Research outputs:

**Climate change risks for severe storms in developing countries in the context of poverty and inequality in Cambodia**

Least developed countries are generally regarded as particularly sensitive to climate change due to among other vulnerable locations and low adaptation capabilities. In the present study, we address climate change hazards in least developed countries by presenting a methodological framework, which is suitable for the estimation damage costs as a function of risk aversion, equality, income distribution and climate scenario using state-of-the-art climate model projections. As a case study, the methodology is applied to study severe storms in Cambodia based on two future climate scenarios and data on historical damages from storm events, which are used as a proxy in performing a sensitivity analysis on all input parameters. For the assumptions and parameter ranges used here, the study shows a high sensitivity to the income distribution (reflected by discount rates) and risk aversion and smaller effects from equality measures and extreme wind climate scenario. We emphasize that the assumptions on risk aversion reflecting consumption smoothing possibilities of low-income households clearly depicts that climate risks can be particularly high as a consequence of poverty and therefore recommend that context-specific vulnerabilities and equity concerns in climate risk studies should be included when making assessments for least developed countries.
Decomposing the cascade of uncertainty in risk assessments for urban flooding reflecting critical decision-making issues

Climate change risk assessments traditionally follow an analytical structure in which climate information is linked to impact models, and subsequently to damage models and decision-making tools. This structure generates a wide cascade of uncertainties that accumulate with each analytical step, consequently resulting in a wide range of risk estimates. This cascade of uncertainties can suggest that climate change risk assessments are not very useful in the context of decision-making regarding climate adaptation. However, many of the uncertainties revealed in traditionally structured climate risk assessments are not equally relevant to specific decisions, and presenting wide cascades of uncertainties can mask key decision-making parameters. In this paper, we show how the cascade of uncertainty relevant to decision-making can be reduced by applying an uncertainty decomposition approach, which, in study design, initially identifies the uncertainty cascade elements of particular relevance to the focal decision-making context. We compare the full cascade of uncertainties that emerge in a traditional risk assessment based on linked climate scenarios, impact modeling, and damage cost assessment with the uncertainty cascade generated by a detailed assessment of urban flooding risks where the focus is on key uncertainties in decision-making on climate change adaptation. A case study on flooding from extreme precipitation in the Danish city of Odense is used to decompose major sources of uncertainties in the climate modeling, the hydrological modeling, and the damage cost assessment. The decomposition approach reduces the focal range of damage cost estimates by 7% of 9 M EUR, which corresponds to a 20% reduction in the full uncertainty range without the application of the decomposition approach. Assuming that damage cost assessments can provide an indication of how much society should be willing to spend on climate adaptation, a decomposition approach as presented here could assist decision-makers in increasing the economic effectiveness when investing in protective measures.
Coastal Climate Risk Coping and Sustainable Development Goals for Cities

General information
Publication status: Published
Organisations: Department of Management Engineering, Systems Analysis
Contributors: Halsnæs, K.
Number of pages: 1
Publication date: 2017

Host publication information
Title of host publication: Book of Abstracts, Sustain 2017
Publisher: Technical University of Denmark (DTU)
Article number: X-2
Electronic versions:
SustainAbstracts2017c.compressed_178.pdf

Research output: Chapter in Book/Report/Conference proceeding – Conference abstract in proceedings – Annual report year: 2017 › Research › peer-review

Contribution of organic farming to public goods in Denmark
The potential contribution of organic farming to the public goods, ‘Nature and Biodiversity’, ‘Environment’, ‘Energy and Climate’, ‘Human Health and Welfare’ and ‘Animal Health and Welfare’ in Denmark is guided and partly secured by the principles and specific requirements of the EU Organic Regulation. However, other factors, such as the production type, farm size, geographical location and - not the least - the management of the farm, also influence the contribution. Using the ban on synthetic pesticides and restricted use of antibiotics, including the requirements to compensate for and prevent such uses in organic farming, as examples, the positive and negative contributions of organic farming in relation to selected public goods were analysed. The contributions of organic farming to Nature and Biodiversity and Human and Animal Health and Welfare are mainly positive compared to conventional farming for all farm types, whilst the effects on Environment and Energy and Climate are mixed; i.e. some effects are positive and others are negative. The analysis revealed a need for further documentation and revision of the organic principles and specific organic requirements in particular in relation to the public goods Energy and Climate, which at present are not addressed in the EU Organic Regulation. Moreover, some organic farming requirements and practices cause dilemmas; e.g. more space per animal and outdoor access improves Animal Health and Welfare but at the same time has negative effects on Environment, Energy Consumption and Climate Change. These dilemmas should be solved before OA may be fully attractive as an integrated policy measure supporting jointly several public goods objectives.

General information
Publication status: Published
Organisations: National Food Institute, Department of Management Engineering, Systems Analysis, International Centre for Research in Organic Food Systems, Seges Knowledge Centre for Agriculture, Aarhus University
Number of pages: 24
Pages: 243-266
Infrastructure Systems in a Sustainable City

General information
Publication status: Published
Organisations: Department of Management Engineering, Systems Analysis, VTT
Contributors: La Greca, S., Drews, M., Åkermann, M., Larsen, M. A. D., Halsnæs, K.
Publication date: 2017

Publication information
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RECREATE_D4.5_2.pdf

Bibliographical note
D4.5 Evidence-Based Narratives
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Source-ID: 134704826
Research output: Book/Report → Report – Annual report year: 2017 → Research → peer-review

Integrated climate change risk assessment: A practical application for urban flooding during extreme precipitation

Risk assessments of flooding in urban areas during extreme precipitation for use in, for example, decision-making regarding climate adaptation, are surrounded by great uncertainties stemming from climate model projections, methods of downscaling and the assumptions of socioeconomic impact models. The multidisciplinary character of such risk assessments also requires that research groups and experts from different scientific disciplines combine knowledge and share model outputs. This paper describes an integrated framework and tool, the Danish Integrated Assessment System (DIAS), which has been designed to address the complex linkages between the different kinds of data required in assessing climate adaptation. It emphasizes that the availability of spatially explicit data can reduce the overall uncertainty of the risk assessment and assist in identifying key vulnerable assets. The usefulness of such a framework is demonstrated by means of a risk assessment of flooding from extreme precipitation for the city of Odense, Denmark. A sensitivity analysis shows how the presence of particularly important assets, such as cultural and historical heritage, may be addressed in assessing such risks. The output of the risk assessment for Odense indicates that highly detailed geographical data reduce the overall uncertainty and assist climate adaptation decision-makers in focusing on protecting those assets that are considered to be relevant in the given context. Also, using an integrated framework such as DIAS enables the relative importance of the different factors (i.e. degree of climate change, assets value, discount rate etc.) to be determined, thus influencing the overall output of the assessment.

General information
Publication status: Published
Organisations: Department of Management Engineering, Systems Analysis
Contributors: Kaspersen, P. S., Halsnæs, K.
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Integrating physical pressures, hazard prevention and urban development in the COHERENT project

General information
Publication status: Published
Organisations: Department of Management Engineering, Systems Analysis
Contributors: Larsen, M. A. D., Halsnæs, K.
Number of pages: 1
Publication date: 2017

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Publisher: Technical University of Denmark (DTU)
Article number: L-17
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The COHERENT Project

General information
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Organisations: Department of Management Engineering, Systems Analysis
Contributors: Larsen, M. A. D., Halsnæs, K.
Publication date: 2017
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The COHERENT project: Coastal hazard risk reduction and management

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Publication status: Published
Organisations: Systems Analysis, Department of Management Engineering, DHI Water - Environment - Health, Danish Coastal Authority, Smith Innovation
Contributors: Larsen, M. A. D., Halsnæs, K., Drønen, N., Sørensen, C., Christensen, F. B.
Number of pages: 1
Publication date: 2017
Peer-reviewed: Yes
Climate Change Risks – Methodological Framework and Case Study of Damages from Extreme Events in Cambodia

Climate change imposes some special risks on Least Developed Countries, and the chapter presents a methodological framework, which can be used to assess the impacts of key assumptions related to damage costs, risks and equity implications on current and future generations. The methodological framework is applied to a case study of severe storms in Cambodia based on statistical information on past storm events including information about buildings damaged and victims. Despite there is limited data available on the probability of severe storm events under climate change as well on the actual damage costs associated with the events in the case of Cambodia, we are using the past storm events as proxy data in a sensitivity analysis. It is here demonstrated how key assumptions on future climate change, income levels of victims, and income distribution over time, reflected in discount rates, affect damage estimates and thereby the economic recommendations for climate change adaptation decision making. The conclusion is that taken vulnerabilities and equity concerns into consideration in adaptation planning for Least Developed Countries really makes a strong case for allocating economic resources to the protection of these countries.

Socio-economic Impacts—Offshore Activities/Energy

The energy sector has a strong presence in the North Sea and in the surrounding coastal areas. Commercial extraction of offshore oil and gas and related activities (exploration, transportation and distribution; pipelines; oil refining and processing) constitutes the single most important economic sector and renewable electricity generation—mainly from offshore wind—is increasing. Energy and offshore activities in the North Sea are critically vulnerable to climate change along the full supply chain. The major vulnerabilities for offshore installations like rigs, offshore wind energy and pipelines concern wind storms and extreme wave heights, whereas on land coastal installations and transportation may also be adversely affected by flooding. Future renewable energy potentials in the North Sea are also susceptible to climate change. Whereas the hydropower potential is expected to increase, it is highly uncertain how much the future potential of other renewable energy sources such as wind, solar, terrestrial biomass, or emerging technologies like wave, tidal or marine biomass could be positively or negatively affected. Due to the different national energy supply mixes the vulnerability to climate-related impacts will vary among North Sea countries. To ensure safe and reliable future operations
comprehensive and systematic risk assessments are therefore needed which account for, for example, the high integration of power systems in the region.

**Key drivers and economic consequences of high-end climate scenarios: uncertainties and risks**

The consequences of high-end climate scenarios and the risks of extreme events involve a number of critical assumptions and methodological challenges related to key uncertainties in climate scenarios and modelling, impact analysis, and economics. A methodological framework for integrated analysis of extreme events and damage costs is developed and applied to a case study of urban flooding for the medium sized Danish city of Odense. Moving from our current climate to higher atmospheric greenhouse gas (GHG) concentrations including a 2°, 4°, and a high-end 6°C scenario implies that the frequency of extreme events increase beyond scaling, and in combination with economic assumptions we find a very wide range of risk estimates for urban precipitation events. A sensitivity analysis addresses 32 combinations of climate scenarios, damage cost curve approaches, and economic assumptions, including risk aversion and equity represented by discount rates. Major impacts of alternative assumptions are investigated. As a result, this study demonstrates that in terms of decision making the actual expectations concerning future climate scenarios and the economic assumptions applied are very important in determining the risks of extreme climate events and, thereby, of the level of cost-effective adaptation seen from the society’s point of view.
The Coastal Hazard Wheel system for coastal multi-hazard assessment & management in a changing climate

This paper presents the complete Coastal Hazard Wheel (CHW) system, developed for multi-hazard-assessment and multi-hazard-management of coastal areas worldwide under a changing climate. The system is designed as a low-tech tool that can be used in areas with limited data availability and institutional capacity and is therefore especially suited for applications in developing countries. The CHW constitutes a key for determining the characteristics of a particular coastline, its hazard profile and possible management options, and the system can be used for local, regional and national hazard screening and management. The system is developed to assess the main coastal hazards in a single process and covers the hazards of ecosystem disruption, gradual inundation, salt water intrusion, erosion and flooding. The system was initially presented in 2012 and based on a range of test-applications and feedback from coastal experts, the system has been further refined and developed into a complete hazard management tool. This paper therefore covers the coastal classification system used by the CHW, a standardized assessment procedure for implementation of multi-hazard-assessments, technical guidance on hazard management options and project cost examples. The paper thereby aims at providing an introduction to the use of the CHW system for assessing and managing coastal hazards.
Climate change mitigation policy paradigms — national objectives and alignments

The aim of this paper is to assess how policy goals in relation to the promotion of green growth, energy security, pollution control and greenhouse gas (GHG) emissions reductions have been aligned in policies that have been implemented in selected countries during the last decades as a basis for discussing how a multi objective policy paradigm can contribute to future climate change mitigation. The paper includes country case studies from Brazil, Canada, China, the European Union (EU), India, Japan, Mexico, Nigeria, South Africa, South Korea and the United States covering renewable energy options, industry, transportation, the residential sector and cross-sectoral policies. These countries and regions together contribute more than two thirds of global GHG emissions. The paper finds that policies that are nationally driven and that have multiple objectives, including climate-change mitigation, have been widely applied for decades in both developing countries and industrialised countries. Many of these policies have a long history, and adjustments have taken place based on experience and cost effectiveness concerns. Various energy and climate-change policy goals have worked together in these countries, and in practice a mix of policies reflecting specific priorities and contexts have been pursued. In this way, climate-change mitigation has been aligned with other policy objectives and integrated into broader policy packages, though in many cases specific attention has not been given to the achievement of large GHG emission reductions. Based on these experiences with policy implementation, the paper highlights a number of key coordination and design issues that are pertinent to the successful joint implementation of several energy and climate-change policy goals.

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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre, UNEP Risø Centre, Indian Institute of Management Ahmedabad, Universidade Federal do Rio de Janeiro, Pembina Institute, University of Exeter, Jadavpur University, Japan Science and Technology Agency, Centro Mario Molina, Obafemi Awolowo University, Center for Energy Efficiency, Engen Petroleum, Global Green Growth Institute, White Box Technologies, Climate Works Foundation
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Journal: Mitigation and Adaptation Strategies for Global Change
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Scopus rating (2014): CiteScore 2.67 SJR 1.072 SNIP 1.219
Web of Science (2014): Impact factor 2.669
Web of Science (2014): Indexed yes
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DOIs: 10.1007/s11027-012-9426-y
Source: dtu
Source-ID: u:5429
Research output: Contribution to journal → Journal article – Annual report year: 2012 → Research → peer-review

Risikovurdering for oversvømmelser i byer – klimadata, økonomi og usikkerheder
Definition of Smart Energy City and State of the art of 6 Transform cities using Key Performance Indicators: Deliverable 1.2

This report summarises the work undertaken under the EU-FP7 TRANSFORM project for Work Package 1 (part 1): Becoming a Smart Energy City, state of the Art and Ambition. Part 1 starts with a clear outline of each of the participating cities. The work describes the context in terms of climate, energy assets, ambitions, targets and main possibilities in terms of energy efficiency, flows and energy production. After this first step, the work focuses on the description of what a smart energy city is (this report), what the main Key Performance Indicators (KPIs) are that should be met and how this relates to where the current cities and the living labs are. It describes at the same time the current status of city planning, energy planning tools, and existing energy data. The outline should also include information on energy production, energy flows and energy efficiency, where possible. The work will draw largely on existing Strategic Energy Action Plans, Climate Action Plans and planning documents.

This report establishes a definition of smart cities develops Key Elements, Key Performance Indicators and reports on the state of the art regarding the KPIs for the 6 Transform cities. As specified in the Transform proposal, the objective of the evaluation is to identify previous and existing initiatives as a sort of stocktaking on the way to establishing a smart city transformation pathway for each of the participating cities in the Transform project. The definition of a smart energy city and the key performance indicators will be used throughout Transform the guide the work.
Integrating Climate Resilience in Renewable Energy Investments in the North Sea

The role of uncertainty in climate change adaptation strategies — A Danish water management example

General information
Publication status: Published
Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Contributors: Halsnæs, K.
Publication date: 2013
Media of output: PowerPoint
Electronic versions:
PDF
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2013 › Research
Economic assessment of climate adaptation options for urban drainage design in Odense, Denmark

Climate change is likely to influence the water cycle by changing the precipitation patterns, in some cases leading to increased occurrences of precipitation extremes. Urban landscapes are vulnerable to such changes due to the concentrated population and socio-economic values in cities. Feasible adaptation requires better flood risk quantification and assessment of appropriate adaptation actions in terms of costs and benefits. This paper presents an economic assessment of three prevailing climate adaptation options for urban drainage design in a Danish case study, Odense. A risk-based evaluation framework is used to give detailed insights of the physical and economic feasibilities of each option. Estimation of marginal benefits of adaptation options are carried out through a step-by-step cost-benefit analysis. The results are aimed at providing important information for decision making on how best to adapt to urban pluvial flooding due to climate impacts in cities.
Framework for economic pluvial flood risk assessment considering climate change effects and adaptation benefits

Climate change is likely to affect the water cycle by influencing the precipitation patterns. It is important to integrate the anticipated changes into the design of urban drainage in response to the increased risk level in cities. This paper presents a pluvial flood risk assessment framework to identify and assess adaptation options in the urban context. An integrated approach is adopted by incorporating climate change impact assessment, flood inundation modeling, economic tool, and risk assessment, hereby developing a step-by-step process for cost-benefit assessment of climate change adaptation measures. A Danish case study indicates that the introduced framework presented in the paper can be considered as an important decision support tool that can supplement and further develop existing decision practices in relation to urban drainage.

Impact Assessment and Decision Support Matrices for Climate Change Adaptation Planning

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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre
Contributors: Gregg, J. S., Halsnæs, K., Kaspersen, P. S., Hansen, M. K.
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Event: Abstract from International Seminar on Exploring Causalities: The societal effects of climate change, Copenhagen, Denmark.
Impact Assessment, Costs, and Decision Making for Climate Change and Adaptation

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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre
Contributors: Gregg, J. S., Kaspersen, P. S., Halsnæs, K.
Pages: 36-37
Publication date: 2012

Host publication information
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Electronic versions:
Abstract.pdf
URLs:
Source: dtu
Source-ID: u::5214
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2012 › Research › peer-review

Methodological framework, analytical tool and database for the assessment of climate change impacts, adaptation and vulnerability in Denmark
This report was prepared at the request of and funded by the Coordination Unit for Research in Climate Change Adaptation (KFT). The report is a milestone of the project titled "Udvikling af metodisk ramme for dansk analytisk værktøj og database over klimasårbarhed og klimatilpasning", funded by KFT. The project is one of seven initiatives proposed by KFT for 2012. The methodology report includes definitions of major concepts, an outline of an analytical structure, a presentation of models and their applicability, and the results of case studies. The work presented in this report draws on intensive research collaboration with several Danish universities and Centres of Excellence, including DMI, GEUS, DHI, Aarhus University, Copenhagen University, and DTU. Work carried out by our research partners has been co-funded by a number of different sponsors, including KFT and the Danish Strategic Research Council. The flood hazard maps presented in this report constitute the first preliminary results of on-going methodological and analysis development in mapping potential impacts in relation to flooding from extreme precipitation in the city of Aarhus. For all purposes the Aarhus flood maps presented in this report should be considered work-in-progress. The analysis was conducted by DHI as part of the DSF project Centre for Regional Change of the Earth System (CRES).

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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre
Contributors: Kaspersen, P. S., Halsnæs, K., Gregg, J. S., Drews, M.
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Original language: English
(DTU Management Engineering Report; No. 11.2012).
Electronic versions:
Methodological_framework.pdf
URLs:
http://www.man.dtu.dk/English/About/Reports/20 12.asp
Sustainable Development as a Framework for Climate Change Mitigation Policies

General information
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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre
Contributors: Halsnæs, K.
Publication date: 2012
Peer-reviewed: No
Event: Abstract from Årsmøde i NationalØkonomisk forening, Kolding (DK), 13-14 Jan, .
Electronic versions:
Kirste Halsnæs om sustainability.pdf
Source: orbit
Source-ID: 317726
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2012 › Research

Assessing the Role of Energy in Development and Climate Policies - Conceptual Approach and Key Indicators
The paper discusses a number of key conceptual issues related to the role of energy in development and its potential synergies and tradeoffs with climate change. The relationship between economic development and energy over time is discussed and illustrated by data from China, India and South Africa, and some other countries. It concludes that energy plays an important role as a productivity enhancing factor in economic development and in human well being. Several policy goals related to sustainable development, energy, and climate can be integrated. However, meeting all these policy goals requires a special effort and has significant cost implications.

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy, Indian Institute of Management Ahmedabad
Contributors: Halsnæs, K., Garg, A.
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Peer-reviewed: Yes
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Scopus rating (2011): CiteScore 2.17 SJR 1.584 SNIP 2.294
Web of Science (2011): Impact factor 1.537
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
Original language: English
Keywords: DTU Climate Centre
DOIs: 10.1016/j.worlddev.2010.01.002
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Source-ID: 277330
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Climate change and diarrhoeal disease: Perspectives for development policies

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Føyn, T. H. Y.
Publication date: 2011
Climate Change Mitigation Policies Conventional Versus Sustainable Development Scenarios in Emerging Economies

General information
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Organisations: Systems Analysis Division, DTU Climate Centre, Rose National Laboratory for Sustainable Energy, Indian Institute of Management Ahmedabad
Contributors: Halsnæs, K., Shukla, P.
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Event information
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Location: Stanford University (US), 6-8 Jul
Electronic versions:
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PowerPoint Presentation
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Research output: Non-textual form – Annual report year: 2011 – Research

Development of Decision Support Matrices for Climate Change Adaptation Planning

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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre
Contributors: Gregg, J. S., Hansen, M. K., Halsnæs, K.
Number of pages: 2
Publication date: 2011
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Event: Abstract from CRES Annual Meeting 2011, Valby, Denmark.
Electronic versions:
ABSTRACTS_CRES.pdf

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Annual Meeting of the Centre for Regional Change in Earth Systems
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Development of Decision Support Matrices for Climate Change Adaptation Planning

General information
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Organisations: Department of Management Engineering, Systems Analysis, DTU Climate Centre
Contributors: Gregg, J. S., Hansen, M. K., Halsnæs, K.
Number of pages: 1
Publication date: 2011
Peer-reviewed: No
Electronic versions:
Economic assessment of climate adaptation options for urban drainage design in Odense, Denmark

Climate change is likely to influence the water cycle by changing the precipitation patterns. An increase in potential flood damage in the urban context is anticipated due to the concentrated population and socio-economic values in cities. Feasible adaptation requires a higher performance on flood risk quantification and assessment of appropriated adaptation actions in term of costs and benefits. This paper represents an economic assessment of three prevailing climate adaptation options for urban drainage design in a Danish case study, Odense. A risk-based evaluation framework is used to give detailed insights of the physical and economic feasibilities of each option. Estimations of marginal benefits of adaptation options are carried out through a step-by-step cost benefit analysis. The results are aimed to provide important information to decision making on how best to adapt for urban pluvial flooding due to climate impacts in cities.

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Organisations: Department of Environmental Engineering, DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy, Urban Water Engineering
Contributors: Zhou, Q., Halsnæs, K., Arnbjerg-Nielsen, K.
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Publication date: 2011

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GHG mitigation targets and potentials in large emerging economies

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Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
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Grøn vækst gearet af markedsintelligens og viden

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Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2011

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Introduction: Sustainable Development, Energy, and Climate Change

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Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy, Basque Center for Climate Change, Indian Institute of Management Ahmedabad
Contributors: Halsnæs, K., Markandya, A., Shukla, P.
Pages: 983-986
Publication date: 2011
Peer-reviewed: Yes

Publication information
Journal: World Development
Volume: 39
Issue number: 6
ISSN (Print): 0305-750X
Ratings:
BFI (2011): BFI-level 2
Scopus rating (2011): CiteScore 2.17 SJR 1.584 SNIP 2.294
Web of Science (2011): Impact factor 1.537
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
Original language: English
Keywords: DTU Climate Centre
DOIs:
10.1016/j.worlddev.2010.01.006
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Source-ID: 277246
Research output: Contribution to journal » Editorial – Annual report year: 2011 » Research » peer-review

Smart city initiatives in Denmark and Europe

General information
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Publication date: 2011

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Publisher: Danmarks Tekniske Universitet, Risø Nationallaboratoriet for Bæredygtig Energi
ISBN (Print): 978-87-550-3905-6
(Denmark. Forskningscenter Risoe. Risoe-R; No. 1778(EN)).
Keywords: Risø-R-1778, Risø-R-1778(EN)
Electronic versions:
ris-r-1778.pdf
Source: orbit
Source-ID: 313831
Research output: Chapter in Book/Report/Conference proceeding » Book chapter – Annual report year: 2011 » Research » peer-review
The cost of renewable energy: past and future

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Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Karlsson, K. B.
Number of pages: 624
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Volume: Chapter 13
Publisher: Edward Elgar Publishing
Editors: Galarraga, I., Gonzalez-Eguino, M., Markandya, A.
ISBN (Print): 978-1-84980-115-7
(Elgar original reference).
Source: orbit
Source-ID: 314073

100% renewable energy scenarios for Denmark

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Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Karlsson, K. B., Halsnæs, K.
Publication date: 2010
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Keywords: DTU Climate Centre, Systems analysis
Source: orbit
Source-ID: 269077
Research output: Contribution to conference – Conference abstract for conference – Annual report year: 2010 – Research

Climate change and diarrhoeal disease: Perspectives for development policies

This paper points to the key role of health in development programmes and illustrates through diarrhoeal diseases as a case example, how climate change can impose increasing risks, which particularly will hit young children and the poor. The increased incidence can both be expected to emerge from higher temperatures and from more extreme events in particularly flooding. The number of people affected is by WHO projected to be approximately 700,000 dead and 22 mill disability adjusted life years in 2030 without climate change, so it is very important to initiate climate change adaptation measures that can help to reduce these risks. An attempt to start such a process i.e. has been done by the Danish Overseas Development Assistance Programme, Danida, which has conducted a climate screening of programme activities in Bangladesh. The paper presents a number of conclusions from this climate screening related to climate proofing of Danida activities in the water supply and sanitation sector.

General information
Publication status: Accepted/In press
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Føyn, T. H. Y.
Pages: 385-391
Publication date: 2010
Peer-reviewed: Yes

Publication information
Costs and potentials for GHG emission reductions in emerging economies

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Føyn, T. H. Y.
Publication date: 2010
Peer-reviewed: No
Keywords: DTU Climate Centre, Systems analysis
Source: orbit
Source-ID: 269055
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Decision making frameworks for climate change adaptation in Denmark

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Vejlgaard, L.
Publication date: 2010
Peer-reviewed: No
Event: Abstract from Climate Adaptation in the Nordic Countries - Science, Practice and Policy, Stockholm (SE), 8-10 Nov, .
Keywords: DTU Climate Centre, Systems analysis
Source: orbit
Source-ID: 269074
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2010 › Research

Decision making frameworks - how to address uncertainties

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Vejlgaard, L., Gregg, J. S.
Publication date: 2010
Peer-reviewed: No
Event: Abstract from Workshop in the Centre for Regional Change in the Earth Systems, Svendborg (DK), 17-18 Nov, .
Keywords: DTU Climate Centre, Systems analysis
Source: orbit
Source-ID: 269075
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2010 › Research

Design practice for urban drainage including climate change impacts

General information
Publication status: Published
Design practice for urban drainage incorporating climate change impacts

General information
Publication status: Published
Organisations: Department of Environmental Engineering, DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Zhou, Q., Ambjerg-Nielsen, K., Mikkelsen, P. S., Nielsen, S. B., Halsnæs, K.
Pages: 180-181
Publication date: 2010

Host publication information
Title of host publication: The 6th Study Conference on BALTEX, Międzyzdroje, Island of Wolin, Poland, 14 to 18 June 2010
Volume: Conference proceeding
Publisher: BALTEX
Source: orbit
Source-ID: 268699
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report
year: 2010 › Research

GHG mitigation targets and potentials in large emerging economies: Comparison of pledges and estimated potentials

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Føyn, T. H. Y., Karlsson, K. B., Balyk, O., Halsnæs, K.
Publication date: 2010

Host publication information
Title of host publication: Abstracts
Publisher: Danish Economic Councils
Keywords: DTU Climate Centre, Systems analysis
Electronic versions:
GHG mitigation.pdf
Source: orbit
Source-ID: 269254
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report
year: 2010 › Research

Methodology and Results in non-EU Countries

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy, DTU Climate Centre
Contributors: Zhu, X., Appelquist, L. R., Halsnæs, K.
Number of pages: 328
Adaptation to Climate Change in Developing Countries

Adaptation to climate change is given increasing international attention as the confidence in climate change projections is getting higher. Developing countries have specific needs for adaptation due to high vulnerabilities, and they will in this way carry a great part of the global costs of climate change although the rising atmospheric greenhouse gas concentrations are mainly the responsibility of industrialized countries. This article provides a status of climate change adaptation in developing countries. An overview of observed and projected climate change is given, and recent literature on impacts, vulnerability, and adaptation are reviewed, including the emerging focus on mainstreaming of climate change and adaptation in development plans and programs. The article also serves as an introduction to the seven research articles of this special issue on climate change adaptation in developing countries. It is concluded that although many useful steps have been taken in the direction of ensuring adequate adaptation in developing countries, much work still remains to fully understand the drivers of past adaptation efforts, the need for future adaptation, and how to mainstream climate into general development policies.

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy, Aarhus University, University of Copenhagen
Contributors: Mertz, O., Halsnæs, K., Olesen, J. E., Rasmussen, K.
Pages: 743-752
Publication date: 2009
Peer-reviewed: Yes
Changing energy systems to prevent climate change

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Rise National Laboratory for Sustainable Energy, Systems Analysis Division. Management
Contributors: Halsnæs, K., Larsen, H. H.
Pages: 138-147
Publication date: 2009

Host publication information
Title of host publication: Engineering challenges: energy, climate change & health
Place of publication: Kgs.Lyngby
Publisher: Technical University of Denmark (DTU)
Editor: Hansen, C. B.
ISBN (Print): 978-87-985544-4-8
(DTU research series).
Keywords: Climate Centre, Climate and energy systems
Electronic versions:
Engineering_challenges_2009.pdf
Source: orbit
Source-ID: 249628
Research output: Chapter in Book/Report/Conference proceeding – Book chapter – Annual report year: 2009 – Research

Development and Climate Change: A Mainstreaming Approach for Assessing Economic, Social, and Environmental Impacts of Adaptation Measures

The paper introduces the so-called climate change mainstreaming approach, where vulnerability and adaptation measures are assessed in the context of general development policy objectives. The approach is based on the application of a limited set of indicators. These indicators are selected as representatives of focal development policy objectives, and a stepwise approach for addressing climate change impacts, development linkages, and the economic, social and environmental dimensions related to vulnerability and adaptation are introduced. Within this context it is illustrated using three case studies how development policy indicators in practice can be used to assess climate change impacts and adaptation measures based on three case studies, namely a road project in flood prone areas of Mozambique, rainwater harvesting in the agricultural sector in Tanzania and malaria protection in Tanzania. The conclusions of the paper confirm that climate risks can be reduced at relatively low costs, but the uncertainty is still remaining about some of the wider development impacts of implementing climate change adaptation measures.

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Rise National Laboratory for Sustainable Energy, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
Contributors: Halsnæs, K., Trærup, S. L. M.
Pages: 765-778
Publication date: 2009
DTU Climate Change Technologies: Recommendations on accelerated development and deployment of climate change technologies

During 2008 and 2009, DTU held a workshop series focusing on assessment of and adaption to climate changes as well as on mitigation of green house gasses. In the workshops, a total of 1500 scientists, government officials and business leaders have outlined scenarios for technology development and deployment and identified bottlenecks for fast track development and deployment

Indian Energy System and Global Stabilization Regimes

Event information
Event: Risø International Energy Conference 2009
Location: Risø DTU, Roskilde, Denmark
Keywords: Climate and energy systems, Sustainable development and climate
Electronic versions:
Low stabilization scenarios for Denmark

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Karlsson, K. B.
Publication date: 2009
Peer-reviewed: Unknown
Event: Abstract from Climate University Days, Lyngby, Denmark.
Keywords: Climate Centre, Climate and energy systems
Source: orbit
Source-ID: 253623
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2009 › Communication

Omkostningerne ved drivhusgasreduktion - globale perspektiver

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2009
Publication information
Journal: Samfundsekonomen
Issue number: 2
ISSN (Print): 0108-3937
Original language: Danish
Keywords: Climate Centre, Climate and energy systems
Source: orbit
Source-ID: 244059
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Communication

CO2 udledning fra trafikken i forhold til EU's målsætninger for reduktion

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
Contributors: Halsnæs, K.
Pages: 57-61
Publication date: 2008
Host publication information
Title of host publication: Fremtidens infrastruktur : Resumé og skriftlige kilder fra høring i Landstingssalen
Place of publication: København
Publisher: Teknologirådet
ISBN (Print): 978-87-91614-41-5
(Teknologirådets rapporter; No. 2008/2).
Source: orbit
Source-ID: 223079
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research

Hvad kan der gøres for at mindske klimaforandringerne, og hvad koster det?

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
Contributors: Halsnæs, K.
Pages: 15-20
Publication date: 2008

Host publication information
Title of host publication: Høring om udviklingslande og klimaændringer
Place of publication: København
Publisher: Teknologirådet
Electronic versions:
2008_128.pdf
Source: orbit
Source-ID: 228731
Research output: Chapter in Book/Report/Conference proceeding – Annual report year: 2008 – Research

Hvad kan vi gøre for at mindske klimaændringerne - og hvad koster det?

General information
Publication status: Published
Organisations: DTU Climate Centre, Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 156
Pages: 87-100
Publication date: 2008

Host publication information
Title of host publication: Klimaændringerne - Menneskehedens hidtil største udfordring
Place of publication: Højbjerg
Publisher: Hovedland
Editor: Meltofte, H.
ISBN (Print): 978-87-7070-125-9
Keywords: Climate Centre, Climate and energy systems
Source: orbit
Source-ID: 238477
Research output: Chapter in Book/Report/Conference proceeding – Book chapter – Annual report year: 2009 – Communication

Kan vi modvirke klimaændringerne?

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 264-265
Publication date: 2008

Host publication information
Title of host publication: Sammendrag af indlæg
Place of publication: Århus
Sustainable development has been suggested as a framework for integrating development and climate change policies in developing countries. Mainstreaming climate change into sustainable development policies would allow these countries to
achieve their development goals while addressing climate change. A number of research programmes have investigated how potential synergies could be achieved at national level and what kind of trade-offs between the various aspects of sustainable development have to be faced. An overview of these studies is provided, focusing on national case studies. The energy and transportation sectors are covered in many studies, but some attention is also given to the infrastructure sector and water supply. Most existing development policies will not lead to a sustainable development pattern, since they insufficiently address climate change. However, good opportunities exist for integrated policies to achieve development goals while engaging with climate change. The energy and transportation sector studies identified many alternative national low-cost policies with much lower GHG emissions than the business-as-usual policy. Opportunities are identified for alternative national development policies for infrastructure and water supply that provide resilience against climate variability and climate change. Le développement durable a été proposé comme cadre pour intégrer les politiques sur le développement et le changement climatique dans les pays en développement. L'intégration du changement climatique aux politiques de développement durable permettrait à ces pays d'accomplir leurs objectifs de développement tout en abordant le changement climatique. Un nombre de programmes de recherche ont étudié la manière de réaliser les synergies potentielles au niveau national et les concessions entre les différents aspects du développement durable qui doivent être abordées. Les secteurs de l'énergie et du transport sont couverts dans maintes études, et un certain degré d'attention est aussi porté au secteur de l'infrastructure et de l'approvisionnement en eau. La plupart des politiques de développement ne mèneront pas à un modèle de développement durable, vu qu'elles n'abordent pas de manière suffisante la question du changement climatique. Cependant, de bonnes opportunités existent pour intégrer les politiques en vue d'accomplir les objectifs de développement tout en s'engageant dans le changement climatique. Les études dans les secteurs de l'énergie ont identifié de nombreuses politiques nationales alternatives de faible coût à faibles émissions de GES comparé aux politiques habituelles. Des opportunités ont été identifiées pour des politiques nationales alternatives en infrastructure et approvisionnement en eau pourvoyant un ressort contre la variabilité climatique et le changement climatique.

**General information**

Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Shukla, P., Garg, A.
Pages: 202-219
Publication date: 2008
Peer-reviewed: Yes

**Publication information**

Journal: Climate Policy
Volume: 8
Issue number: 2
ISSN (Print): 1469-3062
Ratings:
BFI (2008): BFI-level 1
Scopus rating (2008): SJR 0.907 SNIP 1.001
Web of Science (2008): Indexed yes
Original language: English
Source: orbit
Source-ID: 222956
Research output: Contribution to journal » Journal article – Annual report year: 2008 » Research » peer-review

**Sustainable development as a framework for developing country participation in international climate change policies**

**General information**

Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Shukla, P.
Pages: 105-130
Publication date: 2008
Peer-reviewed: Yes

**Publication information**

Journal: Mitigation and Adaptation Strategies for Global Change
Volume: 13
Original language: English
DOIs:
10.1007/s11027-006-9079-9
Tilpasningsrelaterede klimaprojekter i udviklingslande

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2008
Peer-reviewed: Unknown
Event: Paper presented at Klimaforum: Fra klimascenarier til klimatilpasning, Copenhagen, Denmark.
Keywords: Climate and energy systems

Assessing the role of energy in development and climate policies in large developing countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
Contributors: Garg, A., Halsnæs, K.
Pages: 259-279
Publication date: 2007

Host publication information
Title of host publication: Energy solutions for sustainable development. Proceedings
Publisher: Risø National Laboratory
Editors: Sønderberg Petersen, L., Larsen, H.
ISBN (Print): 978-87-550-3603-1
(Denmark. Forskningscenter Risoe. Risoe-R; No. 1608(EN)).
Keywords: Risø-R-1608(EN), Risø-R-1608
Electronic versions: ris_r_1608.pdf

Balancing energy, development and climate priorities in China: Current status and the way ahead

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Number of pages: 104
Publication date: 2007

Publication information
Place of publication: Roskilde
Publisher: UNEP Risoe Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
ISBN (Print): 978-87-550-3628-4
Original language: English
URLs:
Source: orbit
Balancing energy, development and climate priorities in India: Current trends and future projections

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Shukla, P., Dhar, S., Garg, A., Halsnæs, K.
Number of pages: 92
Publication date: 2007

Publication information
Place of publication: Roskilde
Publisher: UNEP Risoe Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
ISBN (Print): 978-87-550-3627-7
Original language: English
Electronic versions:
2007_239_report.pdf
URLs:
Source: orbit
Source-ID: 215976
Research output: Book/Report › Book – Annual report year: 2007 › Research › peer-review

Den globale udledning af klimagasser. Hvad gør vi?

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: No
Event: Abstract from Venstres klima- og energikonference, København (DK), 20 Nov, .
Source: orbit
Source-ID: 310067
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2007 › Research

Development based climate change adaptation and mitigation - conceptual issues and lessons learned in studies in developing countries

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Verhagen, J.
Pages: 1573-1596
Publication date: 2007
Peer-reviewed: Yes

Publication information
Journal: Mitigation and Adaptation Strategies for Global Change
Volume: 12
Original language: English
DOIs: 10.1007/s11027-007-9093-6
Source: orbit
Source-ID: 215689
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review
Development first: Linking energy and emission policies with sustainable development for Brazil

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Number of pages: 84
Publication date: 2007

Publication information
Place of publication: Roskilde
Publisher: UNEP Risoe Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
ISBN (Print): 978-87-550-3630-7
Original language: English
URLs:
Source: orbit
Source-ID: 215973
Research output: Book/Report › Book – Annual report year: 2007 › Research › peer-review

Economic conclusions of IPCC

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: No
Source: orbit
Source-ID: 215687
Research output: Contribution to conference › Paper – Annual report year: 2007 › Research

Electricity supply options, sustainable development and climate change priorities: Case studies for South Africa

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Winkler, H., Mukheibir, P., Mwakasonda, S., Garg, A., Halsnæs, K.
Number of pages: 84
Publication date: 2007

Publication information
Place of publication: Roskilde
Publisher: UNEP Risoe Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
ISBN (Print): 978-87-550-3629-1
Original language: English
URLs:
Source: orbit
Source-ID: 215974
Research output: Book/Report › Book – Annual report year: 2007 › Research › peer-review

EU, energien og den globale klimapolitik

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
EU's 2-graders mål og de internationale klimaforhandlinger

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: Unknown
Source: orbit
Source-ID: 215680
Research output: Contribution to conference › Paper – Annual report year: 2007 › Communication

Framing issues

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Publication date: 2007

Host publication information
Title of host publication: Climate change 2007: Mitigation. Contribution of Working Group III to the fourth assessment report of the Intergovernmental Panel on Climate Change
Place of publication: Cambridge
Publisher: Cambridge University Press
ISBN (Print): 978-0-521-88011-4
URLs:
http://www.mnp.nl/ipcc/pages_media/AR4-chapters.html
Source: orbit
Source-ID: 215970
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2007 › Research › peer-review

From event economy to emergency economy?

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: Unknown
Event: Paper presented at Panel debate at Climate change cinema, Copenhagen, Denmark.
Source: orbit
Source-ID: 215681
Research output: Contribution to conference › Paper – Annual report year: 2007 › Communication
From vulnerability to resilience: The challenge of adaptation to climate change

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Number of pages: 144
Publication date: 2007

Publication information
Place of publication: Roskilde
Publisher: UNEP Risoe Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
Original language: English
Source: orbit
Source-ID: 215662
Research output: Book/Report › Book – Annual report year: 2007 › Research › peer-review

Future extreme events in European climate: An exploration of regional climate model projections
This paper presents an overview of changes in the extreme events that are most likely to affect Europe in forthcoming decades. A variety of diagnostic methods are used to determine how heat waves, heavy precipitation, drought, wind storms, and storm surges change between present (1961-90) and future (2071-2 100) climate on the basis of regional climate model simulations produced by the PRUDENCE project. A summary of the main results follows. Heat waves - Regional surface warming causes the frequency, intensity and duration of heat waves to increase over Europe. By the end of the twenty first century, countries in central Europe will experience the same number of hot days as are currently experienced in southern Europe. The intensity of extreme temperatures increases more rapidly than the intensity of more moderate temperatures over the continental interior due to increases in temperature variability. Precipitation - Heavy winter precipitation increases in central and northern Europe and decreases in the south; heavy summer precipitation increases in north-eastern Europe and decreases in the south. Mediterranean droughts start earlier in the year and last longer. Winter storms - Extreme wind speeds increase between 45 degrees N and 55 degrees N, except over and south of the Alps, and become more north-westerly than cuurently. These changes are associated with reductions in mean sea-level pressure, leading to more North Sea storms and a corresponding increase in storm surges along coastal regions of Holland, Germany and Denmark, in particular. These results are found to depend to different degrees on model formulation. While the responses of heat waves are robust to model formulation, the magnitudes of changes in precipitation and wind speed are sensitive to the choice of regional model, and the detailed patterns of these changes are sensitive to the choice of the driving global model. In the case of precipitation, variation between models can exceed both internal variability and variability between different emissions scenarios.

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Pages: 71-95
Publication date: 2007
Peer-reviewed: Yes

Publication information
Journal: Climatic Change
Volume: 81
Issue number: Suppl. 1
ISSN (Print): 0165-0009
Ratings:
Scopus rating (2007): SJR 1.941 SNIP 1.697
Web of Science (2007): Indexed yes
Original language: English
DOIs:
10.1007/s10584-006-9226-z
Source: orbit
Source-ID: 216562
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review
Globale klimaændringer og de samfundsøkonomiske konsekvenser

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: Unknown
Event: Paper presented at Økonomisk tema om vækst og klima - kick-off seminar, Copenhagen, Denmark.
URLs:
Source: orbit
Source-ID: 215688
Research output: Contribution to conference › Paper – Annual report year: 2007 › Communication

Investering i forhold til bæredygtig udvikling

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: Unknown
Source: orbit
Source-ID: 216405
Research output: Contribution to conference › Paper – Annual report year: 2007 › Communication

Klimapolitik

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 263-284
Publication date: 2007

Host publication information
Title of host publication: Miljøvurdering på økonomisk vis
Place of publication: København
Publisher: Jurist- og Økonomforbundets Forlag
Editors: Halsnæs, K., Andersen, P., Larsen, A.
ISBN (Print): 978-87-574-1292-5
Source: orbit
Source-ID: 216609
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2007 › Research › peer-review

Miljøøkonomiske analyser, beslutningsgrundlag, usikkerhed, bæredæygtighed, diskontering og regulering

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Andersen, P.
Pages: 21-50
Publication date: 2007

Host publication information
Miljøvurdering på økonomisk vis

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Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: Yes
Event: Paper presented at Videnskabscafé om klimaforandringer, Copenhagen, Denmark.
Source: orbit
Source-ID: 216611
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2007 › Research › peer-review

Most recent IPCC recommendations

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Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: No
Event: Paper presented at Videnskabscafé om klimaforandringer, Copenhagen, Denmark.
Source: orbit
Source-ID: 216407
Research output: Contribution to conference › Paper – Annual report year: 2007 › Research

Reduktion af drivhusgasudslip og stabiliseringscenarioer

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2007
Peer-reviewed: Unknown
Source: orbit
Source-ID: 215679
Research output: Contribution to conference › Paper – Annual report year: 2007 › Communication

Summary for policymakers

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Turning climate change information into economic and health impacts
The PRUDENCE project has generated a set of spatially and temporally high-resolution climate data, which provides new opportunities for assessing the impacts of climate variability and change on economic and human systems in Europe. In this context, we initiated the development of new approaches for linking climate change information and economic studies. We have considered a number of case studies that illustrate how linkages can be established between geographically detailed climate data and economic information. The case studies included wheat production in agriculture, where regional climate data has been linked to farm enterprise data in an integrated model of physical conditions, production inputs and outputs, and farm management practices. Similarly, temperature data were used to assess consequences of extreme heat and excess mortality in urban areas. We give an introduction of an analytical approach for assessing economic impacts of climate change and discuss how economic concepts and valuation paradigms can be applied to climate change impact evaluation. A number of methodological difficulties encountered in economic assessments of climate change impacts are described and a number of issues related to social and private aspects of costs are highlighted. It is argued that, in particular, detailed climate information matters in relation to understanding how private agents react to observed climate data.

General information
Publication status: Published
Organisations: UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Kühl, J., Olesen, J.
Pages: 145-162
Publication date: 2007
Peer-reviewed: Yes

Publication information
Journal: Climatic Change
Volume: 81
Issue number: Suppl. 1
ISSN (Print): 0165-0009
Scopus rating (2007): SJR 1.941 SNIP 1.697
Web of Science (2007): Indexed yes
Original language: English
DOIs: 10.1007/s10584-006-9221-4
Source: orbit
Source-ID: 216216
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Climate change and planning

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 227-232
Publication date: 2006
Peer-reviewed: Yes

Publication information
Journal: Planning Theory and Practice
Volume: 7
Original language: English
DOIs: 10.1080/14649350600673278
Source: orbit
Source-ID: 309348
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Drivhusgasser kan reducieres for små penge

General information
Experiences from the Danish "Climate and Development Action Programme". Background paper

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Trærup, S. L. M.
Number of pages: 6
Publication date: 2006
URLs:
Source: orbit
Source-ID: 309509
Research output: Book/Report › Report – Annual report year: 2006 › Research

Integrating climate concerns in development planning

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2006
Peer-reviewed: No
Event: Abstract from Seminar: The global energy challenges, Copenhagen, Denmark.
Source: orbit
Source-ID: 308982
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2006 › Research

Methodologies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Pages: 182-223
Publication date: 2006

Host publication information
Title of host publication: Safeguarding the ozone layer and the global climate system
Place of publication: Cambridge
Publisher: Cambridge University Press
ISBN (Print): 0-521-68206-1
Source: orbit
Source-ID: 309098
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2006 › Research › peer-review
Evaluating the cost of adapting to climate change

Commitments on climate change

International markets for greenhouse gas emission reduction policies - possibilities for integrating developing countries

Globale miljøudfordringer og -prioriteringer

International markets for greenhouse gas emission reduction policies - possibilities for integrating developing countries

Greenhouse gas (GHG) emissions are affecting a global common: the climate, and as a global environmental problem with a public good character it provides attractive opportunities for minimising control costs through the use of emission trading markets. This paper introduces cost and benefit principles that can be applied to the assessment of global markets for GHG emission reduction options and evaluates the scope for and the potential economic gains of such markets.

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Olhoff, A.
Pages: 2313-2325
Publication date: 2005
Peer-reviewed: Yes
Key issues in development, energy and climate change linkages

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2005
Peer-reviewed: No
Event: Abstract from Workshop: Development, energy and climate project meeting, Paris, France.
Source: orbit
Source-ID: 308897
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2005 › Research

Mainstreaming international climate agenda in economic and development policies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Shukla, P.
Number of pages: 28
Publication date: 2005

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory, UNEP Risø Centre
Original language: English
URLs:
Source: orbit
Source-ID: 308927
Research output: Book/Report › Book – Annual report year: 2005 › Research › peer-review

CDM sustainable development impacts. Developed for the UNEP project 'CD4CDM'

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Olhoff, A., Markandya, A., Halsnæs, K., Taylor, T.
Number of pages: 87
Publication date: 2004

Publication information
Place of publication: Roskilde
Publisher: UNEP Risø Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
ISBN (Print): 87-550-3341-5
Original language: English
Climate change impacts and adaptation analysis - How to link physical climate data and economic studies. WP6 PRUDENCE output

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 28
Publication date: 2004

Publication information
Place of publication: Roskilde
Publisher: UNEP Risø Centre on Energy, Climate and Sustainable Development, Risø DTU National Laboratory for Sustainable Energy
Original language: English
URLs:
Source: orbit
Source-ID: 307683
Research output: Book/Report › Book – Annual report year: 2004 › Research › peer-review

Developing countries and climate change

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Markandya, A., Halsnæs, K.
Pages: 239-258
Publication date: 2004

Host publication information
Title of host publication: The economics of climate change
Place of publication: London
Publisher: Routledge
Editors: Owen, A., Hanley, N.
ISBN (Print): 0-415-28724-3
(Routledge explorations in environmental economics, 3).
Source: orbit
Source-ID: 307060
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2004 › Research › peer-review

Economic concepts applied to the evaluation of regional climate impacts. Overview of WP6 results

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2004
Peer-reviewed: No
Event: Abstract from PRUDENCE final meeting, Toledo (ES), 6-10 Sep, .
URLs:
Source: orbit
Source-ID: 307682
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2004 › Research
International markets for greenhouse gas emission reduction policies - Possibilities for integrating developing countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Olhoff, A.
Publication date: 2004
Peer-reviewed: No
Event: Abstract from Årsmøde i Nationaløkonomisk Forening, Kolding (DK), 9-10 Jan, .
Source: orbit
Source-ID: 307684
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2004 › Research

Issues in the assessment of welfare implications of climate change impacts

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 22-28
Publication date: 2004

Host publication information
Title of host publication: Report and scientific papers
Place of publication: London
Publisher: Country Land and Business Association and Climatic Research Unit
Editors: Viner, D., Sayer, M.
Source: orbit
Source-ID: 307045
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research

Linkages between development policies and climate change - lessons from case studies in developing countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 17-18
Publication date: 2004

Host publication information
Title of host publication: Bridging research and development assistance: Strategies for adaptation to climate change in developing countries. Proceedings and conclusions
Place of publication: Copenhagen
Publisher: RENED
Source: orbit
Source-ID: 307103
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2004 › Research

CDM information and guidebook developed for the UNEP project 'CD4CDM'

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Number of pages: 102
Publication date: 2003

Publication information
Place of publication: Roskilde
Climate change and sustainable development - case studies from developing countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2003

Host publication information
Title of host publication: Abstracts
Place of publication: Oslo
Publisher: Det Norske Videnskaps-Akademi
Source-ID: 305256
Research output: Chapter in Book/Report/Conference proceeding – Conference abstract in proceedings – Annual report year: 2003

Climate change information and economic assessments

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2003
Peer-reviewed: No
Event: Abstract from ESF LESC exploratory workshop: Regional climatic change in Europe: Processes and impacts, Wengen (CH), 29 Sep - 3 Oct, .
Source-ID: 306484
Research output: Contribution to conference – Conference abstract for conference – Annual report year: 2003

Development and climate change - exploring the linkages between integrated policy options (invited paper)(paper available on request)

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Christensen, J. M., Halsnæs, K.
Pages: 114-115
Publication date: 2003

Host publication information
Title of host publication: Abstracts
Place of publication: Moscow
Publisher: Institute of Global Climate and Ecology
Source-ID: 305918
Research output: Chapter in Book/Report/Conference proceeding – Conference abstract in proceedings – Annual report year: 2003

Development first project

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
The development and climate nexus: the case of sub-Saharan Africa

This paper explores an alternative approach to future climate policies in developing countries. Although climate change seems marginal compared to the pressing issues of poverty alleviation and economic development, it is becoming clear that the realisation of development goals may be hampered by climate change. However, development can be shaped in such a way as to achieve its goals and at the same time reduce vulnerability to climate change, thereby facilitating sustainable development that realises economic, social, local and global environmental goals. This approach has been
coined the 'development first approach', in which a future climate regime should focus on development strategies with ancillary climate benefits and increase the capability of developing countries to implement these. This is anticipated to offer a possible positive way out of the current deadlock between North and South in the climate negotiations. First, elements are presented for an integrated approach to development and climate; second, the approach is elaborated for food and energy security in sub-Saharan Africa; and third, possibilities are outlined for international mechanisms to support such integrated development and climate strategies. (C) 2003 Elsevier Ltd. All rights reserved.
An assessment of the Intergovernmental Panel on Climate Change

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Pages: 35-145
Publication date: 2002

Host publication information
Place of publication: Cambridge
Publisher: Cambridge University Press
Editor: Watson, R.
ISBN (Print): 0-521-80770-0
Source: orbit
Source-ID: 303808
Research output: Chapter in Book/Report/Conference proceeding > Book chapter – Annual report year: 2002 > Research > peer-review

A review of the literature on climate change and sustainable development

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 49-72
Publication date: 2002

Host publication information
Title of host publication: Climate change and sustainable development. Prospects for developing countries
Place of publication: London
Publisher: Earthscan
Editors: Markandya, A., Halsnæs, K.
ISBN (Print): 1-85383-910-8
Source: orbit
Source-ID: 304343
Research output: Chapter in Book/Report/Conference proceeding > Book chapter – Annual report year: 2002 > Research > peer-review

Assessment of current and alternative development paths

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Hourcade, J., Halsnæs, K.
Publication date: 2002
Peer-reviewed: No
Source: orbit
Source-ID: 304354
Research output: Contribution to conference > Conference abstract for conference – Annual report year: 2002 > Research
Case studies for Zimbabwe, Botswana, Mauritius and Thailand

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Markandya, A., Taylor, T.
Pages: 202-246
Publication date: 2002

Host publication information
Title of host publication: Climate change and sustainable development. Prospects for developing countries
Place of publication: London
Publisher: Earthscan
Editors: Markandya, A., Halsnæs, K.
ISBN (Print): 1-85383-910-8
Source: orbit
Source-ID: 304346
Research output: Chapter in Book/Report/Conference proceeding

Climate change and sustainable development: An overview

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Markandya, A., Halsnæs, K.
Pages: 1-14
Publication date: 2002

Host publication information
Title of host publication: Climate change and sustainable development. Prospects for developing countries
Place of publication: London
Publisher: Earthscan
Editors: Markandya, A., Halsnæs, K.
ISBN (Print): 1-85383-910-8
Source: orbit
Source-ID: 304341
Research output: Chapter in Book/Report/Conference proceeding

Climate change and sustainable development. Prospects for developing countries

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Markandya, A., Halsnæs, K.
Number of pages: 291
Publication date: 2002

Publication information
Place of publication: London
Publisher: Earthscan
ISBN (Print): 1-85383-910-8
Original language: English
Source: orbit
Source-ID: 304340
Research output: Book/Report

Den globale opvarmning. Bekæmpelse og tilpasning

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Jørgensen, A., Halsnæs, K., Fenger, J.
De store organisationers rolle

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2002
Peer-reviewed: No
Event: Abstract from Bæredygtighed og energi efter Johannesburg, København, Denmark.
Source: orbit
Source-ID: 304513
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2002 › Research

Future energy perspectives

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Christensen, J. M.
Pages: 6-10
Publication date: 2002

Host publication information
Title of host publication: Risø energy report 1. New and emerging technologies - options for the future
Editors: Larsen, H., Sønderberg Petersen, L.
ISBN (Print): 87-550-3081-5
(Denmark. Forskningscenter Risoe. Risoe-R; No. 1351(EN)).
Keywords: Risø-R-1351(EN), Risø-R-1351
Electronic versions:
ris_r_1351.pdf
Source: orbit
Source-ID: 304999
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2002 › Research › peer-review

Introduction to identification of major methodological issues that will be relevant to address in relation to CDM project

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2002
Peer-reviewed: No
Event: Abstract from Joint UCC/Regional Centre Meeting on Methodological Issues, Risø, Denmark.
Source: orbit
Source-ID: 305109
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2002 › Research

Market potential for Kyoto mechanisms - estimation of global market potential for co-operative greenhouse gas emission reduction policies
National decision making framework for selecting and preparing CDM projects

Natur- og teknisk videnskabelig forskeruddannelse i tal

Presentation of the literature review: Practical links between development, sustainability and climate change
Proceedings from the Sustainable Development and Climate Change Workshop

The specific objectives of the workshop were: 1) To consider how longer-term development priorities link with climate change concerns. 2) To identify options for meeting developing countries’ needs and priorities while contributing to sustainable development both locally and globally. 3) To discuss possible longer term action at domestic and international levels by countries to further the sustainable development and climate change discussion. First of all, it was recognised that there has been a strong support, endorsement, and agreement among all participants on using sustainable development as a framework for climate change policies, and this agreement is very encouraging for further activities and collaboration. Furthermore, there is a need for new innovative international financial schemes that can support sustainable development investments with large climate change benefits. This is maybe beyond the scope of the UNFCCC, but will maybe be more important than the convention in controlling global GHG emissions. It was several times emphasised in the discussion that capacity building and institutional strengthening in developing countries are needed to implement long-term global strategies. Several national examples of sustainable development policies with large impacts on climate change were given at the workshop. These include:

1) The ethanol programme of Brazil.
2) Energy efficiency programmes in China that are part of general economic development strategies.
3) Development of natural gas supply through investment in a pipeline project in Shanghai in China.
4) Energy efficiency and renewable energy programme in India that are linked to economic development programmes.
5) Detailed national programmes for forestry, agriculture and land use sectors.
6) National development programmes including climate change policies in South Korea with broad stakeholder participation, and the use of market instruments.
7) The South Africa approach to use sustainable development indicators in relation project evaluations, and the establishment of a national climate change policy strategy that has a comprehensive list of sectoral climate change policy options.

Detailed GHG inventory and national report to the FCCC developed by Iran. (In)

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
Contributors: Halsnæs, K., Olhoff, A.
Number of pages: 30
Publication date: 2002

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory. UNEP Collaborating Centre on Energy and Environment
ISBN (Print): 87-550-3069-6
Original language: English
Electronic versions: Halsn_s_and_Olhoff_Proceedings.pdf
Source: orbit
Source-ID: 304347
Research output: Book/Report › Book – Annual report year: 2002 › Research › peer-review

Regional climate change impacts in the EU-socio-economic issues and policy implications

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 55
Publication date: 2002

Host publication information
Title of host publication: PRUDENCE kick-off meeting
Volume: Canish Climate Centre Report no. 01-8
Place of publication: Copenhagen
Publisher: Danish Meteorological Institute
Editor: Christensen, J.
Source: orbit
Økonomiske og samfundsmæssige perspektiver på globalt samarbejde om drivhusgasreduktioner

Summary for policymakers

Sustainable development and climate change - how to build an international policy regime with multiple sharing of benefits from cooperative emission reduction policies
Vurderinger af tekniske sider og forslag i rapporterne. Hvad er fremtidsudsigterne?

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 2001
Peer-reviewed: No
Event: Abstract from Møde i Selskabet for Teknologianalyse og -Vurdering (STAV), Ingeniørforeningen i Danmark, København (DK), 31 May, .
Source: orbit
Source-ID: 302635
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2001 › Research

Comment on Climate change, the rights of future generations and intergenerational equity: An in-expert exploration of a dark and cloudy path by Irving Mintzer and David Michel

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 292-293
Publication date: 2000

Host publication information
Title of host publication: Proceedings
Place of publication: Geneva
Publisher: World Meteorological Organisation
Editors: Munasinghe, M., Swart, R.
ISBN (Print): 90-6960-084-6
Source: orbit
Source-ID: 300718
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2000 › Research

Costing methodologies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Markandya, A., Halsnæs, K.
Pages: 15-31
Publication date: 2000

Host publication information
Title of host publication: Guidance papers on the cross cutting issues of the third assessment report of the IPCC. IPCC supporting material
Place of publication: Geneva
Publisher: Intergovernmental Panel on Climate Change (IPCC)
Editors: Pachauri, R., Taniguchi, T., Tanaka, K.
ISBN (Print): 4-9980908-0-1
Source: orbit
Source-ID: 301158
Estimation of the global market potential for cooperative implementation mechanisms under the Kyoto Protocol

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 25-44
Publication date: 2000

Host publication information
Title of host publication: Implementation of the Kyoto Protocol. Opportunities and pitfalls for developing countries
Place of publication: Manila
Publisher: Asian Development Bank
Editor: Ghosh, P.
ISBN (Print): 971-561-319-5
Source: orbit
Source-ID: 302026

Estimation of the global market potential for the flexibility mechanisms under the Kyoto Protocol

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Lee, M.
Pages: 115-141
Publication date: 2000

Host publication information
Title of host publication: UNFCCC and its Kyoto Protocol, with special reference to the cooperative implementation mechanisms
Place of publication: Seoul
Publisher: Korea Environment Institute
Source: orbit
Source-ID: 301436
Research output: Chapter in Book/Report/Conference proceeding – Conference abstract in proceedings – Annual report year: 2000 – Research

Estimation of the global market potential for the flexibility mechanisms under the Kyoto Protocol

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 142-171
Publication date: 2000

Host publication information
Title of host publication: UNFCCC and its Kyoto Protocol, with special reference to the cooperative implementation mechanisms
Place of publication: Seoul
Publisher: Korea Environment Institute
Source: orbit
Source-ID: 301437
Research output: Chapter in Book/Report/Conference proceeding – Conference abstract in proceedings – Annual report year: 2000 – Research

Økonomisk effektivitet i reduktion af drivhugasser
Costing issues in the past IPCC discussions

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1999
Peer-reviewed: No
Event: Abstract from IPCC Expert Meeting, Tokyo, Japan.
Source: orbit
Source-ID: 299334
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1999 › Research

Costing methodologies: A guidance note

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Markandya, A., Halsnæs, K.
Publication date: 1999
Peer-reviewed: No
Event: Abstract from IPCC Working Group III Lead Authors Meeting, Lillehammer, Norway.
Source: orbit
Source-ID: 299341
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1999 › Research

Estimating the supply and demand of GHG abatements

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Zhang, Z.
Publication date: 1999
Peer-reviewed: No
Source: orbit
Source-ID: 299338
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1999 › Research

Estimation of the global market potential for the flexibility mechanisms under the Kyoto protocol

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 30
Publication date: 1999

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory
Original language: English
Source: orbit
Source-ID: 299336
Research output: Book/Report › Book – Annual report year: 1999 › Research › peer-review

Experiences in implementation issues related to developing countries based on the UNEP country studies
Implementation issues related to developing countries based on the UNEP country studies

Module 6: The analysis of climate effects

Region-specific mitigation cost assessment specific for DCs and EITs

Scenarios
Summary guidelines

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Painuly, J., Turkson, J., Meyer, H., Markandya, A.
Number of pages: 37
Publication date: 1999

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory. UNEP Collaborating Centre on Energy and Environment
ISBN (Print): 87-550-2555-2
Original language: English
(Economics of Greenhouse Gas Limitations. Main Reports).
URLs:
http://uneprisoe.org/publications.htm
Source: orbit
Source-ID: 300393
Research output: Book/Report › Book – Annual report year: 1999 › Research › peer-review

Theoretical and empirical issues in determination of baselines for CDM projects. Panel discussion

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Matsuo, N.
Publication date: 1999
Peer-reviewed: No
Source: orbit
Source-ID: 299337
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1999 › Research

The participation of developing countries in global climate change policies - compatibility between global flexibility mechanisms and current development policies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Eskeland, G., Gouvello, C. D., Halsnæs, K., Markandya, A., Shukla, P.
Pages: 18-19
Publication date: 1999

Host publication information
Title of host publication: Book of abstracts
Place of publication: Oslo
Publisher: University of Oslo, Department of Economics
Source: orbit
Source-ID: 299335
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1999 › Research

Climate change mitigation and energy

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Christensen, J. M., Halsnæs, K.
Number of pages: 41
Publication date: 1998
Host publication information
Title of host publication: 40 years of research at Risø: A platform for the future - interacting with industry and society.
Summary of presentations
Volume: Risø-R-1062(EN,DA)
Editors: Rosendahl, L., Lading, L.
ISBN (Print): 87-550-2407-6
Source: orbit
Source-ID: 297992
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 1998 › Research

Cost analysis principles

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Markandya, A., Halsnæs, K., Milborrow, I.
Pages: 17-49
Publication date: 1998

Host publication information
Title of host publication: Mitigation and adaptation cost assessment: Concepts, methods and appropriate use
Place of publication: Roskilde
Publisher: Risø National Laboratory. UNEP Collaborating Centre on Energy and Environment
Editors: Christensen, J., Halsnæs, K., Sathaye, J.
ISBN (Print): 87-550-2435-1
URLs:
http://uneprisoe.org/publications.htm
Source: orbit
Source-ID: 298285
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1998 › Research › peer-review

Cost assessment - critical issues

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1998
Peer-reviewed: No
Event: Abstract from 'The economics of greenhouse gas limitations' final project workshop, Risø, Denmark.
Source: orbit
Source-ID: 297746
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1998 › Research

Cost concepts in climate policies and strategies

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Christensen, J. M., Beg, N., Halsnæs, K., Rowlands, I., Callaway, J., Markandya, A., Sathaye, J., Shukla, P.
Pages: 153-167
Publication date: 1998

Host publication information
Title of host publication: Mitigation and adaptation cost assessment: Concepts, methods and appropriate use
Place of publication: Roskilde
Publisher: Risø National Laboratory. UNEP Collaborating Centre on Energy and Environment
Editors: Christensen, J., Halsnæs, K., Sathaye, J.
ISBN (Print): 87-550-2435-1
URLs:
http://uneprisoe.org/publications.htm
Economics of climate change: Potential synergies and tradeoffs

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1998
Peer-reviewed: No
Source: orbit
Source-ID: 297712
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1998 › Research

Internationale klimaaftaler

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1998
Peer-reviewed: No
Event: Abstract from Møde i anledning af Nationaløkonomisk Forenings 125 års jubilæum, Hindsgavl (DK), 9-10 Jan, .
Source: orbit
Source-ID: 297838
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1998 › Research

Lessons for mitigation analysis and guidelines

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Callaway, J. M., Sathaye, J.
Publication date: 1998
Peer-reviewed: No
Event: Abstract from 'The economics of greenhouse gas limitations' final project workshop, Risø, Denmark.
Source: orbit
Source-ID: 297752
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1998 › Research

Methodological guidelines

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Number of pages: 212
Publication date: 1998

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory. UNEP Collaborating Centre on Energy and Environment
ISBN (Print): 87-550-2490-4
Original language: English
(Economics of Greenhouse Gas Limitations. Main Reports).
URLs:
http://uneprisoe.org/publications.htm
Source: orbit
Source-ID: 297429
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review
Cross-sectoral assessment of mitigation options

The paper addresses the relationship between national economic and social development objectives and climate change mitigation, with national studies for Tanzania and Zimbabwe as the starting point. The main activities driving GHG emissions in these countries are evaluated in order to identify key options and policy areas where there may be synergistic effects between climate change mitigation and national development objectives. The country study for Tanzania has identified forestry and land use activities and the agricultural sectors as some of the main drivers in the future growth of greenhouse gas emissions. Forestry, land use and agriculture are at the same time key economic and social development areas. This means that options leading to improved performance of these activities can reduce future greenhouse gas emissions and imply increasing welfare. A potential for win-win options has similarly been assessed in the country study for Zimbabwe. The options include in particular efficiency improvements in industrial plants and in the energy sector. A new methodological issue in the country study for Zimbabwe is the comparable assessment of greenhouse gas reductions options for multiple emission sources and gases. The paper reports the result of the integrated assessment of CO2 and CH4 reduction options for energy, agriculture, forestry and waste management for Zimbabwe. This leads up to a final discussion on methodological issues involved in cross-sectoral mitigation assessment. (C) 1997 Published by Elsevier Science Ltd.
Emissions reduction: An economic assessment

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 42-46
Publication date: 1997
Peer-reviewed: No

Publication information
Journal: Ecodecision
Issue number: 25
Original language: English

Experiences with guidelines for mitigation assessment: A methodological framework

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1997
Peer-reviewed: No
Event: Abstract from IPCC Workshop on Mitigation and Adaptation Cost Assessment, Risø, Denmark.

Integrated assessment of climate change in developing countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 118-119
Publication date: 1997

Host publication information
Title of host publication: Proceedings of the international symposium on prospects for integrated environmental assessment: Lessons learnt from the case of climate change
Volume: EUR-17639
Editors: Sors, A., Liberatore, A., Funtowicz, S., Hourcade, J., Fellous, J.

Sector mitigation cost assessment

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1997
Peer-reviewed: No
Event: Abstract from IPCC Workshop on Mitigation and Adaptation Cost Assessment, Risø, Denmark.
The economics of climate change mitigation in developing countries - methodological and empirical results

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 99
Publication date: 1997

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory
Original language: English
Source: orbit
Source-ID: 313001

Aggregerede miljøreguleringsomkostninger

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1996
Peer-reviewed: No
Event: Abstract from Seminar om måling af velfærd og bæredygtighed i analyser af dansk økonomi. RUC, Roskilde (DK), 21 May,.
Source: orbit
Source-ID: 295053
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

A review of mitigation cost studies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Pages: 297-366
Publication date: 1996

Host publication information
Title of host publication: Climate change 1995. Economic and social dimensions of climate change
Place of publication: New York, NY
Publisher: Cambridge University Press
Editors: Bruce J.P., Lee, H., Haites, E.
Source: orbit
Source-ID: 295009
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1996 › Research › peer-review

Cross-sectoral assessment of mitigation options - case-studies from Tanzania and Zimbabwe

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1996
Drivhuseffekt og klimaændringer. Betydningen for Danmark set i lyset af IPCC's 1996-rapporter

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Fenger, J., Jørgensen, A., Halsnæs, K.
Number of pages: 151
Publication date: 1996

Publication information
Place of publication: København
Publisher: Miljø- og Energiminstereiet. Miljøstyrelsen
ISBN (Print): 87-7810-692-3
Original language: Danish
Source: orbit
Source-ID: 294712
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

Drivhusgasserne. Scenarier for udslip og koncentrationer

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Jørgensen, A., Halsnæs, K., Fenger, J.
Pages: 31-45
Publication date: 1996

Host publication information
Title of host publication: Drivhuseffekt og klimaændringer. Betydningen for Danmark set i lyset af IPCC's 1996-rapporter
Place of publication: København
Publisher: Miljø- og Energiminstereiet. Miljøstyrelsen
Editors: Fenger, J., Jørgensen, A., Halsnæs, K.
ISBN (Print): 87-7810-692-3
Source: orbit
Source-ID: 294827
Research output: Book/Report › Book – Annual report year: 1996 › Research › peer-review

Estimating the costs of mitigating greenhouse gases

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Pages: 263-296
Publication date: 1996

Host publication information
Title of host publication: Climate change 1995. Economic and social dimensions of climate change
Place of publication: New York, NY
Publisher: Cambridge University Press
Editors: Bruce J.P., Lee, H., Haites, E.
Source: orbit
Source-ID: 295022
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1996 › Research › peer-review
Integrated assessment of climate change in developing countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1996
Peer-reviewed: No
Source: orbit
Source-ID: 294560
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

Main concepts in the cost assessment

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Birk Mortensen, J., Halsnæs, K.
Publication date: 1996
Peer-reviewed: No
Event: Abstract from Economics of GHG limitations, Holbæk, Denmark.
Source: orbit
Source-ID: 294716
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

Main economic concepts

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1996
Peer-reviewed: No
Event: Abstract from Economics of GHG limitations, Holbæk, Denmark.
Source: orbit
Source-ID: 294754
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1996 › Research

National economic and environmental impacts of AIJ-projects

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 34
Publication date: 1996

Host publication information
Title of host publication: Pilotproject on joint implementation
Place of publication: Copenhagen
Publisher: Nordic Council of Ministers (TemaNord; No. 566).
Source: orbit
Source-ID: 294944
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1996 › Research › peer-review

National social and economic development priorities and climate change mitigation in developing countries
The methodological framework

Assessment of international mitigation costing studies in developing countries

International and national policy issues connected to climate change mitigation strategies for developing countries

Methodological framework and review of cost assessments
Nordens interesser i principper for internationaler drivhusgasaftal

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Risø National Laboratory
Contributors: Halsnæs, K., Meyer, H., Stephensen, P., Sørensen, L.
Number of pages: 107
Publication date: 1995

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory
ISBN (Print): 87-550-2048-8
Original language: Danish
(Denmark. Forskningscenter Risoe. Risoe-R: No. 794(DA)).
Keywords: Risø-R-794, Risø-R-794(DA)
Electronic versions:
RISOR794.pdf
Source: orbit
Source-ID: 294205
Research output: Book/Report › Report – Annual report year: 1995 › Research › peer-review

Samfundsekonominiske omkostninger ved reduceret drivhusgasudslip. Sammenligning af investeringer i reduceret drivhusgasudslip i energisektoren, landbruget, transportsektoren og andre væsentlige drivhusgaskilder

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Number of pages: 172
Publication date: 1995

Publication information
Place of publication: København
Publisher: Miljøstyrelsen
Original language: Danish
(Arbejdsrapport fra Miljøstyrelsen, 49).
Source: orbit
Source-ID: 294205
Research output: Book/Report › Book – Annual report year: 1995 › Research › peer-review

Sustainable development as a planning goal for energy systems in the Nordic and Baltic Area

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Morthorst, P.
Pages: 11-32
Publication date: 1995

Host publication information
Title of host publication: Environmental economics and the Baltic Region
Place of publication: Copenhagen
Publisher: Institute og Economics. Copenhagen University
Editor: Birk Mortensen, J.
Source: orbit
Comparable assessment of national GHG abatement costs

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Mackenzie, G. A., Swisher, J., Villavicencio, A.
Pages: 925-934
Publication date: 1994
Peer-reviewed: Yes

Journal: Energy Policy
Volume: 22
ISSN (Print): 0301-4215
Original language: English
Source: orbit
Source-ID: 291818

Publication information
Journal: Journal article – Annual report year: 1994
Research output: Contribution to journal

Comparable assessment of national greenhouse gas abatement costs: Results of ten country studies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Mackenzie, G. A., Swisher, J., Villavicencio, A.
Pages: 641-656
Publication date: 1994

Host publication information
Title of host publication: Integrative assessment of mitigation, impacts, and adaptation to climate change
Volume: CP-94-9
Place of publication: Laxenburg
Publisher: IIASA
Editors: Nakicenovic, N., Nordhaus, W., Richels, R., Toth, F.
Source: orbit
Source-ID: 292377
Research output: Chapter in Book/Report/Conference proceeding

Globalt samarbejde om at opfylde klimakonventionen

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 12-13
Publication date: 1994
Peer-reviewed: Unknown

Publication information
Journal: Risønyt
Issue number: 3
Original language: Danish
Source: orbit
Source-ID: 292217
Research output: Contribution to journal

Perspectives of regional coordinated energy and environmental planning
Report on the UNEP GHG abatement costing studies. Results from developing countries

Review of bottom-up studies for developing countries. Empirical results and conclusions

The second IPCC assessment
Aspects of energy planning. An integrated analysis of multiple environmental consequences

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Sørensen, L., Halsnæs, K.
Pages: 125-136
Publication date: 1993

Host publication information
Title of host publication: Energy, environment and natural resource management in the Baltic Sea region
Place of publication: Copenhagen
Publisher: Nordic Council of Ministers
Editors: Mander, Ü., Fenger, J., Oja, T., Mikk, M.
(Nordiske Seminar- og Arbejdsrapporter, 653).
Source: orbit
Source-ID: 290648
Research output: Chapter in Book/Report/Conference proceeding – Article in proceedings – Annual report year: 1993 – Research

Basic principles for the definition of national baseline and abatement scenarios in relation to national greenhouse gas abatement strategies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1993
Peer-reviewed: No
Event: Abstract from Workshop on the UNEP greenhouse gas abatement costing studies, New Delhi, India.
Source: orbit
Source-ID: 290680
Research output: Contribution to conference – Conference abstract for conference – Annual report year: 1993 – Research

Comparative assessment of greenhouse gas abatement costs: Results from a bottom-up analysis for ten countries

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Swisher, J.
Publication date: 1993
Peer-reviewed: No
Source: orbit
Source-ID: 290593
Research output: Contribution to conference – Conference abstract for conference – Annual report year: 1993 – Research

Definition of main economic concepts in national greenhouse gas abatement cost assessments

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1993
Peer-reviewed: No
Event: Abstract from Workshop on the UNEP greenhouse gas abatement costing studies, New Delhi, India.
Source: orbit
Source-ID: 290741
Research output: Contribution to conference – Conference abstract for conference – Annual report year: 1993 – Research

Evaluation of the performance of the UNEP guidelines for greenhouse gas abatement costing studies
Methodological framework for international comparison of greenhouse gas abatement costs - results of a comparative assessment for ten countries

Methodological lessons in relation to the UNEP greenhouse gas abatement costing studies

Methodologies for national GHG abatement costing studies
The UNEP/SEI-B environmental database: EDB

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Pages: 253-262
Publication date: 1993

Host publication information
Title of host publication: Expert workshop on life-cycle analysis of energy systems, methods and experience. Proceedings
Place of publication: Paris
Publisher: OECD/IEA
Source: orbit
Source-ID: 290806
Research output: Chapter in Book/Report/Conference proceeding – Annual report year: 1993 – Research

UNEP Greenhouse gas abatement costing studies

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Mackenzie, G. A., Halsnæs, K.
Pages: 100-103
Publication date: 1993

Host publication information
Title of host publication: The road from Rio. Environment and development policy issues in Asia
Place of publication: New Delhi
Publisher: Tate Energy Research Institute
Editors: Ghosh, P., Jaitly, A.
Source: orbit
Source-ID: 290640
Research output: Chapter in Book/Report/Conference proceeding – Annual report year: 1993 – Research

Construction of CO₂ abatement cost curves - exemplified by the Danish integrated energy system simulation model BRUS

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Morthorst, P.
Publication date: 1992
Peer-reviewed: No
Source: orbit
Source-ID: 289735
Research output: Contribution to conference – Conference abstract for conference – Annual report year: 1992 – Research

Methodologies for national GHG abatement costing studies

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Mackenzie, G. A.
Publication date: 1992
Peer-reviewed: No
Event: Abstract from International workshop on costs, impacts and possible benefits of CO₂ mitigation. IIASA, Laxenburg (AT), 28-30 Sep, .
Modelling approaches for economic analysis of greenhouse gas abatement

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1992
Peer-reviewed: No
Source: orbit
Source-ID: 289733
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1992 › Research

Nordens økonomiske interesser i relation til klimakonventionen

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Publication date: 1992
Peer-reviewed: No
Source: orbit
Source-ID: 289734
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1992 › Research

Samfundsmæssig vurdering og prioritering af miljøindsatsen

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 110-116
Publication date: 1992

Host publication information
Title of host publication: Bedre luft. Hvordan skal vi i Danmark prioritere indsatsen for et bedre luftmiljø? Slutdokument og ekspertoplæg fra konsensuskonferencen 22-24 oktober 1990
Place of publication: København
Publisher: Teknologinaevnet (TeknologiNævnets rapporter 1992/2).
Source: orbit
Source-ID: 290271
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1992 › Research › peer-review

The UNIP/SEI-B environmental database: EDB

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Publication date: 1992
Peer-reviewed: No
Source: orbit
Source-ID: 289985
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1992 › Research
UNEP greenhouse gas abatement costing studies

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Mackenzie, G. A., Halsnæs, K.
Publication date: 1992
Peer-reviewed: No
Event: Abstract from Post-UNCED seminar on environment and development policy issues in Asia, New Delhi (IN), 8-10 Oct,.
Source: orbit
Source-ID: 289987
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 1992 › Research

UNEP greenhouse gas abatement costing studies. Analysis of abatement costing issues and preparation of a methodology to undertake national greenhouse gas abatement costing studies. Phase one report

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Number of pages: 157
Publication date: 1992

Publication information
Place of publication: Roskilde
Publisher: Risø National Laboratory. UNEP Collaborating Centre on Energy and Environment
ISBN (Print): 87-550-1828-9
Original language: English
Source: orbit
Source-ID: 289886
Research output: Book/Report › Book – Annual report year: 1992 › Research › peer-review

Environment, energy and natural resources management in the Baltic Region

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Fenger, J., Halsnæs, K., Larsen, H., Schroll, H., Vidal, V.
Number of pages: 594
Publication date: 1991

Publication information
Place of publication: Copenhagen
Publisher: Nordic Council of Ministers
Original language: English
(NORD, 48).
Source: orbit
Source-ID: 289097
Research output: Book/Report › Book – Annual report year: 1991 › Research › peer-review

Strategies for environmental management

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 547-549
Publication date: 1991

Host publication information
Sustainability as a goal for energy systems in the Nordic and Baltic area

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Mackenzie, G. A.
Pages: 415-428
Publication date: 1991

Bæredygtig udvikling som målsætning for nordiske landes energisystemer

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Number of pages: 92
Publication date: 1990

Beslutningsværktøjer til integreret miljøplanlægning

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Fenger, J., Halsnæs, K., Zeuthen Heidam, N.
Number of pages: 126
Publication date: 1990
Consequences of reduced SO₂ and NOₓ emission in the Nordic countries and the Baltic region

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy, Systems Analysis Division
Contributors: Halsnæs, K., Jørgensen, K., Mackenzie, G. A.
Pages: 145-156
Publication date: 1990

Host publication information
Title of host publication: Nordic workshop on integrated energy and environmental modelling
Place of publication: Roskilde
Publisher: Risø National Laboratory
Editors: Halsnæs, K., Mackenzie, G.
Source: orbit
Source-ID: 288800
Research output: Chapter in Book/Report/Conference proceeding – Article in proceedings – Annual report year: 1990 – Research

Integreter energi- og miljøplanlægning

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 55-59
Publication date: 1990

Host publication information
Title of host publication: Beslutningsværktøjer til integreret miljøplanlægning
Place of publication: Roskilde
Publisher: Danmarks Miljøundersøgelser; Forskningscenter Risø
Editors: Fenger, J., Halsnæs, K., Zeuthen Heidam, N.
ISBN (Print): 87-7440-150-5
Source: orbit
Source-ID: 288535
Research output: Chapter in Book/Report/Conference proceeding – Article in proceedings – Annual report year: 1990 – Research

Long-term growth scenarios for the Danish energy system: The need for a sustainable development

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Morthorst, P.
Pages: 1-4
Publication date: 1990
Peer-reviewed: No

Publication information
Journal: Nordic Journal of Environment Economics. Addendum
Original language: English
Source: orbit
Source-ID: 288520
Research output: Contribution to journal – Journal article – Annual report year: 1990 – Research

Nordic workshop on integrated energy and environmental modelling

General information
The concept of sustainable development seen in relation to integrated energy and environmental planning

Emissions of SO₂, NOₓ and CO₂ from the Danish Energy Sector in the Period 1975-2010

Energiplanlægning og miljø. Kortlægning af værktøjer og metoder til integreret energi- og miljøplanlægning i de nordiske lande
Problemer i modellering af energisystemets miljøpåvirkning

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K.
Pages: 12-22
Publication date: 1989

Host publication information
Title of host publication: Modelbygningsforsøg, systemteori og miljøplanlægning
Place of publication: Roskilde
Publisher: TEK-SAM Forlaget
Editors: Svane Jørgensen, M., Homann Jespersen, P.
(Roskilde Universitetscenter. Institut for Miljø, Teknologi og Samfund. Forskningsrapportserien, 11).
Source: orbit
Source-ID: 288108
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1989 › Research › peer-review

Simulation of the Italian Energy System with the DESS-Model

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Halsnæs, K., Sørensen, H.
Number of pages: 69
Publication date: 1989

Publication information
ISBN (Print): 87-550-1542-5
Original language: English
(Risø-M; No. 2798).
Keywords: Risø-M-2798
Electronic versions: ris_m_2798.pdf
Source: orbit
Source-ID: 288409
Research output: Book/Report › Report – Annual report year: 1989 › Research

Trafik i storbyen - integreret miljøplanlægning

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Fenger, J., Halsnæs, K.
Pages: 4-5
Publication date: 1989
Peer-reviewed: No

Publication information
Journal: Risønyt
Issue number: 4
Original language: Danish
Varmesektorens emissioner og emissionsreduktionsmuligheder ved efterisolering af enfamiliehuse

General information
Publication status: Published
Organisations: Systems Analysis Division, Risø National Laboratory for Sustainable Energy
Contributors: Skjerk Christensen, P., Halsnæs, K., Nielsen, L. H., Sørensen, H.
Number of pages: 111
Publication date: 1989

Publication information
ISBN (Print): 87-550-1561-1
Original language: Danish
(Risø-M; No. 2808).
Keywords: Risø-M-2808
Source: orbit
Source-ID: 288302

Renere luft. Varmebevarelse giver også renere luft

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Grohnheit, P., Halsnæs, K., Smith-Hansen, O.
Publication date: 1987
Peer-reviewed: No

Publication information
Journal: VVS
Original language: Danish
Source: orbit
Source-ID: 287440
Research output: Contribution to journal → Journal article – Annual report year: 1987 → Research

Risiko for mere forurening

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Grohnheit, P., Halsnæs, K., Smith-Hansen, O.
Publication date: 1987
Peer-reviewed: No

Publication information
Journal: Energi Planlægning
Original language: Danish
Source: orbit
Source-ID: 287442
Research output: Contribution to journal → Journal article – Annual report year: 1987 → Research

Varmebevarelse giver også renere luft

General information
Publication status: Published
Organisations: Risø National Laboratory for Sustainable Energy
Contributors: Grohnheit, P., Halsnæs, K., Smith-Hansen, O.
Publication date: 1987
Peer-reviewed: No
Projects:

CIREG: Climate information to support integrated renewable electricity generation
Increasing the share of renewable resources in the total energy mix can reduce greenhouse gas (GHG) emissions and thus is a promising pathway to meeting increasing energy demands. Since renewable energy sources depend on climatic conditions and are thus impacted by climate change and variability, decisions in the energy sector must be backed by climate services. Many countries in Sub-Saharan Africa (SSA) are facing already an energy crisis. This will be engraved because GDP and electricity demand in most SSA countries is rising faster than electricity generation, whilst in the next two to three decades population in SSA is predicted to double, increasing hence the already huge demands. Countries in SSA are now at a crossroad between mainly fossil-fuel driven and a renewable power production mix and current decisions will affect their future development, GHG emissions and energy prices. Presently, many SSA countries have a high share of hydro-power in their energy portfolios, whilst other renewable sources for electricity generation (e.g. wind, solar) are much less developed. However, the use of renewable sources can entail unplanned side-effects on ecosystem functions and services, underscoring another dilemma in the decision-making today. Given the projected climate variability and change in SSA, electricity generation through renewable sources such as hydro, wind or solar is likely to be challenged. The aim of this project (CIREG) is the elaboration of a (model-based) support for decision-makers in the energy sector by establishing and providing necessary climate services covering all spatio-temporal scales from short-term to scenario projections and from local to transboundary and large river basin scales while following a transdisciplinary approach. CIREG thus will consider the entire water-energy-food-climate nexus, because decisions taken in the energy sector will inevitably have a feedback on water supply and food production.

Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis
Bolvig, S., Project Participant, Department of Management Engineering, Systems Analysis
Larsen, M. A. D., Project Participant, Department of Management Engineering, Systems Analysis
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis
Svenningsen, L. S., Project Participant, Department of Management Engineering, Systems Analysis
01/02/2018 → 31/01/2021
Keywords: Renewable Energy, Climate services, Africa, sustainable development, Climate change
Collaborators: Potsdam Institute for Climate Impact Research, University of Bonn, WASCAL - West African Science Service Centre on Climate Change and Adapted Land Use, Vrije Universiteit Brussel, Stockholm Environment Institute
Project: Research

Cost Benefit Analysis for Climate Change Adaptation and Sustainable Flood Water Management in Cities
Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis
Bay, L., Project Participant, Department of Management Engineering, Systems Analysis
01/07/2017 → 31/12/2017
Project: Research

MARCO: MArket Research for a Climate Services Observatory
Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis
Bay, L., Project Participant, Department of Management Engineering, Systems Analysis
02/01/2017 → 31/12/2018
Project: Research

Horizon 2020 Insurance
Larsen, M. A. D., Project Participant, Department of Management Engineering, Systems Analysis
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis
Drews, M., Project Participant, Department of Management Engineering, Systems Analysis
Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis
Nielsen, M. R., Project Participant, Department of Management Engineering
01/05/2017 → 30/04/2020
Project: Research
COHERENT: Coastal Hazard Risk Reduction and Management
Halsnæs, K., Project Manager, Department of Management Engineering, Systems Analysis
Larsen, M. A. D., Project Participant, Department of Management Engineering, Systems Analysis
Drews, M., Project Participant, Department of Management Engineering, Systems Analysis
Sørensen, C. S., Project Participant, National Space Institute, Geodesy
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis
Bay, L., Project Participant, Department of Management Engineering, Systems Analysis
von Bülow, C. W., Project Participant, Department of Management Engineering, Systems Analysis
Innovation Fund Denmark: DKK10,000,000.00
01/11/2017 → 30/10/2020
Collaborators: The Danish Agency for Data Supply and Efficiency, Danish Coastal Authority, Danish Meteorological Institute, Aabenraa Kommune, Helmholtz-Zentrum Geesthacht, DHI Water - Environment - Health, Ringkøbing-Skjern Kommune, Smith Innovation, Skive Kommune
Award relations: Coastal Hazard Risk Reduction and Management
Project: Research

Skov- og landbrugssektoren i et skiftende klima - Metodeudvikling og analyse af vekselvirkninger mellem tilpasning til klimaændringer og reduktion af drivhusgasser
Møller, L. R., PhD Student, Department of Management Engineering
Olhoff, A., Main Supervisor
Jacobsen, J. B., Supervisor
Halsnæs, K., Examiner
Markandya, A., Examiner
Schou, J. S., Examiner
Centerfinansieret
01/12/2011 → 23/03/2017
Award relations: Skov- og landbrugssektoren i et skiftende klima - Metodeudvikling og analyse af vekselvirkninger mellem tilpasning til klimaændringer og reduktion af drivhusgasser
Project: PhD

Economic Assessment of Global Bioenergy Resources
Hvid, A., PhD Student, Department of Management Engineering
Halsnæs, K., Main Supervisor
Henningsen, G., Supervisor
Klinge Jacobsen, H., Examiner
Tarp Jensen, H., Examiner
Markandya, S. (., Examiner
Centerfinansieret
01/10/2010 → 20/06/2014
Award relations: Economic Assessment of Global Bioenergy Resources
Project: PhD

Decision support for climate change adaptation - applications for coastal regions
Appelquist, L. R., PhD Student, Department of Management Engineering
Halsnæs, K., Main Supervisor
Aagaard, T., Supervisor
Olhoff, A., Examiner
Garg, A., Examiner
Rasmussen, K., Examiner
Centerfinansieret
01/03/2009 → 26/05/2014
Award relations: Decision support for climate change adaptation - applications for coastal regions
Project: PhD

PhD scholarship in Statistical Analysis of High Impact Climate Projections and their Economic Consequences
von Bülow, C. W., PhD Student, Department of Management Engineering
Halsnæs, K., Main Supervisor
Samfinansieret - Andet
15/12/2013 → 12/01/2019
Award relations: PhD scholarship in Statistical Analysis of High Impact Climate Projections and their Economic Consequences
Project: PhD
Urban Runoff Design under influence of Climate Change
Zhou, Q., PhD Student, Department of Environmental Engineering
Ambjerg-Nielsen, K., Main Supervisor
Halsnæs, K., Supervisor
Mikkelsen, P. S., Supervisor
Nielsen, S. B., Supervisor
Bauer-Gottwein, P., Examiner
Krebs, P., Examiner
Merz, B., Examiner
Technical University of Denmark
01/05/2009 → 21/11/2012
Award relations: Urban Runoff Design under influence of Climate Change
Project: PhD

Living with poverty and climate change - a study on vulnerability and adaptation to climate-related shocks on household level
Jakobsen, K. T., PhD Student, Department of Management Engineering
Halsnæs, K., Main Supervisor
Christensen, J. M., Examiner
Mortensen, J. B., Examiner
Markandya, S., Examiner
Technical University of Denmark
01/09/2008 → 24/08/2012
Award relations: Living with poverty and climate change - a study on vulnerability and adaptation to climate-related shocks on household level
Project: PhD

OASIS+ / Open access catastrophe modelling driving adaptation to enable resilience in an uncertain future
Larsen, M. A. D., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre
Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre
Drews, M., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis
01/01/2016 → ...
Project: Research

CRES: Centre for regional change in the Earth system
In taking an interdisciplinary approach, the overall objective of CRES is to extend knowledge of and reduce the uncertainties surrounding regional climate change and its impacts and thereby support future climate change adaptation and mitigation policies.
Gregg, J. S., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Larsen, M. A. D., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
01/10/2009 → 01/10/2014
Keywords: climate uncertainty, climate change adaptation
Project: Research

RiskChange: Risk-based design in a changing climate
The main objective of the RiskChange project is to establish a consistent scientifically-based framework for risk-based design of critical infrastructure that includes state-of-the-art knowledge of projected changes in climate extremes.
Gregg, J. S., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Halsnæs, K., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Kaspersen, P. S., Project Participant, Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Åström, H. L. A., Project Participant
SusTrans: Enabling and governing transitions to a low carbon society

Sustainable Transitions is a cross-disciplinary research alliance comprising of research groups at the Technical University of Denmark, Aalborg University and the Business School Aarhus University in cooperation with research groups from universities in Eindhoven, Munich and Nottingham. The project operates on five core societal arenas for transition: Market regulation, Household consumption, Innovation dynamics, City structure and transport, and Legislation on biomaterials. Through historic analysis, case studies and action research the alliance will develop knowledge and methods that can support different actor’s engagement in societal and technological transition processes reducing the use of fossil energy.

Supported by the Danish Council for Strategic Research.

Activities:

Compound events and pressures in coupled catchment and storm surge modelling
Period: 9 Sep 2019 → 13 Sep 2019
Morten Andreas Dahl Larsen (Speaker)
Kirsten Halsnæs (Guest lecturer)
Nils Drønen (Guest lecturer)
Bo Brahtz Christensen (Guest lecturer)
Climate Risks and Economics
Sustainability

Degree of recognition: International

Related event

European Meteorological Society annual meeting 2019
09/09/2019 → 13/09/2019
Lyngby, Denmark
Activity: Talks and presentations › Conference presentations

Coupled catchment and storm surge modelling for risk assessments in the coastal zone
Period: 7 Apr 2019 → 12 Apr 2019
Morten Andreas Dahl Larsen (Speaker)
Kirsten Halsnæs (Guest lecturer)
Nils Drønen (Guest lecturer)
Bo Brahtz Christensen (Guest lecturer)
Climate Risks and Economics
Sustainability

Degree of recognition: International

Related event

EGU General Assembly 2019
07/04/2019 → 12/04/2019
Dynamic modelling of coastal flooding hazard risk management  
**Period:** 7 Apr 2019 → 12 Apr 2019  
Kirsten Halsnæs (Guest lecturer)  
Morten Andreas Dahl Larsen (Guest lecturer)  
Mads Lykke Dømgaard (Guest lecturer)  
Per Skougaard Kaspersen (Guest lecturer)  
Martin Drews (Guest lecturer)  
Department of Technology, Management and Economics  
Sustainability  
Climate Risks and Economics  
Degree of recognition: International  

**Related event**  
**EGU General Assembly 2019**  
07/04/2019 → 12/04/2019  
Vienna, Austria  
Activity: Talks and presentations › Conference presentations

The potential to reduce uncertainties in probabilistic storm surge impact assessments  
**Period:** 7 Apr 2019 → 12 Apr 2019  
Martin Drews (Guest lecturer)  
Thordis Thorarinsdottir (Guest lecturer)  
Peter Guttorp (Guest lecturer)  
Morten Andreas Dahl Larsen (Guest lecturer)  
Kirsten Halsnæs (Guest lecturer)  
Peter Thejll (Guest lecturer)  
Climate Risks and Economics  
Sustainability  
Department of Technology, Management and Economics  
Degree of recognition: International  

**Related event**  
**EGU General Assembly 2019**  
07/04/2019 → 12/04/2019  
Vienna, Austria  
Activity: Talks and presentations › Conference presentations

Integrated coastal hazard risk reduction and management – a closer look at the dynamical damage cost methodology used in the COHERENT project  
**Period:** 13 Jun 2018  
Kirsten Halsnæs (Guest lecturer)  
Morten Andreas Dahl Larsen (Guest lecturer)  
Department of Management Engineering  
Systems Analysis  
Degree of recognition: International  

**Related event**  
**2nd Baltic Earth Conference: The Baltic sea in transition**  
11/06/2018 → 15/06/2018  
Helsingor, Denmark
Integrated hydrology in the COHERENT project
Period: 10 Jan 2018 → 12 Jan 2018
Morten Andreas Dahl Larsen (Guest lecturer)
Kirsten Halsnæs (Other)
Department of Management Engineering
Systems Analysis
Degree of recognition: International

Related event

33rd Nordic Geological Winter Meeting
10/01/2018 → 12/01/2018
Kgs. Lyngby, Denmark
Activity: Talks and presentations › Conference presentations

The COHERENT Project
Period: 6 Dec 2017
Morten Andreas Dahl Larsen (Guest lecturer)
Kirsten Halsnæs (Other)
Department of Management Engineering
Systems Analysis

Description
Coastal hazard risk reduction and management
Degree of recognition: Regional
Documents:
SUSTAIN poster

Related event

DTU Sustain 2017
06/12/2017 → 06/12/2017
Kgs. Lyngby, Denmark
Activity: Talks and presentations › Conference presentations

CORDEX 2016
Period: 18 May 2016
Kirsten Halsnæs (Participant)
Department of Management Engineering
Systems Analysis
DTU Climate Centre

Description
The International Conference on Regional Climate CORDEX 2016
Documents:
Cordex 2016 - kirsten

Related event

CORDEX 2016: The International Conference on Regional Climate
17/05/2016 → 20/05/2016
Stockholm, Sweden
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.
**IEA workshop on Climate and Energy**  
Period: 15 Nov 2013  
Kirsten Halsnæs (Lecturer)  
Department of Management Engineering  
Systems Analysis  
DTU Climate Centre  
Energy Systems Analysis  
Links:  
http://www.iea.org/media/workshops/2013/egrdutrecht/5.Halsnaes.pdf (Presentation)

**Related external organisation**  
Unknown Organization  
Keywords: Energy and climate risks  
Activity: Talks and presentations › Conference presentations

**Climate Change and the Financial Crises: Science and Cocktail, Christiania**  
Period: 22 Oct 2013  
Kirsten Halsnæs (Lecturer)  
Department of Management Engineering  
Systems Analysis  
DTU Climate Centre  
Energy Systems Analysis  

**Related external organisation**  
Unknown Organization  
Keywords: Climate  
Activity: Talks and presentations › Conference presentations

**Urban Energy and Climate Change**  
Period: 8 Oct 2013  
Kirsten Halsnæs (Lecturer)  
Department of Management Engineering  
Systems Analysis  
DTU Climate Centre  
Energy Systems Analysis  

**Description**  
DTU Man Seminar  

**Related external organisation**  
Unknown Organization  
Activity: Talks and presentations › Conference presentations

**Department of Management Engineering (Organisational unit)**  
Period: 2013  
Kirsten Halsnæs (Participant)  
Department of Management Engineering  
Systems Analysis  
DTU Climate Centre
Energy Systems Analysis

Description
Phd bedømmelsesudvalg

Related organisation

Department of Management Engineering (Organisational unit)
Kirsten Halsnæs (Participant)
2013
Activity: Membership › Membership of commitees, commissions, boards, councils, associations, organisations, or similar

Department of Management Engineering (Organisational unit)
Period: 2013
Kirsten Halsnæs (Participant)
Department of Management Engineering
Systems Analysis
DTU Climate Centre
Energy Systems Analysis

Description
Professor bedømmelsesudvalg

Related organisation

Department of Management Engineering (Organisational unit)
Kirsten Halsnæs (Participant)
2013
Activity: Membership › Membership of commitees, commissions, boards, councils, associations, organisations, or similar

Det Etiske Råd (External organisation)
Period: 2013 → 2014
Kirsten Halsnæs (Participant)
Department of Management Engineering
Systems Analysis
DTU Climate Centre
Energy Systems Analysis

Related external organisation

Det Etiske Råd
Denmark
Activity: Membership › Membership of commitees, commissions, boards, councils, associations, organisations, or similar

DTU Energy Conference Smart Energy Cities
Period: 2013
Kirsten Halsnæs (Lecturer)
Department of Management Engineering
Systems Analysis
DTU Climate Centre
Energy Systems Analysis

Related external organisation

Unknown Organization
Peer review procedures in the IPCC: Lessons learned  
**Period:** 19 Jan 2012  
Kirsten Halsnæs (Keynote speaker)  
Department of Management Engineering  

**Description**  
Place: EU Expert Meeting: Peer review procedures in IPBES and Procedures for election of authors, editors and reviewers in IPBES, Copenhagen (DK)  

**Related external organisation**  
Unknown Organization  
Activity: Talks and presentations › Conference presentations

Introduction to sustainable development and the application of the concept in relation to energy and climate change policies  
**Period:** 29 Apr 2011  
Kirsten Halsnæs (Speaker)  
Risø National Laboratory for Sustainable Energy  
Systems Analysis Division  
DTU Climate Centre  

**Related event**  
Introduction to sustainable development and the application of the concept in relation to energy and climate change policies  
29/04/2011 → 29/04/2011  
Internal DTU Climate Centre seminar on sustainable development - methodological issues and assessments  
Keywords: DTU Climate Centre  
Activity: Other

International Centre for Research in Organic Food Systems (External organisation)  
**Period:** 2011 → 2014  
Kirsten Halsnæs (Participant)  
Department of Management Engineering  
Systems Analysis  
DTU Climate Centre  
Energy Systems Analysis  

**Description**  
Forskningsråd for økologisk landbrug  

**Related external organisation**  
International Centre for Research in Organic Food Systems  
Denmark  
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

BBVA Spanish Bank (External organisation)  
**Period:** 2010 → 2014  
Kirsten Halsnæs (Participant)  
Department of Management Engineering  
Systems Analysis
Description
Medlem af priskomittee for Klimaforskning Frontiers of Knowledge
Degree of recognition: International

Related external organisation
Banco Bilbao Vizcaya Argentaria, S.A.
Spain
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Ibis debatmøde om fødevaresikkerhed og klimaforandringer
Period: 18 Nov 2009
Kirsten Halsnæs (Speaker)
Risø National Laboratory for Sustainable Energy
Systems Analysis Division
DTU Climate Centre
Description
Place: København (DK)

Related external organisation
Unknown Organization
Keywords: Climate and energy systems, Climate Centre
Activity: Talks and presentations › Conference presentations

Intergovernmental Panel for Climate Change, (IPCC) (External organisation)
Period: 2009 → 2014
Kirsten Halsnæs (Participant)
Department of Management Engineering
Systems Analysis
DTU Climate Centre
Energy Systems Analysis
Description
WGIII
Body type: Klima panel
Degree of recognition: International

Related external organisation
Intergovernmental Panel for Climate Change, (IPCC)
Geneva, Switzerland
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Press clippings:

Klimaforhandlinger
Kirsten Halsnæs
25/11/2013

Subject
COP 19 møde i Polen
Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Media contribution (1)

Klimaførhandlinger
25/11/2013
Radio 24 syv, Print
35 min
Kirsten Halsnæs
Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Press/Media: Press / Media

Oversvømmelser
Kirsten Halsnæs
25/09/2013

Subject
Oversvømmelser
Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis

Media contribution (1)

Oversvømmelser
25/09/2013
Metro express, Print
Kirsten Halsnæs
Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Press/Media: Press / Media

Klimaekstremer, IPCC
Kirsten Halsnæs
23/09/2013

Subject
Klima og risici
Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis

Media contribution (1)

Klimaekstremer, IPCC
23/09/2013
Information, Print
Jørgen Steen Nielsen
Kirsten Halsnæs
Department of Management Engineering, Systems Analysis, DTU Climate Centre, Energy Systems Analysis
Press/Media: Press / Media

CO2-kvoter gavner klimaet
Kirsten Halsnæs
07/12/2009
DTU Climate Centre, Risø National Laboratory for Sustainable Energy, Systems Analysis Division

Media contribution (1)

CO2-kvoter gavner klimaet
07/12/2009
P1 Formiddag 07. december 2009 kl. 09:09, Radio
http://www.dr.dk/P1/P1Formiddag/Udsendelser/2009/12/02144121.htm
PUB-OA
Kirsten Halsnæs
Risø National Laboratory for Sustainable Energy, Systems Analysis Division, DTU Climate Centre
Press/Media: Press / Media

Grænsen for vækst?
Kirsten Halsnæs
29/11/2009
DTU Climate Centre, Risø National Laboratory for Sustainable Energy, Systems Analysis Division

**Media contribution (1)**

**Grenser for vækst?**
29/11/2009
DR2 Deadline den 29. november 2009, Television
PUB-OA
Kirsten Halsnæs
Risø National Laboratory for Sustainable Energy, Systems Analysis Division, DTU Climate Centre
Press/Media: Press / Media

**Skuffelse over G8 resultat**
Kirsten Halsnæs
10/07/2009
DTU Climate Centre, Risø National Laboratory for Sustainable Energy, Systems Analysis Division

**Media contribution (1)**

**Skuffelse over G8 resultat**
10/07/2009
Danmarks Radio DR1, TV Avisen kl. 21, Television
http://www.dr.dk/odp/player.aspx?uniqueid=335829&mt=newstab&st=news_TVAvisen&furl=http%3A//www.dr.dk/odp/default.aspx%3Ftemplate%3Dnyhed%26guid%3DDR1200907102100%26autoplay%3D0%26back%3Ddefault.aspx%253Ftem plate%253Dnyheder%2526day%253D0
DOC-OA
Kirsten Halsnæs
Risø National Laboratory for Sustainable Energy, Systems Analysis Division, DTU Climate Centre
Press/Media: Press / Media

**Klimaks. Klimapolitik i praksis**
Kirsten Halsnæs
09/03/2009
UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC), Risø National Laboratory for Sustainable Energy, Systems Analysis Division

**Media contribution (1)**

**Klimaks. Klimapolitik i praksis**
09/03/2009
Jyllandsposten, Web
http://blogs.jp.dk/klimaks/
PUB-OA
Kirsten Halsnæs
Risø National Laboratory for Sustainable Energy, Systems Analysis Division, UNEP Risoe Centre on Energy, Climate and Sustainable Development (URC)
Press/Media: Press / Media