CURRICULUM VITAE

YAMANOUCHI, Noboru (Nobby)

Family Name: Yamanouchi

Given Name: Noboru

Date of Birth: 16 August 1950

Birth Place: Shanghai, People's Republic of China

Nationality: Japan

Language: Japanese, English

Background: Business Development (Not an engineer)

Profession: EnMS-Doc Associates

Energy management system (EnMS) specialist

 Sustainable Business Development in the field of Energy and Environmental Management

 Consultant: Energy Management System conforming to the ISO50001 standard

• EnMS "Guidebook & template in one" author for the EnMS related documentation in line with the ISO 50001 standard

• Coordination of EnMS related business development.

Translation (Japanese⇔English) on EnMS related subjects

Domicile: 2-7, Shirokane Minato-ku, Tokyo, Japan

Address: #1104-10777 University Dr., Surrey, B.C. V3T 0E6 Canada

Position statement:

Objective

- 1. To promote sustainable business development, in the context of "Climate Change" and "Corporate Social Responsibility".
- 2. To pursue profit gain for energy users by improving their energy performance.
- 3. To provide information and consultancy to energy users in order to benefitting from operation with effective and efficient energy and

- environmental management system (EnMS and EMS).
- 4. To become an official practitioner for the International Standard, Energy Management System, "ISO50001".
- 5. Create ISO50001 Class EnMS related documents to be used by energy users to implement competent EnMS operation.
- 6. Develop network to enhance EnMS activities and documentation through www.enms-doc.com.
- 7. To introduce EnMS related products and services to energy users on opportunistic basis.

Strategic direction

- Continue our effort in promoting ISO 50001 class EnMS implementation in Southeast Asia (Singapore, Malaysia, Indonesia, Sri Lanka, etc.)
- (2) Place attention in China and Japan being far ahead on ISO 14001 and ISO 9001 certification but very slow on ISO 50001.
- (3) Keep close eyes on the growth mode demonstrated by African countries and how sustainability approach to be blended into the growth.
- (4) Learn from Germany how EnMS, other sustainability related activities and incentive program resulting in a strong ISO 50001 certification situation.
- (5) Learn from US SEP program initiative in verifying energy performance improvement in line with the ISO 50001 standard.

Current Activities

2010 - Current

EnMS-Doc Associates Operation Principal



- Consulting activities to build up ISO 50001 Class Energy Management operation for energy user organisation.
- Develop and establish ISO 50001 Class documentation for energy user organisation for the EnMS operation.
- Consulting activities to implement energy monitoring system, procedure and saving verification practice best suited for energy user organisation EnMS operation
- Development of partnership to practice energy management expertise with energy user organisation.
- EnMS "Guidebook & template in one" author for the EnMS related documentation in line with the ISO 50001 standard.
- Business enhancement <u>www.enms-doc.com</u> website operation.

Business partners

- * TEAM (Energy Auditing Agency Ltd., UK) www.teamenergy.com
 - Energy Service partner in Japan, Malaysia, Canada and U.S.A.

- EeSolution Engineering, Malaysia
- www.enms-doc.com/my

ISO 50001 Self-Declaration Malaysia

- Business partner in Malaysia
- Siri Exergy And Carbon advisory Services (P) Ltd., India
 - Business partner in India
- Antris Management Solution, Singapore www.enms-doc.com/Antris
 - Business partner in Singapore

Recent Accomplishment

- (1) Composition of "Energy Manager Training" course syllabus for the training organiser European Copper Institute
- (2) Implementation of 3-day ISO 50001 Class EnMS Workshop for the purpose of EnMS Champion candidates (participants) to lead their organisation to achieve energy performance improvement by running effective EnMS operation.
 - Workshop #2 Kuala Lumpur, Malaysia (7-9 May 2013)
 - Workshop #1 Singapore (23-25 April 2013)
 - Workshop #1 Kuala Lumpur, Malaysia (25-27 September 2012)
- (3) Formation of Initial league of ISO 50001 Self-Declaration energy user union in Malaysia. (October-2012)

 Energy Users League of
- (4) Create EnMS-Doc version of TEAM's wiki50001, Paperless EnMS Operation & Documentation under the collaboration of TEAM.
 - Japanese version (<u>www.enms-doc-jp.wiki50001</u>)
 - Asia-Pacific version (www.enms-doc-ap.wiki50001)
- (5) Official translation (Japanese to English) of "RENKEI Control Guidebook" commissioned by Green IT Promotional Council (GIPC) of its secretariat at Japan Electronics and Information Technologies Association (JEITA). (July-2012)
 - http://www.jeita.or.jp/english/public/data/RENKEI Control.pdf
- (6) Development and establishment of ISO 50001 Class EnMS Audit scorecard system in line with Superior Energy Performance program supported by the U.S. Council for Energy-Efficient Manufacturing (U.S. CEEM) .(April-2012)
- (7) Establishment of ISO 50001 Class 12 key management documents (including EnMS Charter) ready to be adapted by energy user organisation. (English and Japanese, July-2011)
- (8) Introduction of EnMS-Doc Associates web site: www.enms-doc.com (June 2011)

Experience in the Field of Energy Management

Coordinate to contract and deliver following Energy related consulting services to the first class designated factories under the Energy Conservation Act in Japan:

ENERGY AUDIT

- Rubber Industry Tire Plant in Miyazaki (2008- 2009)
- Ham Processing & Packing Plant in Miyazaki (2008)
- Chemical Plant in Fukui (2008)
- Beverage & Bottling Plant in Fukuoka (2008)
- Beverage & Bottling Plant in Gunma (2007)
- Shochu Distillery Plant in Kagoshima (2006- 2009)
- Airline Engine Factory in Chiba (2004)
- Heavy Machine Transmission Factory in Fukui(2004)
- Manhole Forging Plant in Hyogo (2004)
- Plastic Pipe & Tube Mfg. Factory in Saga(2004)
- Beverage & Bottling Plant in Miyazaki (2003)
- LCD Factory in Kobe (2003)
- Aluminum Recycling Plant in Hyogo (2002)
- Electronics Factory in Saga (2002)
- Plastic Molding Factory in Shiga(2002)

IMPLEMENTATION OF ENERGY MANAGEMENT SYSTEM

- Shochu Distillery Plant in Kagoshima (2006-2009)
- Beverage & Bottling Plant in Miyazaki (2004)

Coordinate to contract and deliver following Energy related consulting services to the first class designated factories under the Energy Conservation Act in Thailand:

ENERGY AUDIT

- Automotive Engine & Assembly Plant in Ayutthaya (2000-2001)
- Knitting Factory in Bangkok (2000-2001)
- Automotive Plant in Lad Krabang-Bangkok (2000-2001)
- Sugar & Sweetener Plant in Samutprakan (2000-2001)
- Dyeing Factory in Lumpini Pathumwan-Bangkok (2000)
- Dairy Product Factory in Bangkok (1999-2000)
- Packaged HVAC Unit Plant in Lad Krabang-Bangkok (1999-2000)
- Synthetic Fiber Plant in Bangkok (1999-2000)

- Flat Glass Plant in Samutprakan (1999-2000)
- Float Glass Plant in ChonBuri (1999-2000)
- Textile Mills in Nakorn Pathom (1999-2000)
- Textile Mills in Samutprakan (1999-2000)
- Textile Plant in Samutprakan (1999-2000)
- Automotive Plant in Pathumthani (1999)
- Semiconductor Factory in Pathumthani (1999)
- Medical Supply Factory in Sena, Ayutthaya (1999-2000)
- Automotive Battery Plant in Samutprakan (1998, 2001)
- Synthetic Fiber Plant in Nava Nakorn (1998)
- Aluminum Profile and Frame Plant in Nava Nakorn (1998, 2001)
- Food Processing Plant in Kamphaeng Phet (1998-1999)
- Food Processing Plant in Phra Pradaeng (1998-1999)
- Textile Mills in Samutprakan (1998-1999)
- Textile Mills in Nava Nakorn (1998)

IMPLEMENTATION OF ENERGY MANAGEMENT SYSTEM

- Medical Supply Factory in Sena, Ayutthaya (2000-2001)
- Sugar & Sweetener Plant in Samutprakan (2000-2001)
- Automotive Battery Plant in Samutprakan (1998-2002)
- Textile Mills in Nakorn Pathom (2000-2002)
- Food Processing Plant in Kamphaeng Phet (1999-2001)
- Textile Mills in Samutprakan (1999-2001)
- Textile Mills in Samutprakan (1999-2001)
- Textile Mills in Nava Nakorn (1999-2002)
- Aluminum Profile and Frame Plant in Nava Nakorn (1998)

IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT SYSTEM

- Aluminum Profile and Frame Plant in Nava Nakorn (2000-2001)
- Sugar & Sweetener Plant in Samutprakan (2000-2001)

Feasibility Study of Lean Manufacturing integration into the Energy Management operation Conduct a feasibility study under the corporation of aircraft manufacturing to integrate "Lean Manufacturing" and "Energy Management" operation for an evaluation of optimum performance efficiency

- Plant in Everett, Wa. (2003)
- Plant in Renton, Wa. (2003)

Plant in Portland, Or. (2003)

Experience in the Field of Computer System Validation /Part 11-ERES

IMPLEMENTATION OF Computer System Validation/Part 11-ERES

- On eCTD-Global Three Region (Japan-U.S.A.-Germany) Documentation System for Pharmaceutical company headquarter in Tokyo, Japan
- On Computer System Inventory Management for Pharmaceutical company, Tokyo, Japan.

Control System Research & Marketing Effort

Study work in the Japan Electronics & Information Technology Association (JEITA)

 Team Leader of Working Group #1 undertaking in the study group on Energy Efficiency Control Technology for Climate Change, organised under the Control Systems Committee organized under the Industry Equipment and Social System Board

Promote multi organisation collaboration effort to enhance Energy Management Business throughout Industrial sectors

Electrical company, FA System Div./ Control company marketing
 Collaboration in seeking synergy affect to gain enhanced user satisfaction.

Energy Management Training Effort

Provide lectures on the following occasions with main theme "21th Century Energy Management Approach responding to Climate Change and its Economics Impact (Business opportunity)"

- "EMS Seminar" for Iron Works factory, Chiba (Mar., 2009)
- "EMS Seminar" Electronic Plant, Kagoshima-Sendai (Mar., 2009)
- "User Meeting" for control equipment distributors (Feb., 2009)
- azbil Group Nagoya EMS Seminar (Nov., 2008)
- azbil Group Shizuoka EMS Seminar (Oct., 2008)
- azbil Group Hokuriku EMS Seminar (Sep., 2008)
- Miyazaki Environmental Management Study Assn. "EMS Seminar" (Sep., 2008)
- "User Meeting" for control equipment distributors (May, 2008)

Facility Management Operation

<u>Provide the facility management operation on behalf of municipal government</u>

Community Center, Tokyo-Sumida City (Apr.-Jun., 2009)

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<u>Provide the Business Continuity facility management operation for Banking</u> Facility

• U.S. Investment Bank in Roppongi Hills premises (Jul., 2009.-Aug., 2010)

Energy Conservation Drive for 81 units Apartment Building Common Area

Lead the energy conservation drive for 81 units apartment house common area, as the chairman of management operation committee of the apartment house (Baseline annual kWh usage: 250,000 kWh)

6 Story-Condominium Apartment Shirokane (Aug. 2002.-Jul., 2007)

Minato-Ku, Tokyo

Achievements:

5-year cumulative kWh savings: 181,300 kWh

5-year cumulative cost savings: 5,555,000 JPY (approx. 62,000 CAD)

5-year cumulative Co2 emission reduction: 100 ton-CO2

Employment Record	2009-2010	YAMATAKE CORPORATION Facility Mar	Tokyo, Japan nagement Operation	
	2006-2009	YAMATAKE CORPORATION Tokyo, Japan Business Development Manager, Carbon Business Solution Marketing Dept., Advanced Automation Company		
	2005-2006		ORATION Tokyo, Japan buter System Validation and Part-11 eware Division, Advanced Automation	
	2004	YAMATAKE CORPORATION Consultant, Environmental & E Business Unit, Automation Ass Division, Advanced Automation	set Management	
	2002-2004	YAMATAKE CORPORATION Senior Manager, Business Development Center	Tokyo, Japan opment, Environmental	
	1998-2002	Yamanouchi-Wouter Limited		
		Contract with Energy Consulting Co. in Thailand Director, Business Development		
	1997-1998	Yamanouchi-Wouter Limited		
		Contract project with Consulting Engineering Co. Bangkok Liaison Office Director, Business Development		
	Organise the firm to be registered as an Energy Consultant under			

- Organise the firm to be registered as an Energy Consultant under ENCON Act B.E. 2535 with DEDP, the Ministry of Science Technology and Environment of the Royal Thai Government.
- Act as key role to communicate with management of Japanese transplants in Thailand to assure the result of the consulting work.

1996-1997 Yamanouchi-Wouter Limited Brussels, Belgium

Contract project with Consulting Engineering Co.

Europe Representative Office
Acting Director

- Develop network in Europe.
- Identify opportunities to do business with European companies trying to set foot in Japan.
- Develop the name value of the company in Europe.

1986-1995 Yamatake-Honeywell Co., Ltd. Brussels, Belgium
Europe Japan Relations Office
Manager

- Co-ordinate the business between Honeywell Europe and Yamatake.
- Develop market for Yamatake in Europe.
- Develop market for Honeywell Europe in Japan.
- Establish Supply Chain procedure between Japan and Europe.
- Pursue the projects in Europe under the finance of Japanese Yen.

1983-1986 Honeywell Asia Pacific Inc. Singapore Manager, Control Products, Asia Pacific

- Marketing the Honeywell control products Asia Pacific region.
- Promote Yamatake products in Asia Pacific region.
- Develop the communication channel in the region for the firm.

1974- 1983 Yamatake-Honeywell Co., Ltd. Tokyo, Japan Control Products Div., Marketing Dept. Manager

- Co-ordinate the business between Honeywell and Yamatake in the field of Control Products.
- Marketing of Flame Safeguard product line.
- 2-year assignment (1980-1981) to Honeywell Europe to promote Yamatake products.

Education

1969-1973

Bowdoin College, Brunswick Maine, USA BA, Liberal Arts - Mathematics.

Other curriculum

- ISO 14001:2004 Lead Auditor Training, Cert. No 14084, TUV USA (2010)
- ISO14000 internal auditor training by the certified senior auditor of Yamatake Industrial System Co., Ltd. (2002)
- Energy Management Workshop conducted for staff of Energy Consulting
 Co. in Thailand (1999)
- Act as auditee with Energy Consulting Co. in Thailand on ISO9001 certification (1999)
- Energy Management System Training by Dr. Z. Morvay, Director, ENCONET International Limited (1998)
- Business Management Course for Middle Managers organised by Honeywell Europe S.A. (1989-1990)
- International Business Course for Managers organized by Yamatake-Honeywell Co., Ltd. (1985)

Personal assessment and interests

- Benefiting from the professional career in global business development activities, I can communicate extensively with any level of people in organisation with different cultural background.
- I take pride in and lifework position in the field of Energy Management as I strongly believe it is one of the most important elements in tackling the "climate change" while pursuing business "growth".
- Uniqueness and base of my success in the field of Energy Management is that I put a lot of emphasis on the strength of people as well as pursuing the importance of technical aspect.
- I respect opinions of others, and listening is my strength.
- I practice PDCA (Plan-Do-Check-Action), and never shy away from issues that may exist during the operation.
- Physical and mental health is the top priority in my agenda.

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10/10 16th June 2013