

Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) | Hanne Bach

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E-mail <u>hba@dmu.dk</u>

Nationality Danish

Date of birth 26-09-1960

Gender Female

Occupational field | Chief consultant; environmental science and policy

Work experience

Dates 1999-

Occupation or position held | DCE-Danish Centre for Environment and Energy, Aarhus University

Chief Consultant, DCE- Danish Centre for Environment and Energy (2011->),

Leave of absence (2008-2011)

Research Director, Department of Policy Analysis (1999-2008), National Environmental Research

Institute

Main activities and responsibilities 2011-: Project management, coordination and quality assurance for advisory services within the field of environment, nature, climate change adaptation and energy. Specific responsibility for atmospheric, socio-economic, and arctic environment aspects. Responsible for state of environment and other comprehensive reporting initiatives aiming at dissemination of results targeted the policy level and the public. Acquisition and proposal writing for large cross-cutting activities, nationally and internationally. Contribute to coordination and necessary adjustments related to the implementation of the framework contract with ministry of environment.

> 1999-2008: Management of research department (Department of Policy Analysis) including research strategy development, strategy implementation, results-based monitoring of research department, human resource management (50 people) and economic management.

> Member of the management team of the National Environmental Research Institute. Collaboration with relevant ministerial departments of Ministry of Environment and Ministry of Climate, Energy and Building on aspect related to socio-economy, air emissions, greenhouse gas emissions, environmental indicators and State of the Environment reporting. Project manager for selected, strategic projects including EU research and advisory projects, large national advisory projects and projects related to Danish development assistance.

Selected relevant projects:

- Project manager for an independent review of the EIA of the Femern Belt Link between Denmark and Germany. Client: Femern A/S. 2011-2012.
- Project manager (DCE) for the 'Framework contract for services related to review of the Thematic Strategy on Air Pollution supporting air quality assessment and management'; Client: European Commission, DG Environment. 2011-2015.
- Technical assistance to the Environment Programme and Climate Change and Adaptation Initiative of the Mekong River Commission. Client: Mekong River Commission. 2011-2012.
- Project manager for the SINKS project: Documentation related to the Kyoto protocol art. 3.4. Client: Ministry of Climate end Energy, 2007-2008. Environmental expert. Thematic review of mainstreaming cross-cutting issues in Danida programmes. Client: Danida. 2007

- Environmental expert. Review of the Danish assistance to the Environment Programme in Egypt. Client: Danida. 2007.
- Project manager for evaluation in a Danish context of the thematic strategy on air pollution proposed by the EU Commission. Client: Ministry of Environment, Denmark. 2006
- Project manager and chief editor of the 'State of the Environment Report of Denmark, 2005'. Prepared by the National Environmental Research Institute on the behalf of the Danish Ministry of Environment. 2004-2005
- Project Manager for the Framework contract: State of the Environment Reporting (SOER2005) and indicator-related activities. Client: The European Environment Agency. 2004-2007.
- Environmental indicator development advisor to the Vietnamese Environmental Protection Agency, Ministry of Natural Resources and Environment under the project Environmental Information and Reporting supported by Danida. Client: Danida. 2003-2006. Module leader of the Integrated Project SENSOR (Sustainability Impact Assessment: Tools for Environmental, Social and Economic Effects of Multifunctional Land Use in European Regions). Leader of Module 5 entitled: Integrated data and indicator management. Client: DG Research. 2004-2008.
- Work package leader of the Integrated Project: NOMIRACLE (Novel Methods for Integrated Risk Assessment of Cumulative Stressors in the Environment). Leader of Work Package 1 entitled: Risk Scenarios, Client: DG Research, 2004-2008.
- Quality assurance on the 'Assistance to Institutional Strengthening of National Air Emission Inventories in Latvia'. Client: DANCEE, Denmark. 2003-2004.
- Project Manager for 'Review of the Danida support to the Mekong River Commission'. Environmental Planning and Management Expert and external consultant to Danida. Editor of reports and documents. Client: Danida. 2003 and 2006.

- External Expert in the evaluation of research applications for the Irish 'Environmental RDTI Programme 2000-2006 Phase 2'. Client: The Irish EPA. 2002.
- Environment expert and external consultant to Danida for a Danida Formulation Mission to Vietnam: 'Environmental Monitoring and Reporting system' under the DEA programme, May, 2001. Editor of reports and documents. Client: Danida. 2001.
- Project manager for the 'State of the Environment Report of Denmark, 2001'. Prepared by the National Environmental Research Institute on the behalf of the Danish Ministry of Environment and Energy. 1999-2002.
- Project Manager for 'Re-appraisal of the Basin Development Plan, Mekong River Commission'.
 Aquatic environment Expert and external consultant to Danida. Editor of reports and documents.
 Client: Danida. 2000-2001.
- Project Manager for 'Appraisal of the Basin Development Plan, Mekong River Commission'. Aquatic environment Expert and external consultant to Danida. Editor of reports and documents. Client: Danida. 2000.
- Aquatic Environment expert and external consultant to Danida at the Danida Mission to the Mekong River Commission, Cambodia: 'Strategy Mission for the Danida-Sida assistance to MRC, December 2-16, 1999'. Editor of reports and documents. Client: Danida, TSA6. 1999-2000.
- Member of the Steering Committee for 'AMOR Centre for Analyses, Models and Accounting' a
 Centre under the Strategic Environmental Research Programme focusing on developing methods
 and theories concerning sustainable development of the society. Client: Danish Strategic
 Environmental Research Programme. 1999-2001.
- Project manager for the Appraisal of the Proposal for Danida-AIT Cooperation (1999-2004).
 Ecological modelling and Coastal Zone Management Expert at the mission and editor of reports and documents (Programme Support Document and Appraisal Report). Client: Danida. 1999.

Name and address of employer

DCE-Danish Centre for Environment and Energy, Frederiksborgvej 399, 4000 Roskilde, Denmark

Dates

Occupation or position held

2008-2011

Mekong River Commission (MRC)

Chief Technical Advisor, Environment Programme

Main activities and responsibilities

Technical assistance, capacity building and strategy development within the fields of environment and climate change adaptation of the Mekong River Commission. On-the-job training of riparian staff. Member of staff selection and contract selection panels for other MRC programmes. Coordination with technical advisors from other MRC programmes and with external partners including development partners.

Selected relevant activities:

- Chief Technical Advisor for formulation and implementation of the Mekong River Commission Environment Programme, 2011-2015; Lao PDR 2010-2011.
- Chief Technical Advisor. Technical assistance to formulation and implementation of the Mekong River Commission Climate Change and Adaptation Initiative including logical framework analysis and programme monitoring. 2008-2011.
- Chief Technical Advisor, responsible for environment aspects of the "MRC review of the proposed Xayaburi Project", Mekong river, Lao PDR. 2010-2011.
- Chief Technical Advisor, "Transboundary Environmental Impact Assessment Guidelines", Mekong River Commission, Lao PDR. 2008-2011.
- Chief Technical Advisor, formulation of "Technical Guidelines for Procedures for Water Quality" Lao PDR, 2008-2011.
- Managing Editor. State of the Basin report for the Lower Mekong Basin. Mekong River Commission. 2010.
- Chief Technical Advisor, reviewing environmental aspects of the "Strategic environmental assessment of proposed mainstream dams in the Lower Mekong Basin", prepared by ICEM for the Mekong River Commission, Lao PDR. 2009-2010.
- Chief Technical Advisor, environment for the "Preliminary design guidance for proposed mainstream dams in the Lower Mekong Basin", 2009.

Name and address of employer

Mekong River Commission, Vientiane, Lao PDR

Dates

1986-1999

Occupation or position held

VKI - Institute for Water Environment

(formerly Water Quality Institute, since 2000 DHI Water Environment Health)
Head of Department (1997-1999)
Chief Engineer (1994-1997)
Senior Engineer (1991-1994)
Engineer (1986-1991)

Main activities and responsibilities

Management of the "Ecological Modelling Centre" and engaged in environmental impact assessment studies and compliance monitoring (ecological modelling) for the Øresund fixed link as well as in the feasibility studies of the Fehmern Belt link (water quality, oxygen and eutrophication modelling). Selected relevant projects:

- Project manager for the Appraisal of the Proposal for Danida-AIT Cooperation (1999-2004).
 Ecological modelling and Coastal Zone Management Expert at the mission and editor of reports and documents (Programme Support Document and Appraisal Report). Client: Danida, TSA6. 1999.
- Task manager for the water quality and ecological aspects of the study: Integral Study for the Environmental Remediation of Lake Maracaibo'. A water quality and eutrophication study accomplished to investigate the cause of the present biological conditions for the Lake and the potential of actions to improve the conditions. Client: Petrolo de Venezuela, S. A. (PDVSA). 1998-1999
- Project Manager for 'Development of an operational and validated assessment tool describing the
 fate and effects of pesticides in surface waters (rivers and ponds)'. The tool is part of a larger
 catchment modelling system to be used for risk assessment of new pesticides entering the market in
 Denmark. Client: Danish Environmental Protection Agency. 1998-1999.
- Task Manager for the assessment of impact on the water quality of the 'Macro EIA and Shoreline Management Plan for Sabah', Malaysia. An EIA and shoreline management plan for the north east coast of Borneo belonging to Sabah was undertaken in relation to tourism development by construction of islands outside the coast. Client: Government of Sabah, Malaysia. 1997-1998.
- Project Manager for 'Evaluation of the environmental impact of discharge of leachate from a
 Gypsum stack at the coast of Øresund, Sweden; evaluation of the consequences closing the depot
 within a 50 year time frame.' Client: Hydro Agri, Sweden. 1997-1998.
- Project Manager for simulation of the potential blocking of the oxygen flux from the Kattegat to the
 Baltic Sea as a result of the construction of a fixed link across Øresund between Denmark and
 Sweden. 3-D water quality modelling is performed to study the present flux of oxygen through
 Øresund, the changes caused by the physical structures under construction and the potential effects
 of compensation dredging. Client: Øresundskonsortiet, Denmark. 1996-1998.
- Task Manager for the water quality modelling of the project: Investigation of Marine Environmental Impact for a fixed Link across Fehmern Belt. Eutrophication modelling was accomplished in order to assess the potential impact of the permanent structure as well as the impact during the construction work from dredging and reclamation activities. Client: Danish Ministry of Traffic and German Ministry of Traffic. 1996-1998.
- Project Manager for the water quality part of the evaluation of a beach park at the Øresund coast
 just outside Copenhagen, Denmark. The evaluation concerned the area within the constructed
 Lagoons as well as the coastal beaches created with respect to bathing water quality and
 eutrophication. Client: The Danish Ministry of Traffic. 1996.
- Project Manager for investigating the water quality and biological effects of discharging waste water from the Swedish municipalities along the Øresund Coast. Client: The STW in Helsingborg, Höganäs and Landskrona, Malmö County and Øresund Water Board, Sweden. 1995-1996.

- Member of Expert Commission for the Analysis of the Aguas Argentinas S.A. Proposal for Modification of the Plan of Improvement and Extension of Service. Assessment of Water Supply and Sewage Master Plan for Buenos Aires, Argentina. Client: Ente Tripartito de Obras y Sanitarios (E.T.O.S.S.). 1996.
- Project manager for the ecological modelling in connection with an Environmental Impact
 Assessment and Feedback Monitoring for the Øresund Link. The activities include modelling of the
 effects of dredging spoils on the eelgrass vegetation during the four year construction period. Client:
 Øresundskonsortiet, 1994-1999.
- Project manager of an EEC training course in the fields of accidental pollution: "A Short course in analysis of accidental spills at sea". Client: The EEC, DG XI. 1992-1993.
- Project manager of the river water quality assessment part of the project "Water quality model of the Elbe River and German Bight". Client: The International Commission for Protection of the Elbe and financed by the EEC. 1992-1993.
- Task manager of the mathematical eutrophication modelling concerning a proposed connection across the Sound between Sweden and Denmark, 1990 and 1992. Clients: Danish Rail and Road Directorate and SVE¬DAB. 1991-1992.

Name and address of employer

VKI – Institute for Water Environment (now DHI Water, Environment, Health), Agern Alle 5, 2970 Hørsholm

Education and training

Dates

Title of qualification awarded

Title of qualification awarded

Principal subjects/occupational skills covered

1986

M.Sc. (Chemical engineer)

- Chemical engineering
- Mathematical modelling in chemical engineering
- Environmental chemistry
- Environmental modelling

Name and type of organisation providing education and training

Technical University of Denmark

Personal skills and competences

Mother tongue(s)
Other language(s)

Self-assessment

European level (*)

English German

Danish

	Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production				
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	
B1	Advanced user	B2	Advanced user	B2	Advanced user	B1	Advanced user	A2	Basic user	

(*) Common European Framework of Reference for Languages

Social skills and competences

Strong team-player in inter-disciplinary teams. Many years of experience as co-ordinator and project manager of several large research and consultancy projects in Denmark, Europe, South-East Asia and South America. Strong cross-cultural skills from extensive international experience including living abroad. Pleasant, consensus seeking and considerate.

International experience from: Argentina, Australia, Cambodia, Czech Republic, Ethiopia, Hong Kong, Israel, Italy, Japan, Kenya, Lao PDR, Lithuania, Malaysia, New Zealand, Poland, Spain, Slovakia, Taiwan, Thailand, Turkey, UK, Venezuela, and Vietnam.

Organisational skills and competences

More than 12 years of managing experience. About 9 years managing a research department (Department of policy analysis) including research strategy development, human resource management (50 people) and economic management. Three years managing a consulting company department (Ecological modelling centre) including promotion, fund raising, project acquisition, human resource management and economic management. More than 25 years of experience in project execution and management.

Appointed member of boards and panels:

Member of the advisory panel to the Danish Environmental Economics Council, 2007-2008.

Member of the Board of the Danish Space Research Programme, 2002-2004

Member of the Board of the Research Programme for Organic Farming, 2001-2008.

Member of the Board for Copenhagen Resource Institute, 2006-2008.

Technical skills and competences

Broad knowledge on environmental management, transboundary water management, environmental impact assessment, State of Environment and State of the Basin Reporting. In-depth knowledge on integrated environmental assessments and policy analysis including analysis of the societal sectors, transdisciplinary analysis of the society and development and use of indicators. The key qualifications include assessments of quality and ecology of marine and fresh water bodies including water quality and ecological modelling used as a part of environmental impact assessment studies and environmental management studies.

Educational skills Lecturer at the University of Copenhagen for graduate students in environmental chemistry. 1995-

External examiner at the University of Copenhagen, University of Aarhus and the Agricultural University for environmental chemistry students, 1994-2007

Member of the Steering Committee, FIVA - International Research School of Water Resources, 2002-2008.

Member of the Steering Committee, 3R - Residual resources research graduate programme, 2005-

Computer skills and competences

Extensive experience on water quality and ecological modelling for marine and fresh water systems. Proficient user of Microsoft office tools.

Selected Publications (In English)

- Bach H, Clausen TJ, Dang TT, Emerton L, Facon T, Hofer T, Lazarus K, Muziol C, Noble A, Schill P, Sisouvanh A, Wensley C and Whiting L (2011). From local watershed management to integrated river basin management at national and transboundary levels. Mekong River Commission, Lao PDR
- Helming, K.; Diehl, K.; Bach, H.; Dilly, O.; König, B.; Kuhlman, T.; Perez-Soba, M.; Sieber, S.; Tabbush, P.; Tscherning, K.; Wascher, D.; Wiggering, H. (2011): Ex ante impact assessment of policies affecting land use, Part A: analytical framework. - Ecology and Society 16 (1): Art. 27, 1-17.
- Bach, H. (Managing Editor) (2010). State of the Basin Report for the Lower Mekong Basin. Mekong River Commission, Vientiane, Lao PDR.
- Helming, K., Tscherning, K., König, B., Sieber, S., Wiggering, H., Kuhlman, T., Wascher, D., Perez-Soba, M., Smeets, P., Tabbush, P., Dilly, O.,, Hüttl, R. and Bach, H. (2008) Ex ante impact assessment of land use changes in European regions — the SENSOR approach. In: Katharina Helming, Marta Pérez-Soba and Paul Tabbush (Eds), Sustainability Impact Assessment of Land Use Changes. Springer Berlin Heidelberg.
- Thomsen, M., Knudsen, L. K., Vorkamp, K, Frederiksen, M., Bach, H., Bonefeld-Jorgensen, E.C., Rastogi, S., Fauser, P., Krongaard, T. and Borgen Sorensen, P. (2008). Conceptual framework for a Danish human biomonitoring program. Environmental 7 (Suppl 1):S3.
- Jensen, T.S., Kristensen, P., Klitgaard, K. & Bach, H. (2005); Methodological aspects of the environmental assessment of the budget in Denmark. - European Environment 15(1): 27-43.
- Bach, H., Christensen, N., Gudmundsson, H., Jensen, T.S. & Normander, B. (2006): State of the Environment in Denmark 2005, Illustrated summary. National Environmental Research Institute. - NERI Technical Report 550 (Illustrated summary): 22 pp.
- Bach, H. K., Niels Christensen, Peter Kristensen (Editors), 2001: The State of the Environment in Denmark. Report from the National Environmental Research Institute, Denmark.

- Bach, H.K., K. Jensen and J.E. Lyngby, 1997. Management of Marine Construction Works Using Ecological Modelling. Estuarine, Coastal and Shelf Sc. 44 (1997) pp. 3-14.
- Bach, H.K. and J.K. Jensen, 1994. Modelling of the water quality of a proposed impounded lake of a tidally influenced river. Ecological Modelling 74 (1994) pp. 77-90.
- Bach, H., 1993. A Dynamic Model Describing the Seasonal Variations in Growth and the Distribution of Eelgrass (Zostera marina L.) I. Model Theory. Ecological Modelling,65, pp. 31-50.
- Bach, H., A. Malmgren-Hansen & J. Birklund, 1992. Modelling of Eutrophication Effects on Coastal Ecosystems with Eelgrass as the Dominating Macrophyte. Science of the Total Environment, Supplement 1992.
- Nyholm, N., H. Bach, J. Birklund, T.L. Jensen, K.O. Kusk, O. Schleicher & H. Schrøder, 1991.
 Environmental Studies of a Marine Wastewater Discharge from a Sulphite Pulp Mill Examples of a General Study Approach for Marine Industrial Discharges. Wat. Sci. Tech., Vol. 23, 1991, p. 151, 1991.
- Warren, I.R. and H.K. Bach, 1992. MIKE 21: a modelling system for estuaries, coastal waters and seas. Environmental Software, 7 (1992) pp. 229-240.