

CURRICULUM VITAE

Proposed position in assignment:

1. **Family name: Saajoranta**
2. **First names: Hannu Juha**
3. **Date of birth: 21.03.1956**
4. **Nationality: Finnish**
5. **Civil status: Married**
6. **Education: M.Sc (Env.)**

<i>Institution</i>	
<i>Date: from (month / year):</i> <i>to (month / year):</i>	1.9.1976 15.4.1983
<i>Degree(s) or Diploma(s) obtained:</i>	M.Sc (ENV.)
<i>Institution</i>	University of Jyväskylä
<i>Date: from (month / year):</i> <i>to (month / year):</i>	
<i>Degree(s) or Diploma(s) obtained:</i>	

7. **Language skills:** (Mark 1 to 5 for competence, 5 being the highest)

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
Finnish	5	5	5
English	5	4	4
Swedish	4	4	4
German	4	3	3
Bahasa (Malaysia)	1	3	1

8. **Membership of professional bodies: Finnish Waste Management Society**
9. **Other skills (e.g. computer literacy, etc.): Office, GPS skills**
10. **Present position: Managing Director**
11. **Years within the firm: Seven**
12. **Key qualifications (relevant to the programme): Waste Management, specially treatment of organic wastes, sludge management**
13. **Specific Eastern European and CIS experience:**

<i>Country</i>	<i>Date: from (month / year) to (month / year)</i>
Russia	1.2012/11.2012
Estonia	4.2011/2.2012
Russia	10.2009/2.2010

14. **Professional Experience Record:**

<i>Date: from (month / year) to (month / year)</i>	12.6.2009/present position
<i>Location:</i>	Finland
<i>Company:</i>	JS-Enviro Oy
<i>Position:</i>	Managing Director
<i>Description:</i>	Owner of JS-Enviro Oy, a consultancy company, project manager, senior adviser. Major part of projects are consists of treatment of organic waste fractions; large scale composting,

	anaerobic treatment or even production of ethanol by using organic waste fractions

<i>Date: from (month / year) to (month / year)</i>	2.2007/3.2009
<i>Location:</i>	Finland
<i>Company:</i>	Envistone Oy
<i>Position:</i>	Managing Director
<i>Description:</i>	Development of nitrogen removal techniques from municipal and industrial waste waters, sales and marketing, administrative tasks related to position as a managing director

<i>Date: from (month / year) to (month / year)</i>	1.2004/2.2007
<i>Location:</i>	Finland
<i>Company:</i>	Ramboll Finland
<i>Position:</i>	Branch office manager, project manager
<i>Description:</i>	Projects related to waste management, specially related to organic waste fractions, development of waste management businesses, administrative tasks related to position as head of office.

<i>Date: from (month / year) to (month / year)</i>	11.1996/1.2004
<i>Location:</i>	Finland
<i>Company:</i>	Etelä-Karjalan Jätehuolto Oy (South Carelia Waste Management Ltd)
<i>Position:</i>	Managing Director
<i>Description:</i>	Building up a new regional waste management plant for company mentioned above and owned by 12 municipalities. Project included application of all necessary permits, purchase of land areas (120 hectares) for the plant, general and detailed planning of the operations, all necessary competitive biddings, building up a new landfill site, drainage systems, composting plant (34 500 tonnes of organic waste/a), treatment site for contaminated soils, storage for hazardous wastes, separation site for solid waste, start-up of the plant at the beginning of 2002 and economically successful running of the company for two years.

<i>Date: from (month / year) to (month / year)</i>	9.1898/11.1996
<i>Location:</i>	Finland
<i>Company:</i>	Vapo Oy Biotech
<i>Position:</i>	Development Manager, Sales Manager
<i>Description:</i>	Vapo Oy Biotech, in above mentioned time period, owned by a state- owned energy company Vapo Oy. Juha Saajoranta's responsibilities were development of selected business lines, which were treatment of organic waste, odour control techniques, and waste gasification. Later on, as a sales manager, Juha Saajoranta was responsible of sales and marketing of tunnel composting plants using techniques obtained from Dutch company VAM.

<i>Date: from (month / year) to (month / year)</i>	2.1986/9.1898
<i>Location:</i>	Batang Berjuntai, Malaysia
<i>Company:</i>	Peat Tech Malaysia (Sdn.Bhd), Subsidiary of Vapo Oy).
<i>Position:</i>	Production Manager
<i>Description:</i>	Juha Saajoranta was responsible of pilot project using

	Malaysian peat (tana gambut) as a growing media for vegetable farms in Central Malaysia. At the same time he was responsible of developing Vapo Oy's pilot scale energy projects in Northern Sumatra and Kalimantan.
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<i>Date: from (month / year) to (month / year)</i>	3.1983/2.1986
<i>Location:</i>	Finland
<i>Company:</i>	Vapo Oy
<i>Position:</i>	Technical assistant/project development
<i>Description:</i>	Numerous consultancy projects in the Far East (Malaysia, Indonesia), Canada, Ireland, Sweden and USA. Purpose of these projects was to analyse possibilities for horticultural or fuel peat production. Work consisted of field studies on bog areas as well as quality evaluation of peat and feasibility studies.

15. Selected reference projects

<i>Date from-to</i>	<i>Location</i>	<i>Position</i>	<i>Client/Description</i>
4.2015/1 1.2015	Forssa, SW Finland	Senior adviser	Loimi-Hämeen Jätehuolto Oy; Analysis and assessment of environmental risks in relation to change in ownership of a municipality owned waste management company in SW Finland.
5.2014/1 2.2014	Eura, SW Finland	Project Manager	Prefeasibility and feasibility studies regarding build – to – be composting plant for organic waste fractions in Satakierto Oy, South –Western Finland
1.12012/ 11.2012	Suonenjoki, Eastern Finland	Project Manager	Preparation of documents for competitive bidding of design of new WWTP in Suonenjoki town, realization of competitive bidding process and control of the design work
1.2012/1 1.2012	Leningrad region, SW Russia	Team Leader	Finnish Ministry on the Environment/NEFCO. Development of Technology for Modernization of Manure Processing Lines including detailing Plans and Machinery. Preparation of complete Packages of Project Documents for three Livestock Farms in the Leningrad Region. Work also included preparation of Tender Documents for Budgetary Competitive Bidding of Manure Inceneration Plant. Documents were prepared according to FIDIC Yellow Book.
3.2010/5 .2011	Finland	Project Manager	St1 Oy (fuel company) and municipality owned waste management companies Turun Seudun Jätehuolto Oy, Loimi-Hämeen Jätehuolto Oy, Rouskis Oy, Rosk'nRoll Oy, Itä-Uudenmaan Jätehuolto Oy: Prefeasibility and feasibility studies for a bioethanol plant using biowaste as source material. Task included reviews of source materials, calculations of transportation costs as well as feasibility studies regarding the whole production scheme.
4.2011/2 .2012	Tarto, Estonia	Senior Adviser	City of Tarto/Keskkonnaprojekt As: Senior adviser for construction of gas collection system in Aardlapalu landfill. Task has involved collaboration with local authorities as well as with main contractor and subcontractor responsible for construction of gas collection network.
1.2010/4 .2010	Lohja, Finland	Project Manager	Rosk'nRoll Oy, Prefeasibility study for sludge management in Munkkaa waste management site in Lohja, Technical and economical comparison of anaerobic treatment of sludge and lime stabilization techniques .

<i>Date from-to</i>	<i>Location</i>	<i>Position</i>	<i>Client/Description</i>
10.2009/ 2.2010	SW Russia	Consultant	Technical Concept for Chicken Manure Plant for ZAO Roskar Chicken Farm, prefeasibility study, comparison of possible treatment techniques (combustion, anaerobic treatment, aerobic treatment) for chicken manure in ZAO Roskar Chicken farm. Project was financed by Nefco and its aim was to improve effective and environmental use of manure in St. Petersburg region and thus improve environmental conditions in the Baltic Sea. Writer for part "Aerobic treatment (composting) of chicken manure." Finland
3.2006/6 .2006	Seinäjäki, Finland	Consultant	Lakeuden Etappi Oy (Ltd) Seinäjoki, Inspection plan for waste reclamation of waste fractions utilised as energy source, inspection of quantity of the waste components utilised in energy production and analysis of economical aspects of waste incineration at the Lakeuden Etappi Oy's area of operation
2.2006/1 .2007	Lohja, Finland	Project manger	Rosk'n Roll, Planning of waste treatment centre in Munkkaa, planning of new gas collecting system for present landfill site and improvement planning of the previous gas collection system. In order to get extra capacity, the solutions of supportive structures between the present and previous filling area were designed. By identification of future filling area's use, the terms under what differently classified waste components can be placed, were clarified. Planning in question contained inspection of the above-mentioned terms; water management system plans and plans for isolation compartments between the waste components. Planning also included the realization of sand trap treatment and additional clarification on affects that extension area will have on nature were prepared.
2004/20 06	Turku SW Finland	Competitive bid management consultant	Turku Regional Purification Plant Ltd. The aim of the task was to choose contractor for sludge treatment implementation as an overall service. Service included establishment of a procurement unit, deciding the procurement procedures, defining the service and running the competitive bidding according to prevailing legislation. Project was completed at the end of 2006.
3.2004/4 .2005	Consultant	Kouvola Finland	Kymenlaakso Waste Management Ltd: Competitive bidding of composting of sewage sludge in Kotka, Hamina, Kouvola and Anjalankoski municipalities as an overall service. Project comprehended also operative planning of composting procedure.
11.1996/ 1.2004	Lappeenranta ,SW Finland	Managing Director	South Karelia Regional Solid Waste Management Ltd, -Establishment of the regional waste management company. Task included registration of the company, negotiations with shareholders, creation of the business plan and other institutional matters (1997-2002). -Recruiting the employees to the waste management centre (1997-2002). -Planning of the functional matters of the regional waste treatment centre, identification of the investment projects and investment calculations. -Implementation plan of the environmental impact assessments of the regional waste treatment centre (1996-1997). -Organization of a competitive bidding for

<i>Date from-to</i>	<i>Location</i>	<i>Position</i>	<i>Client/Description</i>
			<p>implementation of environmental impact assessment in the regional waste treatment centre (1997).</p> <ul style="list-style-type: none"> -Supervision of implementation of the environmental impact assessment of the regional waste treatment centre (1997-1998). -Application of the environmental licence to the regional waste treatment centre -General plan for waste treatment centres' infrastructure, receivment and handling procedures of the waste (1997-2002). -Management of waste centre's water management system planning and construction consultation, including drainage and equalizing ponds, pumping plants and monitoring wells in the area (1999-2000). -Planning management and construction management consultation for waste treatment centre's roads (1999-2000). -Planning of the waste dump for common waste to the construction plan level (1999-2000). -Organization of competitive bidding for earthwork contract in the common waste dump (2000) -Organization of competitive bidding for foundation engineering solutions for common waste (2000). -Supervision of foundation construction in the waste dump for common waste (2001). -Supervision of implementation of the waste dump for common waste (2002). -Planning management of the waste dump, which is planned for implementation and placement of contaminated soils, up to the construction plan level. (2000). -Organization of competitive bidding of earthwork contract in contaminated soil dump (2000). -Organization of competitive bidding on ground construction method in contaminated soil dump (2000). -Supervision of ground work in contaminated soil dump (2001). -Supervision of implementation of the contaminated soil dump (2001). -Organization of competitive bidding on acquisition of machinery equipment, needed in daily operations on dump sites (2001). -Organization of competitive bidding for composting plant (capacity 34 500 tn/a) to be built in the waste treatment centre (2000). -Construction management consultation for composting plant in waste treatment centre (2000). -Supervision of implementation of the composting plant (2002). -Planning management and construction management consultation of reception functions to the full state of readiness (2000-2002). -Organization of reception and recycling recyclable waste components (2001-2002). -Organisation of reception and further felivery of hazardous waste (2001-2002). -Planning management and construction management

<i>Date from-to</i>	<i>Location</i>	<i>Position</i>	<i>Client/Description</i>
			<p>consultation of waste treatment centre's premises (office, weighing station social premises etc.) and storage spaces (2002-2003).</p> <p>-Planning of sorting directions performed in South Karelia and giving information to the local inhabitants (136 000 people), companies and institutions (2001-2004).</p> <p>-Design of information strategy to the South Karelia (2001). - Managing the functional operations of South Karelia's Regional Solid Waste Management Ltd. as general manager in 1996-2004.</p>

Certification:

I, the undersigned, certify that to the best of my knowledge, these data correctly describe me, my qualifications and my experience.

<u>Juha Saajoranta</u>		<u>29.2.2016</u>
Name of expert	Signature	Date

<u>Juha Saajoranta</u>		<u>29.2.2016</u>
Name of authorised representative of the firm	Signature	Date