on Payment for Ecological and Environmental Services in Lashihai Nature Reserve, China." Study for the World Bank, 2007.
65. Assessing the Environmental, Forest and Natural Resource Aspects of Development Policy Lending": A World Bank Toolkit". (with M. Mani and others). World Bank: Washington DC. 2008.
66. "Organic Crops or Energy Crops? Options for Rural Development in Cambodia and Lao People's Democratic Republic (PDR)", Discussion Paper, Asian Development Bank Institute, Tokyo, 2008.
67. "Environmental Tax Reforms in Developing Countries", Paper presented to the Environment for Development Initiative Conference, Capetown, November, 2007.
68. "Environmental Tax Reforms in South Africa", Paper presented to the Tax Symposium, Ministry of Finance, Pretoria, March 2008.

69. “Scaling up ecosystem service values: methodology, applicability and a case study”. Report to the European Environment Agency, April 2008. (Joint Authors: L. Brander, A. Ghermandi, O. Kuik, A. Markandya, P. Nunes, M. Schaafsma and A. Wagtendonk.
70. “Review on The Economics Of Biodiversity Loss – Phase 1 (Scoping) Economic Analysis And Synthesis, Report Env.G.1/Fra/2006/0073 to DG Environment.” March 2008. Authors, Anil Markandya, Paulo A.L.D. Nunes, Ingo Brauer, Patrick ten Brink, Onno Kuik (IVM) and Matt Rayment (GHK). 2008.
71. “The Economic Valuation of Ecosystem Services, Paper Prepared for a Workshop on Greening the Economy: Integration of Monetary and Non-monetary Signals for Decision-Making in Ecosystem Conservation”, Brussels, December 4th 2007. Sole Author, Professor A. Markandya. 2007.
72. “The Cost of Policy Inaction (COPI): The case of not meeting the 2010 biodiversity target.” Alterra-rapport 1718, ISSN 1566-71 97. Authors include: L. Braat & P. ten Brink, J. Bakkes, K. Bolt, I. Braeuer, B. ten Brink, M. Kettunen, U. Kirchholtes, C. Klok, A. Markandya, M. van Oorschot, M. Rayment, C. Travisi. May 2008.
73. “Economic Modelling of Income, Different Types of Capital and Natural Disasters” (with Suzette Pedroso-Galinato), World Bank Policy Research Working Paper No. 4875, March 2009.
74. “Economic Valuation of Forest Ecosystem Services: Methodology and Monetary Estimates”, Nota di Lavoro, 12.009, FEEM working Papers. Download from <http://www.feem.it>. 2009.
75. “Fujian Sustainable Water Monitoring and Payment for Ecological Services (PES) Development”, With Liu Jian, Zhang Lei and Jin Leshan. Asian Development Bank, East Asia Department, 2009.
76. “Fiscal Dimensions of Climate Adaptation in India” Study for the **World Bank**, 2009.
77. “Potential costs and benefits of adaptation options: A review of the existing literature” prepared for the **UNFCCC** prior to the Copenhagen Meeting. Document FCCC/TP/2009/2.
78. “Net Zero Carbon Ambition: Use of Discount Rates and Uncertainty Factors. Prepared for the South West Regional Development Authority (SWRDA). June 2009.
79. “The External Costs of European Crude Oil Imports” (with A. Bigano, L. Guarrera, S. Karbuz, M. Haffner, S. Navrud), FEEM Nota di Lavoro 13.2009.
80. “Scaling up ecosystem services values: methodology, applicability and a case study”, with Luke Brander, Andrea Ghermandi, Onno Kuik, Paulo A.L.D. Nunes, Marije Schaafsma, Alfred Wagtendonk, Report to the European Environment Agency and FEEM Nota di Lavoro XX.2010. FEEM working Papers. Download from <http://www.feem.it>.
81. “Financing Public Environmental Expenditures in Mongolia.” Mongolia Discussion Papers, East Asia and Pacific Sustainable Development Department. Washington, D.C.: World Bank. 2010.
82. “The Linkages between Energy Efficiency and Security of Energy Supply in Europe”, with A. Bigano, R.A. Ortiz, E. Menichetti, and R Pierfederici. FEEM Working Paper 2010.065. 2010.
83. “Eastern Europe and the Former Soviet Union Since the Fall of the Berlin Wall: Review of the Changes in the Environment and Natural Resources”. FEEM Working Paper 2010.065. 2010.
84. “The Montreal Protocol and the Green Economy: Assessing the Economic Impact and Co-benefits of a Multilateral Agreement”, with N. Dale. Document prepared for UNEP, 2012.

85. “Environmental Impact Assessment for Socio-economic Analysis of Chemicals: Principles and Practice”, with several authors. Technical Report N° 113, European Centre for Ecotoxicology and Toxicology of Chemicals, Brussels, 2011.
86. “Multi-Criteria Analysis for Climate Change: A Review of the UNEP Study on this Topic and Related Documents” Report for UNEP, 2011.
http://www.unep.org/pdf/Planning_Pro-Dev.pdf
87. “*The Challenge of Ecosystems and Biodiversity*”. (with Hussain SS, Markandya A, Brander L, McVittie A, de Groot R, Vardakoulias O, Wagendonk A and Verburg P Copenhagen Consensus Paper. 2012.
88. “Managing coastal areas to maximise ecosystem services and sustainable tourism” in “Toward Green Growth in Mediterranean Countries: Implementing Policies to Enhance the Productivity of Natural Assets: 2012 MED Report”, World Bank, EIB, FEMISE and Plan Bleu.
89. “Application of Methodology for Climate Change Risk Assessment for Integrated Coastal Zone Management in Buna/Bojana Region of Albania and Montenegro” Report to the PAP/RAC Centre, Split, Croatia, 2012. (with T. Taylor, L. Annebiona).
90. Integrating climate change into the ICZM planning process: Contribution to the Integrative Methodological Framework for coastal, river basin, aquifer and groundwater management. MedPartnership/2012/IMF.CC MAP/Priority Actions Programme. 2012.
91. “India’s Economic Growth and Environmental Sustainability: What are the Tradeoffs?” World Bank Policy Research Working Paper N° 6208 (with M. Mani, A. Sagar and S.Sahin). 2012.
92. “An Analysis of Physical and Monetary Losses of Environmental Health and Natural Resources in India” (with M. Mani, S. Sagar and E. Strukova), World Bank Policy Research Working Paper N° 6219, Washington D.C. 2012.
93. “The Economic Benefits of the Natura 2000 Network: Synthesis Report, DG Environment, European Commission. March 10, 2013, Authors: Patrick ten Brink, Matt Rayment, Anil Markandya, Helen (Hongyu) Ding. 2012.
94. “Public Environmental Expenditure: A Review of Case Studies in Latin America and Methodological Guidance”, Prepared for the Inter-American Development Bank, 2012.
95. India: Diagnostic Assessment of Select Environmental Challenges Valuation of Biodiversity and Ecosystem Services in India. Report No. 70004-IN. The World Bank, Washington DC. June 2013.
96. “Energy and the Environment: Using Lessons Learned from the MDGs to Build Sustainability” Paper for the Commonwealth Secretariat (CCGE(13)3), Consultative Group in Energy and the Environment, February, 2013.
97. “Applying an Ecosystem Services Framework to Transport Appraisal”: Report for the UK Department of Transport (with Atkins). February 2013.
98. “Assessing Environmental Impacts of Research and Innovation Policy. Study for the European Commission, Directorate-General for Research and Innovation, Brussels, edited by M. Miedzinski 2013.
99. “Policy Instruments to Foster Energy Efficiency” (with X. Labandeira and A. Ramos), WP 01/2014, Economics for Energy, Madrid. 2014.
100. “The Economic Feedbacks of Loss of Biodiversity and Ecosystems Services” Report to the OECD Environment and Economy Integration Division, Environment Directorate. 2014

101. “A Preliminary Benefit-Cost Assessment of the Ecosystem Targets” for the 11th Session UN Open Working Group Goals. Copenhagen Consensus Centre. 2014.
<http://www.copenhagenconsensus.com/publication/preliminary-benefit-cost-assessment-11th-session-owg-goals>
102. “Technology Gaps” in UNEP Adaptation Gap Report 2014. UNEP, 2014.
103. “Economic and Social Assessment of Croatian Marine Waters and the Coastal Zones”. Report for the Croatian Government through PAP/RAC. 2014.
104. “EU Exports to the World: Effects on Employment and Income (1995-2011)”. Report EUR 26982 EN. European Commission Joint Research Centre Institute for Prospective Technological Studies. 2014.
105. “”, Report for CDKN. 2015.
106. National Climate Change and Low Carbon Green Growth Strategy for Romania 2016-2030. Report for the Government of Romania and the World Bank. 2015.
107. “The costs and benefits of adaptation: results from the ECONADAPT project. Policy report”. European Commission. 2015.
108. “Rapport sur l'analyse socio-économique des impacts de la variabilité et du changement climatique dans les zones côtières tunisiennes”. Report to PAP/RAC. 2015.
109. “Evaluation du coût de dégradation de quelques services écosystémiques du littoral de Tétouan, Maroc. (Flayou, L., Snoussi, M., Markandya, A. Levrel H., and El Mrini, A.). Report to the GDN Program on Natural Wealth Accounting. 2015.
110. “Making the Money Count: Financing Climate Change and Sustainable Development”. Paper to the Governance of Climate Change Programme, UNDP, Bangkok. 2015.
https://www.climatefinance-developmenteffectiveness.org/sites/default/files/documents/27_08_15/1%20Making%20the%20money%20count%20Financing%20Climate%20Change%20and%20Sustainable%20Development%20Ver05%20August%2027.pdf.
111. Markandya, A. “Cost benefit analysis and the environment: How to best cover impacts on biodiversity and ecosystem services”, *OECD Environment Working Papers*, No. 101, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jm2f6w8b251-en>. 2016.
112. “Better Cities, Better Growth: India’s Urban Opportunity”. Acknowledged Contribution to the Report prepared by the New Climate Economy. 2016.
113. Markandya, A. “State of Knowledge on Climate Change, Water and Economics”. *Forthcoming*, World Bank Discussion Paper Series, 2017.

LANGUAGES:

(1-5 for Competence)

| | | | |
|-------------|------------|------------|-------------|
| English: | Reading: 5 | Writing: 5 | Speaking: 5 |
| French: | Reading: 4 | Writing: 3 | Speaking: 4 |
| Italian: | Reading: 4 | Writing: 3 | Speaking: 4 |
| Spanish: | Reading: 4 | Writing: 3 | Speaking: 4 |
| Russian: | Reading: 1 | Writing: 1 | Speaking: 2 |
| Hindustani: | Reading: 1 | Writing: 0 | Speaking: 4 |

OTHER RELEVANT WORK EXPERIENCE

Field experience in the following developing countries: Argentina, Bangladesh, Botswana, Brazil, Burkina Faso, Cambodia, China, Chile, Colombia, Egypt, El Salvador, Ghana, India,

Ivory Coast, Jamaica, Kenya, Lao PDR, Malaysia, Mexico, Nepal, Pakistan, Philippines, Somalia, Sri Lanka, Sudan, Thailand, Trinidad, Turkey, Uganda.

Field experience in the following transition economies: Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Mongolia, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Tajikistan, Turkmenistan, Uzbekistan and Ukraine.

Working Experience in the following other countries: Australia, Dubai, France, Korea, Kuwait, Italy, Japan, Oman, Saudi Arabia, Qatar, Spain, UAE, UK, and USA.