

## Curriculum Vitae

<b>Name</b>	Torben Kristiansen
<b>Specialisation</b>	
<b>Nationality</b>	Danish
<b>Year of Birth</b>	1965
<b>Civil Status</b>	Married
<b>Children under 18</b>	2
<b>Education</b>	<p>M.Sc. Degree in Civil and Structural Engineering from the Technical University of Denmark, 1991, majoring in Sanitary Engineering.</p> <p>M.Sc. Thesis performed at Delft University of Technology, the Netherlands, 1991.</p> <p>Pimlico State High School, Townsville, Australia, 1984.</p> <p>Various post-graduate courses, including courses in Russian, Project Management, Quality Assurance, Personal skills, Tender Procedures &amp; Procurement, Logical Framework Approach, etc.</p>
<b>Years with the Firm</b>	Since 2008.
<b>Key Qualifications</b>	<p>Mr Torben Kristiansen is an experienced Project Manager and Head of Department of COWI's department for Solid Waste Management. Mr Kristiansen has documented successful experience in the management of large scale and long-term multi-disciplinary projects including the management of large contingents of expatriate and local staff. Specifically, Mr Kristiansen has vast experience in waste management – including hazardous/infectious waste and special waste products (WEEE, batteries, etc.), carbon trading projects, public private partnerships, waste information systems, environmental awareness and public consultations, sanitary engineering, water supply and environmental engineering based on several assignments abroad and in Denmark.</p> <p>He has been posted in Egypt for 1½ years and in South Africa for 4 years managing comprehensive large-budget health care waste management projects including development of policies, strategies, guidelines and drafting legislation as well as practical implementation of technical and training solutions with procurement, supervision and commissioning of treatment plants and waste handling equipment. Also, he has worked as the in-house carbon-trading specialist to the Danish Embassy in South Africa.</p> <p>Mr Kristiansen has been on several missions to South East Asia, Southern Africa and Central and Eastern Europe on assignments and project preparation mis-</p>

sions. Hence, he has substantial experience from several assignments in Europe (Russia, Ukraine, Belarus, Moldova, Latvia, Lithuania, Poland, Croatia, and Hungary), the Middle East (Egypt), Africa (South Africa, Swaziland and Namibia) and South East Asia (Malaysia and Thailand). He has planned and carried out several seminars for capacity building of South African, Egyptian, Malaysian, Russian, Polish, Romanian and Hungarian specialists.

<b>Language</b>	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>
Danish	Mother tongue	Mother tongue	Mother tongue
English	Excellent	Excellent	Excellent
German	Good	Excellent	Good
Russian	Good	Good	n/a
French	Fair	Good	n/a
Dutch/Afrikaans	Fair	Good	n/a
Arabic	Little	n/a	n/a

### **Memberships**

The Society of Danish Engineers, IDA

Committee for Sanitary Engineering

Member of the Technical Committee for the South African National Standards “SANS 452 Containers for the collection of sharp medical items used in health-care facilities” 2005-2007

Member of the Technical Committee for the Revision of South African National Standards “SANS 10248 Management of Health Care Waste” Revision 2006-7

Member of the Technical Committee for the South African National Standards “SANS 10248 Management of Health Care Waste” Revision 2002-3

### **Employment record**

<b>Period</b>	<b>Employer</b>	<b>Position</b>
2008 -	COWI A/S	Head of Department for Solid Waste Management
2007	Rambøll Danmark A/S	Chief Consultant in the department

		for Waste Management
2001 - 2004	Rambøll Danmark A/S	Secondment as Project Manager in the Gauteng Province, Johannesburg, South Africa
1999 - 2000	Rambøll Danmark A/S	Secondment as Project Manager in Cairo, Egypt
1996 - 1999	Rambøll Danmark A/S	Project Manager
1996	Rambøll Danmark A/S	Short-term secondment in Moldova
1991 - 1996	Rambøll Danmark A/S	Project Manager

#### **Selected Assignments**

**Denmark.** Project Manager for prefeasibility study for the establishment of a new 560,000 tonnes per annum waste-to-energy facility for the City of Copenhagen and 4 neighbouring municipalities to replace the existing 37 year old 400,000 tpa facility. The study includes detailed estimation of the waste design load, design calorific value, assessment of scenarios for waste diversion, assessment of alternative locations (heat sales, transport, traffic, planning issues, infrastructure issues etc.). The purpose of the assignment is to provide a solid decision making basis for the owners to decide to proceed with the procurement of a replacement facility, its capacity and location and overall plant configuration and design principles. Mr Kristiansen also participated in assessment of the future business strategies for financing, operation and ownership of the new plant. Client: Amagerforbrænding 2008.

**Denmark.** Project director for a greenhouse gas inventory assignment for the Municipality of Hvidovre. The assignment includes calculating the entire emission of greenhouse gasses from all fixed and mobile sources within the geographical boundaries of the municipality (heating, transport, consumption, land-use, lighting etc.). This includes the all activities including the municipalities own activities as well as the activities of residents, commerce and industries. Client: Municipality of Hvidovre 2008

**Denmark.** Project director for detailed recommendation for future integrated waste management system to be established in "Vores By" (Our Town), which is an integrated commercial/residential/cultural development on the area previously used by the Carlsberg Breweries in Valby, Copenhagen. Client: Carlsberg Breweries 2008

**Denmark.** Project Director for developing a Catalogue of Ideas for municipal solid waste management plants with a view to producing more relevant, operational and goal targeted waste management plants for the 2009-2012 planning cycle. The assignment including planning and conducting a facilitated workshop with the participation of 60 particularly invited leading waste managers. Client: Kommunernes Landsforening (Association of Danish Local Authorities)

**Poland.** Waste Incineration Specialist for the assessment of possible EC grant co-financing of up to 8 waste-to-energy facilities proposed in Poland. The assignment includes general waste-to-energy specialist support to the Jaspers staff/ European Investment Bank and includes assessment of feasibility reports, site visits and assessment of project concepts (energy recovery, energy sales, waste quality, site suitability, investment and operational costs etc.) The assignment includes assessment of operational structures and ownership as well as operational budgets. Plant capacities of the various plants are in the approximate range of 100,000 - 300,000 tonnes/year. Client: Jaspers/EIB 2008.

**Ireland.** Project Director for the establishment of a MRF (Material Recovery Facility) in Cork. The assignment is carried out in cooperation with the RPS Group. Client: The Cork City Council

**Romania.** Project director for the design and procurement of 8 bio-remediation plants and 5 sanitary landfills for oil-contaminated soils and materials throughout Romania for the oil company Petrom. Client: Petrom/OMV Group

**Denmark.** Development of a guideline for Danish municipalities for calculation of carbon footprint and carbon reductions for the NGO Danish Society for Nature Conservation in support of the national climate municipality initiative. Client: Danish Society for Nature Conservation, 2007 - 2008.

**Denmark.** Overall waste management planning assistance to Egedal Municipality to be provided via a long-term framework contract providing resources and waste management expertise to the municipality. Client: Egedal Municipality, 2007

**Denmark.** Development of carbon calculator and total carbon emission model for local authorities for the purpose of identifying priority carbon reduction initiatives for local authorities whilst allowing for benchmarking and comparison of the total carbon footprint of individual local authorities based on a recognised standard method. Client: In-house in consultation with relevant NGOs and organizations, 2007.

**Denmark.** Development of a prototype carbon and energy product declaration model for the Danish Council for Sustainable Business Development to be tested by leading Danish large international manufacturing industries. The model is intended to assist in the marketing of environmentally superior Danish brands by demonstrating the product's climate footprint and energy consumption compared to competing products. Client: Danish Council for Sustainable Business Development, 2007.

**United Kingdom.** Support to the development of an Outline Business Case (OBC) for the North London Waste Authority seeking implementation of several types of waste management infrastructure including Energy-from-Waste(EfW), Mechanical Biological treatment (MBT), transfer systems, recycling systems etc. The OBC will focus on attracting PFI credits for the residual waste treatment components of the Joint Waste Management Plan of the

seven boroughs. The assignment includes identification of sites and assessment of proposals by private developers. Client: North London Waste Authority, 2007.

**Ireland.** Technical expert for the Environmental Research, Technological Development and Innovation (ERTDI) Programme of the Irish Environmental Protection Agency for developing sustainable organic waste management and composting. The assignment reviews and considers Mechanical Biological Treatment (MBT) applied for the management of residual municipal solid waste in Ireland based on international and European experience. The assignments include review of flagship MBT plants, review of mass-balances, capital and operation costs, and environmental impacts compared to other residual waste technologies etc. Client: Irish Environmental Agency, 2006 - 2007

**Denmark.** Project Manager for the detailed review and forecasting of waste quantities suitable for energy-from-waste facilities being generated in all the municipalities in Denmark as well assessment of the supply of heat to current and available district heating markets receiving heat from EfW plants. The project critically reviews and forecasts the waste generation with the installed and projected EfW treatment capacity as well as the potential for co-incineration in coal-fired power plants and additional separation and utilisation of biodegradable waste for recovery or utilisation. Client: WasteDenmark/affaldDanmark (association of EfW facilities in Denmark), 2007.

**Denmark.** Detailed review and forecasting of waste quantities suitable for energy-from-waste facilities (approx. 20 tonne/hour) being generated in the municipalities located in the service area of the inter-municipal waste management company KARA-NOVEREN in central and western Sealand. Client: I/S KARA-NOVEREN, 2007

**South Africa.** International Waste Management expert for the drafting and finalisation of the South African National Waste Management Bill. The Final Draft of the Waste Bill is presented to Parliament mid 2007 for finalisation with a view to promulgating the Waste Bill in the end of 2007 or early 2008. Input includes technical review and assessment of the current draft, providing of best international experience in waste legislation from Denmark and the EU. The assignment includes a number of missions to Pretoria. Client: Department of Environmental Affairs and Tourism, 2007.

**Denmark.** Editor of the Danish waste management magazine Ren Viden ([www.renviden.dk](http://www.renviden.dk)), which is a print magazine published four times annually to a group of 3500 waste management specialists in the Danish waste management industry, including local governments, waste management companies, transporters, national departments, environmental organisations, NGOs, consultants and interested individuals. Client: Department of Environmental Affairs, 2006 - 2007.

**International.** Contributing author to the Hazardous Waste Section, as well as the sections on waste avoidance, special wastes and products (WEEE, batteries etc.) of the quarterly magazine International Waste News (International Af-

faldsnyt) distributed electronically to the Scandinavian waste management industry at <http://www.affaldsinfo.dk/>

Client: Waste Centre Denmark (Videncenter for Affald), 2005-2007.

**Denmark.** Assessment of current Waste-to-energy treatment capacity vs. forecasting of quantities of waste for incineration and power and heat generation in Eastern Denmark (Sjælland & Lolland-Falster) based on detailed modelling and forecasting using annual historical data from the ISAG waste reporting system and the forecast model FAF based on historical waste data and economic indicators of the Ministry of Economic Affairs. The assessment includes assessment of local district heating markets. Client: I/S Amagerforbrænding and I/S Vestforbrænding, 2006 - 2007.

**Ireland.** Development of a public private partnership model for the integrated waste management for the 6 counties of the South East Region of Ireland. The assignment includes all the steps from the revision of the South East Region Waste Management Plan via PPP assessment, risk assessment, public sector benchmarking, market soundings among possible bidders and preparation of the bidding process and bidding documents until award of contract. The project comprises a 150,000 tonnes per year energy from waste facility, composting and materials recycling facilities as well as transfer stations and other support structures. Client: Fehily Timony Rambøll Joint Venture for the South East Region, 2005-2007.

**Norway.** Assessment of possible cost of treatment of waste by Energy from Waste Facility in Kristiansand based on likely available alternatives in Norway and Scandinavia. Client: Agder Energi, 2006.

**United Kingdom.** Project Engineer for the development of Outline Business Case for Lincolnshire Energy for Waste facility. Client: Lincolnshire County, 2006-2007.

**United Kingdom.** Preparation of technical, environmental and financial description of Energy-from-Waste based on power production only as well as district heating for a private British developer in the UK. Client: Private UK Property Developer, 2006.

**South Africa.** Health Care Waste Management Specialist to the South African Department of Environmental Affairs and Tourism for the Health Care Waste Component of the project "Implementation of the National Waste Management Strategy". With an input of 8 person-months over 2 years. Mr. Kristiansen is responsible for developing national policy and strategy for healthcare waste management, drafting HCRW Management Codes for the South African Bureaux of Standards, drafting of input for new legislation on emission from incinerators and management of HCRW in general, development of minimum technical specifications and procurement guidelines as well as support and monitor the implementation of pilot projects for 1) management of HCW in rural and remote areas as well as 2) piloting system for servicing minor generators of healthcare risk waste. The assignment is conducted in cooperation with a dedicated DEAT Officer and a group of South African HCW Specialists. Work

included liaison with the Waste Information System component for the purpose of defining the WIS requirements for health care waste. Client: South African Department of Environmental Affairs and Tourism, 2005-2006.

**Vietnam/Denmark.** Organiser of a Study Tour for a delegation of environmental managers from Vietnam. The Study Tour focused on i) land planning and zoning, ii) environmental management systems, iii) integrated waste management and iv) cleaner production and management of putrescible waste from the fish industry. Client: SIDA / Ramböll Natura, 2004-2005.

**South Africa.** South African Project Manager for assistance to DANIDA in developing a Cleaner Development Mechanism methane gas extraction programme for a large South African landfill with a view to sale of carbon credits to the Danish Government and/or Danish industry. Programme includes actual pump tests, landfill gas modelling, and verification of carbon reduction potential with the Designated National Authority up to the preparation for final Emission Reduction Purchase Agreement. Client: DANIDA (Danish International Development Assistance), 2004-2005.

**South Africa.** In-house part-time Carbon Trading specialist to the Royal Danish Embassy to South Africa. Functions include supporting the RDE in developing carbon trading projects under the Kyoto Protocol both in terms of project identification and project development as well as assistance with the day-to-day management of the carbon trading portfolio of the RDE, which includes supporting the building of capacity in carbon trading projects both internally at the RDE and within various sectors in South Africa. Client: DANIDA (Royal Danish Embassy to Pretoria), 2004-2005.

**South Africa.** Posted full time as Chief Technical Advisor/Project Manager for a comprehensive health care waste management initiative by the Gauteng Provincial Government. The project involved i) preparation of provincial health care waste management guidelines, ii) development of HCW management policy, strategy and action plans, iii) design and programming of a HCW Information System to be legislated, iv) conduction of a series of full scale pilot projects for HCW management at health institutions involving service providers also, v) development of provincial technical specifications and tender documents for the service of collecting and treatment HCW generated at provincial hospitals and clinics, vi) development of training and capacity building programmes for the implementation of Provincial Strategy and Action Plan and the improved HCW management system at the health institutions and vii) drafting and supporting implementation of Waste Information Reporting and Health Care Waste Management Regulations promulgated September 2004. A complete internet based Waste Information and Reporting system was designed, developed, tested and implemented for use by HCRW treatment plant operators and generators. Mr. Kristiansen has been full time posted in Johannesburg from April 2001 until January 2005. Since June 2004 the CTA post has been part-time to allow time for other assignments in South Africa. Client: Gauteng Dept. Agriculture, Conservation and Environment/DANIDA, 2001-2004.

**South Africa.** Project Manager to the joint project on assessment of the South African potential for utilisation of landfill gas for energy purposes as well as carbon trading. A joint proposal between Lombard de Mattos and Associates (SA) and Rambøll was accepted by the Department of Minerals and Energy. The project involves a detailed landfill gas resources survey based on existing contacts, questionnaires and visits to selected medium to large scale landfills followed by presentation of findings at national workshops convened at several nodes in South Africa. Client: Lombard de Mattos & Associates via CaBEERE project at Department of Minerals and Energy, 2004.

**South Africa.** Market Development Consultant to a Danish Incinerators Manufacturer for the purpose of investigating the feasibility of cooperation with manufacturers in Southern Africa with a view to increasing the market share in the Region and the Far East. Client: ENVIKRAFT A/S, 2004.

**South Africa.** Assistance to South African Black Economic Empowerment consultancy company for the development of Regional Waste Management Plans for the Districts of Vhembe and Sekhukhune in the Limpopo Province. Client: Basiza Waste Solutions /Limpopo Provincial Government, 2004.

**Poland.** Assisting Project Manager for the Establishment of an Inter-municipal Solid Waste Management Utility for a group of seven municipalities in the District of Będzin. The Project includes transitionally forming of the utility, setting of Articles of Association including transition to joint ownership/operation of one sanitary landfill as well as planning for investment in more advanced recycling and waste treatment technologies. Client: Danish Environmental Protection Agency/District of Będzin, 2001.

**South Africa.** Mission to Johannesburg in the preparation of a bid for the Gauteng Health Care Risk Waste Management Project. The mission included meetings with several government and provincial agencies as well as inspection of hospitals and facilities for health care waste treatment and HCW service providers. Client: In-house, 2000.

**Egypt.** Posted 18 months in Cairo as project manager for a DKK 25 mill health care waste management project including installation of incinerators, procurement of health care waste handling equipment, training of staff, including hands-on instruction in wards. Also, the project includes development of a national health care waste management strategy for the Ministry of Health and Ministry of Environment. Part of the project was to support and put in place an organisation and operational procedures for the daily operation of 2 medical waste incinerators treating 300 kg/hour, including running in of plant, dosing of chemicals etc. Client: Danida/Cairo University Hospital/Min. of Health/Min. of Environment, 1999-2000.

**Namibia.** Waste Management Specialist for the Erongo Integrated Coastal Zone Management Project. Mr. Kristiansen was responsible for a 2 month on-site input, comprising: i) waste survey, ii) promotion of regional solutions and common codes of practice, iii) survey of hazardous waste and infectious waste including hospital audits, iv) conduction of workshops, and v) development of



recommendations for improved management of solid wastes in the Erongo Region. Client: Danced/Erongo Regional Council/Ministry of Environment and Tourism, 1998-1999.

**Ukraine.** Solid Waste Management and Waste Incineration Specialist for a one-week mission to assess the feasibility of revamping an existing waste incineration plant and construction of a green field solid waste incineration plant in Kiev. Client: The Danish Energy Agency, 1999.

**South Africa.** Two-week on-site assistance to the compilation of an overall national solid waste management strategy for the Republic of South Africa based on a number of sector strategies for various types and management principles for solid waste. Client: DANCED/Dept. of Water Affairs and Forestry/Dept. of Environment and Tourism, 1998.

**Malaysia.** Waste Management Specialist for the project “Wood Processing in West Malaysia”. Mr Kristiansen drafted a national guideline on wood waste management and conducted a survey and elaborated options for improved management of wood waste from saw mills, veneer/plywood, furniture industry, MDF and particle board industries, with a view to recycle the wood waste resource or to introduce energy recovery. Client: DANCED/Forest Research Institute of Malaysia, 1996-1998.

**Thailand.** In-house project preparation mission for an urban solid waste management project for Bangkok, including site visits at the city’s composting plant and landfills. Also visits were paid to selected waste collection utilities, including inspection of waste collection in various residential and commercial areas. Client: In-house, 1998.

**People’s Republic of China/Southeast Asia.** Home office specialist for preparation of a WB Decision Makers Guide on Incineration of Solid Waste for use in China and South East Asia. Client: World Bank, 1998.

**Poland.** Technical and financial audit of two projects carried out in Kielce, Poland, with the support of DEPA. The projects are: i) Waste Planning and Mapping in Kielce County” and “Planning and Mapping of Health Care Waste in Kielce County”. Client: Danish Environmental Protection Agency, Denmark, 1997.

**Russia.** Project Manager for assistance to ECAT Kaliningrad in developing short-term solutions for hazardous waste in Kaliningrad Region. Solutions are developed for: i) PCB containing oils, ii) un-used pesticides, iii) galvanic waste, iv) strong acids and bases, and v) health care risk waste. Also, the project includes improved data management and record keeping for hazardous waste. Client: Environmental Centre for Administration and Technology (ECAT) in Kaliningrad, Russia, 1997.

**Russia.** Assistance to the European Bank for Reconstruction and Development (EBRD) for defining the framework for establishing an EBRD loan partially financing the revamping of an municipal solid waste incineration plant in Mos-

cow. The project is carried out under the co-ordination of Allplan GmbH. Client: Allplan GmbH, Austria, 1997.

**Russia.** Assistance to the Home Rule of Greenland in developing the waste management strategy for the settlements in Greenland. Client: Department of Environment, Home Rule of Greenland, 1997.

**South Africa.** Responsible for a one week pre-bid mission to Pretoria/Johannesburg for development of an integrated national waste management strategy including municipal solid waste, industrial waste, hazardous waste, hospital waste, mining waste etc. Client: In-house, 1997.

**Moldova.** Posted for 3 months in Chisinau as Resident Project Manager and responsible for project co-ordination, EIA and institutional strengthening of Regia Apa Canal for improvement of the water supply, treatment and distribution as well as sewerage sludge management. Tender documents and a plan for financial and institutional strengthening of Regia Apa Canal is prepared for the EBRD including evaluation and restating of current accounts in accordance with International Accounting Standards. Client: Danish Environmental Protection Agency/EBRD, 1996-1997.

**Russia.** Project Manager for the Hazardous and Industrial Waste Management Study in Smolensk Region. The Study includes waste registrations, computerised waste database, seminars on Cleaner Technology, Hazardous Waste Master Plan, design of intermediate storage and implementation of pilot treatment plant. Client: Danish Environmental Protection Agency, 1996.

**Malaysia.** Positioned in Malaysia for 3 weeks for the Melacca River Rehabilitation Project for elaboration of project documents and tender documents for improvement of sewerage systems, industrial effluents, ambient monitoring system and a river enhancement programme. Client: DANCED, Government of Malaysia, 1996.

**Malta.** Review of a waste management plan for Malta in co-operation with the Dutch Consultants Grontmij. Mr. Kristiansen was responsible for the financial analysis of the alternatives, including estimates of investments, operation and income for composting, incineration, sanitary landfill, transfer station and the collection system. Client: Government of Malta, Environment Protection Department, 1996.

**Belarus.** Responsible for a pre-bid fact finding mission to Minsk, Grodno, Vitebsk and Brest for assessment and improvement of the water supply and sanitation in the latter three cities. Client: In-house, 1996.

**Denmark.** Responsible for development of proposal for the overall handling of solid waste to be generated during construction and operation of the new suburb Ørestaden of Copenhagen. Ørestaden involves construction of 3.1 million square meters of combined offices, services and housing during the period of 1997-2038. Client: Ørestadsselskabet, 1996.

**Malaysia.** In charge of a 10 day fact finding mission to Malaysia for the project Environmental Improvements in the Wood Processing Enterprises at Peninsular Malaysia. Client: In-house, 1996.

**Latvia.** Faculty member on Waste Incineration Technology for the WHO Waste Management Course held in Riga presenting lectures on waste incineration technology and municipal waste management systems. The seminar was attended by approximately 50 regional and municipal waste management specialists from the Baltic countries including Estonia, Latvia, Lithuania, Kaliningrad (Russia) and Poland. Client: World Health Organisation, Regional Office for Europe, 1995.

**Malaysia.** Pre-bid fact finding mission to Kuala Lumpur and Melacca for a DANCED River Rehabilitation Project. The fact finding included establishment of data on sewerage, industrial effluents, current status of the river and the institutional set-up as well as establishment of agreements with local consultants and institutes. Client: In-house, 1995.

**Hungary.** Combined energy and waste management study for the city of Győr. RAMBØLL carried out a detailed waste master plan with special emphasis on hospital waste management and control of hazardous waste. Client: Danish Environmental Protection Agency (DEPA), 1994-1995.

**Romania/Denmark.** Responsible for planning, lecturing and conducting of a one-week practical environmental seminar in Denmark for a group of 7 Romanian environmental experts of the Ministry of Environment and the Provincial Environmental Protection Agencies. The seminar consisted of both class room lectures, visits to Danish authorities and on-site inspection of facilities for treatment of hospital, hazardous and solid waste. Client: EC PHARE/Ministry of Environment, Romania, 1995.

**Croatia.** Financial analysis of waste management scenarios prepared for development of an integrated waste management strategy and investment plan for the Istria and Kvarner regions. The area has 500,000 inhabitants for an area of 5,150 km<sup>2</sup>. The study included all types of non-hazardous and hazardous waste and sludge, comparison of alternatives, investment plans and environmental impact assessment. Client: European Investment Bank/Office of the Adriatic – Rijeka, 1995.

**Bosnia.** Home office support for planning, monitoring and supervision of demolition of war damaged buildings in the centre of Mostar. The project included registration, tendering, contract management and supervision of work. Client: EU Administration of Mostar, 1995.

**Bosnia.** Project manager for design of a sanitary landfill of 20 ha. including a leachate treatment plant and recultivation of an existing city dump of the city of Kaliningrad. Additionally, the project included managerial and financial aspects as well as institutional building for an integrated waste management system. Client: Danish Environmental Protection Agency (DEPA), 1995-1997.

**Russia.** Assistance in evaluation of a Russian draft project for extension of an existing dump in the Solnechnogorsk district prepared by the institute Mosvodakanalniiprojekt in Moscow. The study included on-site inspection of Danish sanitary landfills and comparison with Danish landfill technology. Client: Ecotechprom, Department of Communal Service, City of Moscow, 1994.

**Russia.** Project manager for preliminary design of the first sanitary landfill including a leachate treatment plant according to western European standards for parts of Moscow City and the Moscow Region. The first five sections are planned to cover a total of 17 ha. Client: Danish Environmental Protection Agency (DEPA), 1994-1996.

**Denmark.** Project manager for the second phase of a research and development study on co-treatment of residues from air pollution control at waste incinerators. Elute tests of dry and semi-dry residues using process water from the wet flue gas cleaning method was carried out by the Danish Water Quality Institute, while RAMBØLL was responsible for the reporting and conclusions. Client: Danish Environmental Protection Agency (DEPA), 1994-1995.

**Europe.** Project engineer on the development of an environmental impact assessment (EIA) model for islands in the European Union. The model will form basis for assessing alternative waste management systems, including the local priorities in environmental protection and occupational health. Client: European Union, DG XI, 1994.

**Poland.** Presentation of international waste management systems and methods of inter-municipal waste management corporations at a seminar organised by the Union of Municipalities, Brwinov. Client: Danish Environmental Protection Agency (DEPA), 1994.

**Romania.** Preparation of papers for a training course in Romania on solid waste management for environmental offices in the municipal, regional and national administration. Client: Ministry of Waters, Forests and Environmental Protection / PHARE, 1994.

**Denmark.** Preparation of a planning permission for the sanitary landfill Sten-gaarden. Client: County of Roskilde, 1994.

**Denmark.** Assessment and comparison of the Danish national waste registration and monitoring system for waste (ISAG) with the European Waste Catalogue (EWC) and the defined monitoring method. The study analyses the possibilities for introducing a harmonised waste registration system within the European Union. Client: Danish Environmental Protection Agency (DEPA), 1994.

**Denmark.** Responsible for an environmental seminar for decision makers of the City of Samara. The seminar included waste management, waste treatment techniques, the Danish Environmental Protection Act, etc. Clients: The City of Samara and JV Prima, 1994.

**Russia.** Project manager for elaboration of a comprehensive analysis of a priority investment programme for the City of Moscow. The European Bank for Reconstruction & Development is proposed to finance the programme. The analysis comprised i) Revamping of the existing incineration plant ii) A sanitary landfill and iii) Eight transfer stations. The study included detailed financial and economic analyses, institutional development and tendering and procurement procedures. Client: Danish Environmental Protection Agency (DEPA), 1994.

**Portugal.** Preparation of an urban solid waste management plan with detailed technical and financial description of incineration and composting technologies. Client: Investimentos E Participações Empresarias S.A., 1994.

**Russia.** Localisation, design and construction of a common sanitary landfill for parts of Moscow City and the Moscow Region in connection with the Moscow Sanitary Landfill Project. The project includes elaboration of an appropriate co-operation model for the involved parties. Client: Danish Environmental Protection Agency (DEPA), 1993-1995.

**Hungary.** Municipal solid waste study in Pest County and the Budapest region. The study included elaboration of a future strategy and action plan for MSW, including a feasibility study of incineration, collection of hazardous waste and applicable management systems for Budapest Agglomeration, cities and villages in the County. Client: Danish Environmental Protection Agency (DEPA), 1993-1994.

**Russia.** Demonstration project in Kaliningrad for transfer of Danish know-how of waste treatment. This included: Planning of comprehensive solid waste management systems for collection, transport, treatment and disposal of solid waste. Client: Danish Environmental Protection Agency (DEPA), 1992-1993.

**Denmark.** Research and development project concerning the possibilities for co-treatment of residues from advanced flue gas cleaning system (wet scrubber, dry or semi-dry). Key aspects: process engineering, chemical and energy balances. Client: Danish Environmental Protection Agency (DEPA), 1992.

**Russia.** Evaluation of present strategy and determination of appropriate options for future collection, transportation, treatment and disposal of domestic solid waste in connection with the Moscow Solid Waste Study. The study included appropriate options for management and financing of domestic solid waste services. Client: European Bank for Reconstruction and Development, 1992.

**Poland.** Localisation, preliminary investigations, environmental measures, detailed design and construction of a sanitary landfill meeting European standards to be build in the City of Poznan. Client: Danish Environmental Protection Agency (DEPA), 1992-1993.

**Malta.** Solid waste study in the Republic of Malta. Consultancy services included: Data collection on the existing waste management system, and a model for the future structure, waste minimisation and source separation. Sludge mana-

gement: Elaboration of a concept for waste oil and sea ballast. Environmental impact assessment of the proposed waste management system. Client: European Investment Bank, 1992.

## Publications

- 2000- Several papers published at various international conferences regarding the management of Health Care Waste, Energy from Waste Facilities and Cleaner Development Mechanism projects, incl. the following international conferences:
- CIWM 2006 (Paignton, UK, June 2006): Small Scale Energy from Waste Plants: Case Study from Denmark
- CIWM Northern Ireland (Ballymena, May 2006): Presentation of Energy from Waste Facilities at Regional CIWM Conference
- WasteCon2006 (Cape Town, South Africa, September 2006): 1 Paper: Development of a Health Care Risk Waste Management Policy for South Africa
- WasteCon2002 (Durban, South Africa, October 2002): 1 paper: Sustainable Management of Health Care Risk Waste: Modelling of Management Scenarios
- 1st Int'l Sustainable Health Care Waste Conference (Johannesburg 2003): 4 papers
- International Federation for Environmental Health Conference (Durban, South Africa, 2004): 1 paper
- WasteCon2004 (Sun City, South Africa, October 2004): 2 papers
- Institute of Municipal Engineers Conference (Mossel Bay, South Africa, 2004): 1 paper
- Botswana International Waste Conference (Francistown 2003): 1 paper
- 1996 J. Haukohl, T. Kristiansen: "Waste Incineration", Published by WHO Regional Office for Europe in Russian, Estonian, Lithuanian and English.
- 1995 J.Haukohl, T. Kristiansen: "The Danish Experience in Waste-to-energy Plants", Waste Management & Recycling International, March 1995, Sterling Publications Ltd.
- 1992 M.Bruun, T.Kristiansen: "Assessment of Combined Sewer Overflow Reduction Techniques", Novatech 92. International conference on innovative technologies in the domain of urban storm water drainage, Lyon, France.

1991 M.Bruun, T.Kristiansen, "The Effects of Combined Sewer Overflow Reduction Techniques in Three Dutch Urban Areas, Delft University of Technology, June 1991