

Future center for energy sector of Ostrobothnia! A smart choice towards organizational and societal innovative improvement through proactive leadership

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Abstract

The study presents an attempt to offer a feasibility cum analytical review aimed to suggest the establishment of future center at the Ostrobothnia region for energy sector's support. The study is formulized on the basis of the method of community need assignment as well as the support of the concept of emotional intelligence. The results of the research analysis confirmed the potential of establishing of the `Energy Future Center` for the sector's uplift as well as sustainability.

1. Introduction

The current research paper is a feasibility cum analytical review aimed to investigate following research dimensions:

- Worth of supporting a proposal on the establishment of `Energy Future Center` for Energy Sector of Ostrobothnia, a region located in Western Finland.
- Ways to achieve attention of small and large scale energy companies to initiate a two way communication process.

To obtain the above research objectives, the author tries to highlight and justify the location of Ostrobothnia as a suitable venue for the establishment of innovative Future Center(s). The fact behind selecting the referred region is its vital resources [i.e., long term industrial history of the area, existing infra-structure, communicational facilities and the presence of the majority stakeholders (i.e., Companies, researchers, funding and regulatory authorities) confirming the area to be the best choice. The paper further throws light on the process of `need assessment` of the Ostrobothnia Energy companies. The core idea is to find out the ways to initiate a healthy `Communication Process` on the basis of `contextual intelligence and emotional intelligence` to make the message more strong and appealing for the target population. Later, the concepts, relevance, and significance of `Future centers`, with regards to the European as well as Ostrobothnia locations will be highlighted on the logical ground. In the end, a list of the energy sector companies located in Ostrobothnia, with regards to their size and nature of operations are placed. The final stage of the paper helped in arriving at the list of challenges or the areas of interests` for the Ostrobothnia Companies to build a strong base for initiating a healthy mutual communicational process.

2. Ostrobothnia Region and Energy Sector

The region of `Ostrobothnia` identified as a historically significant region situated in western Finland. It is considered most picturesque western coast. This region holds great potential, due to having strong energy sector infrastructural.

2.1 Strong spread of energy industry

According to the estimated projected figures, there are more than 120 businesses in the Ostrobothnia region that operate as energy technology subcontractor. Furthermore, these energy sector companies are operating with an approximated total of 12,000 as their work force, and are contributing to the national economy through a remarkable turnover of around 7.5 billion euros.

2.2 Research Opportunities in Ostrobothnia Region

The Area is well served through the strong network of Universities, training centers and research institutes. University of Vaasa, VAMK, University of Applied Sciences, Hanken, Vaasa Energy Institute are few prominent names to start with.

2.3 Attractive communicational facilities

In addition to above, the Ostrobothnia region is recognized as one of the most convenient Nordic destination, due to having the Sea openings well supported by the modern `Sea Port(s)` as well as a well-equipped Airport, offering the best connections for not only the domestic but for the international travelers and cargo facility as well.

The above are just the few features, quite enough to justify the City of Vaasa or the Ostrobothnia region's significance in the field of energy sector, to prove the Ostrobothnia region as the largest center of excellence in the field of energy technology, among the Nordic countries.

3. Need to propose an innovative choice for sustainable development of Ostrobothnia energy sector

The Energy sector of Ostrobothnia comprises of approximately 120 companies. The issues and needs vary from company to company, mainly on the basis of;

- a) Size and scale,
- b) the nature and operations of the energy company.

Henceforth, to attract the energy sector enterprises and to make them communicate their requirements and expectations for the formation of future centers, the initial step must be to undergo a detailed need assessment, while segregating them according to their size (Big companies or small scale companies), scope or operational basis.

3.1 To involve the `energy companies of Ostrobothnia`

3.1.1 Community need assessment`

Community needs assessment is a strategic chain linking process, combining one step with the next to arrive at the final outcome. The steps involved here are:

- a) `Collection of needs related information`,
- b) `Involving the target community (through Surveys, interviews, formal and informal discussion sessions` etc.)
- c) Designing a `focused action`,
- d) With the final targeted of `community improvement`.

The main aim of `community needs assessment` is to reveal the strengths and weaknesses (needs) within a community (Berkowitz, 1982). Then the responsibility of the `Community leaders, local regulatory or governance to setups, the community advocacy groups either individually or as collectively to design and develop or further revolutionize a policy in accordance with the identified need for the community improvement (Burton, & Merrill, 1991). There are various `CAN` Processes, however the most relevant one, in accordance with our targeted field, (i.e., finding ways to attract and involve the Energy enterprises of Ostrobothnia region) is as follows, to comprehend the flow of action:

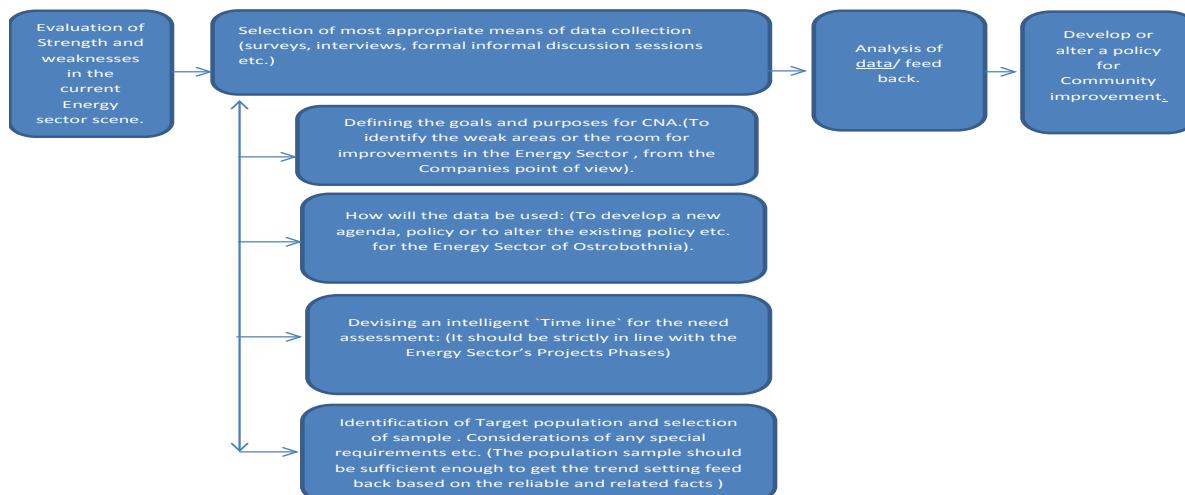


Figure.1 showing the most relevant process of community need assessment in line with the key research area

3.1.2. Incorporating `Contextual Intelligence` and `Emotional Intelligence`, as the key elements of Proactive leadership to support the Communication Process

The process of communication is the most basis requirement to initiate any mutual action between 2 or more individuals or groups. However, the basic communication model of s `Message` being sent to a `Receiver` by the `Sender` through some `medium` gets highly comprehensible, meaningful, action oriented and the source of achieving the targeted goal, if we include the most logical elements of `context` and `emotionality` in the communication process. Now, its important to briefly understand the two concepts to establish relevance with respect to the core research investigation. This will help in `finding the way to involve the `Energy Companies of Ostrobothnia` to share their needs and issues concerning their operations for further suggesting the establishment of facility like `Future Center` for their community`s improvement and sustainable development.

3.1.2.1 Contextual Intelligence

Joseph S. Nye, Jr.,(2011) defined Contextual intelligence as an `intuitive diagnostic skill` that facilitates and support a leader to match up the best suited `tactics` with the `aims` for intelligent designing of the innovative ways to cope with the new environments and settings. Contextual intelligence is a key factor for the `Reformers and leaders` to alter their working style and strategies in accordance with the environmental as well as the followers` needs and aspirations. Contextual intelligence works wonders in terms of attracting the attention of the `target Audiences` if well supported by emotional intelligence. Intelligentsia revealed that the absence of sensitivity towards others` needs on the basis of empathy, even a smart and lean cognitive analysis and extensive experiences may prove insufficient and useless.

Hence forth, the intellectually smart and powerful leaders and regulatory authorities operate in innumerable contexts i.e., the knowledge base of the relevant culture, distribution of power resources, followers` needs and demands, time and space, in addition to the relevant information flows to reach and achieve even the unattainable goals.

A modern innovative miracle of `Future Center` got its basis on `Contextual Intelligence` in the following way:

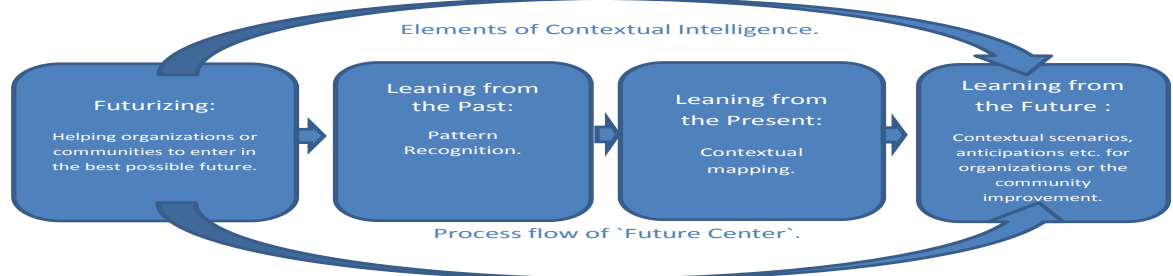


Figure 2. Revealing the comparability between `Contextual intelligence` and the core theme of processes in the `Future Centers`

3.1.2.2 Sectoral need assessment and emotional intelligence

According to Van Rooy and Viswesvaran, (2004,) EI can be understood as “a collection of abilities (verbal and non-verbal) that enhance the comprehension level of a person to recognize, generate, express, understand, and evaluate not only ones own but of the others` emotions so to support the process of thinking and initiate actions successfully in accordance with the environmental needs and pressures”. The basic ingredients of EI i.e., empathy, self-confidence, and self-awareness are the core underpinnings of visionary leadership (Boyatzis, McKee, 2002). Henceforth, Emotional Intelligence will support the development as well as Communication process of the `idea` of `Suggesting `Future Centers` for Energy Sector Enterprises situated at Ostrobothnia Region`, in terms of the stakeholders needs Assessment through the elements like, Empathy, Self-awareness, Interests, Comfort level etc (Neuber, K., et al. (1980).

Henceforth, following is the communication process flow chat to explain what the Communication process we are targeting in the current scenario. Basically, what we expect as the most suitable means to arrive at, is the following communicational flow to target our goal through two ingredients of proactive leadership i.e., Contextual Intelligence and Emotional Intelligence (Goleman, 1995. 1998, Goleman. Boyatzis, & McKee, 2002. 2002. Kazmi, Kinnunen, 2012. Kazmi, & Naaranoja, 2015).

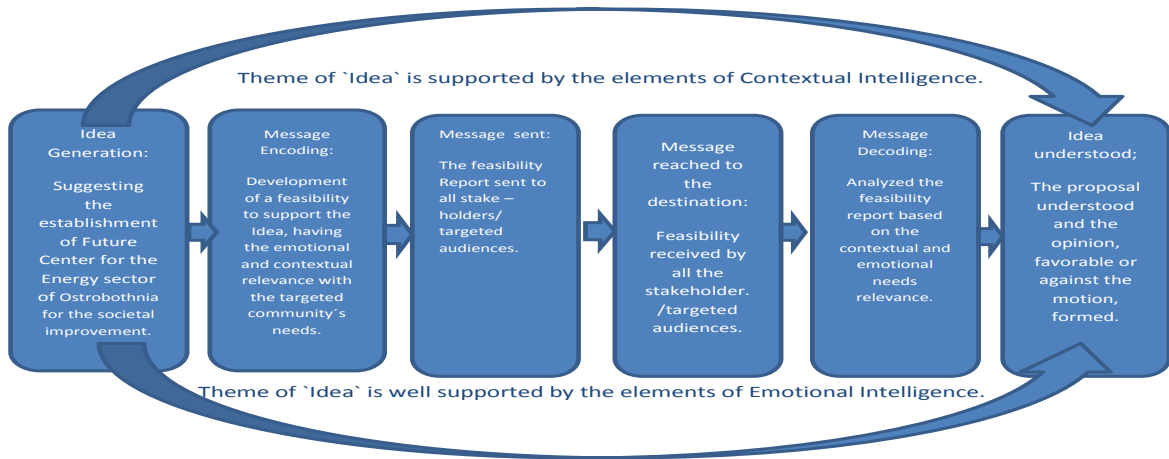


Figure.3 showing the flow of communication in line with the elements of Proactive leadership

Concept of `Future center` is another breakthrough in the field of management, introduced by Japanese management researchers and experts (Kelley & Littman 2005. Love, 1998, Neuber, K., et al. 1980, Tid, 2001). The facility is defined as `Technology enhanced work spaces (i.e., physical as well as virtual) to provide solutions for the needs of not only the individuals or groups but work for the overall community's improvement and success, beyond limits and through the most innovative way(s) (Hauschildt, 1997. Hurley, & Hult, 1998).

3.2. Work pattern of Future Centers

The concept can well be apprehended through the following figure:

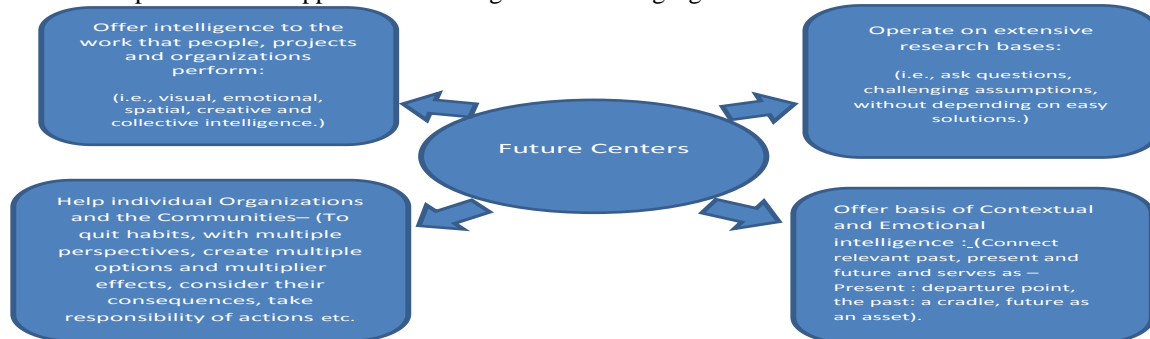


Figure.4 reveals the work pattern of Future centers.

3.4 `Future center` for Ostrobothnia Energy Sector

Here the aims of the study are as follows:

- 1) To investigate the suitability and profitability of suggesting `Energy Future Center` for Energy Sector of Ostrobothnia,
- 2) To formulate the most suitable strategy or to devise one by combine various to `achieve the attraction and then involvement of the Energy Companies of the Ostrobothnia,
- 3) To analyze if there are special areas or needs bases to be countered or caped for the smooth operations of the `feasibility study` or the Project till its Finalization.

As the name suggests, `Future centers` are introduced as special work settings or environments (physical or Virtual), dully supported by the most modern communicational, collaborative as well as technical facilities for people, organizations or the whole community, to come out from their formal and strict routines, to investigate the best alternatives for their problems, through multiple perspectives, to select the best suited and effective problem solution or approach to move forward with maximum success level (Hauschildt, 1997. Hurley, & Hult, 1998. Iansiti, M., (1993). The concept of `Future Centers` emerged as one of the most innovative trends in the form of `Knowledge Cities`. Smart leaders and innovators of today are busy in transforming purposefully their localities or environments in to `Knowledge Cities` to harness and refine the knowledge base of their followers and users for sustainable development and excellence (Kamien, & Schwartz.1982. Kazmi, Kinnunen , 2012, Kazmi, & Naaranoja, 2015, kazmi, 2016. Kazmi, Takala, & Naaranoja, 2015, Kazmi, Naaranoja, & Kytola 2015). The main features of `Futures Centers` can be comprehended through the following flow chart:

Basic Features of Future Center

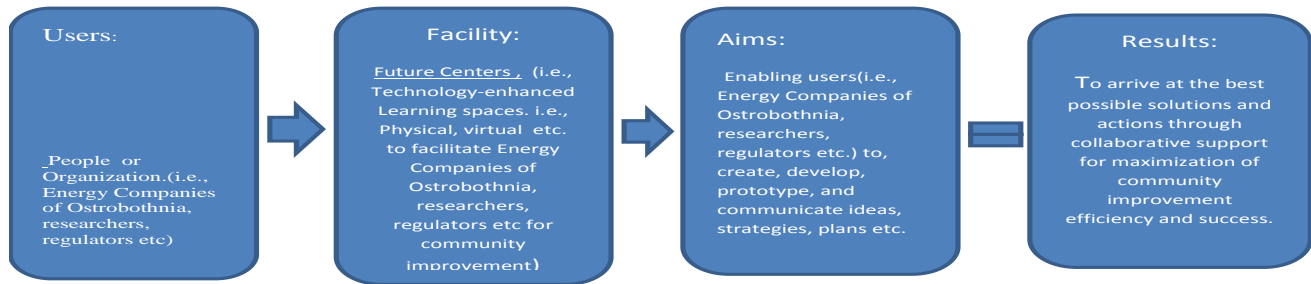


Figure 5. Showing the most basic purpose of the `Future Centers`.

3.3. Future Centers’ reality in European scene

- Currently there are over 30 Future centers across Europe, though know by different names (Mind Labs, Innovation labs, Creativity Centers etc.)
- Future centers facilitating the 04 ministries in Netherlands,
- Future centers facilitating the 03 ministries in the UK and Denmark,
- Open Futures project of European Commission’s is actively involved with the growth and support of Future Centers.
- In private scene, new Future Centers are gaining popularity,
- Skandia Future Center is a leader in the European Future centers history.

Henceforth, this innovative creation is unstoppable now due to the unmatched advantages it offers.

3.5 Perspectives of `Future Centers` and their relevance for Energy sector of Ostrobothnia

Following are the perspectives associated with the concept of `Future Centers` that can work best to attract the energy sector of Ostrobothnia for not only the sustainable development and growth but to promise a system for developing a sense of positive competition among them in addition to provide opportunities to achieve the level of global market leadership through innovation.

3.5.1 Futuristic` approach towards individuals (researchers, reformers, regulators etc.) and the Organizations (managements, market competition, innovations, situations, as well as the global intelligence etc.), henceforth, the Energy Companies of Ostrobothnia can find the innovative solutions to their needs and problems, enhance their knowledge base, through latest researches in the field, and quick connections in terms of latest trends in Outsourcing, contracting and subcontracting, global energy partnerships, joint ventures through to adapt latest advancements in the fields of Energy technology and product and services development etc.

3.5.2 Physical space: Energy sector of Ostrobothnia can take the advantage of reality based physical facility to achieve the advantage of actually and practically joining the forces for wider out reach of each other’s potential, resources and knowledgebase.

3.5.3. Technologies: Since the Energy Future Center of is `platform for similar field (i.e., Energy Sector) so the similar technological support and advancement will combine all the stake holders.

3..5.4.Methodologies: The Future centers will broaden the vision of their users (Energy Companies of Ostrobothnia) to take advantage of understanding various methodologies being used in different companies, new approaches to handle the issues on the basis of smart ways (e.g., Lean, just in time, resilient management etc.).

4. Prominent Energy Companies of Ostrobothnia:

Sr.No.	Name of the Company	Field of operations in Energy Sector	Contextual and Emotional Stimulators.	Scales of Business.
1	ABB Oy	Products and services for power distribution and distribution automation, electric motors, generators and transformers.	Areas related to the manufacturing of Energy products and services.	Large
2	AD-Electronics Oy	Subcontracting: Manufacture of control centers and switchgear, production of guard relays Bodycote	Metal Industry subcontracting	Small
3	Altenia Oy	Project management, construction services and supervision, cost planning/real estate economy.	Automation services for energy sector.	Small
4	Arcteq Oy	Protection relays and arc protection systems for power generation, transmission and distribution.	Areas related to the manufacturing of Energy products and services.	Small

5	Avecon Oy	Automation, drive and power distribution systems	Automation services for energy sector.	Small
6	Buorre Creation Ab	Industrial design and product development, package design, technical documentation (installation and user instructions) etc.	Planning and consulting	Small
7	Citec	Technical solutions and project services.	Planning and consulting.	Large
8	Citec Engineering Oy	Technical design and applications	Planning and consulting	Large
9	Citec Information Oy	Technical documentation and communication	Planning and consulting	Large
10	Crimppi Oy	Manufacture of wire harnesses.	Areas related to the manufacturing of Energy products and services.	Large
11	CLS-Engineering Oy	Automation, data collection concepts, programming and electrification	Automation services for energy sector.	Large
12	CNC-Tekniikka Oy	Subcontracting: Design and manufacture of sheet metal tools for e.g. electro technical industry.	Metal Industry subcontracting	Small
13	EFC Finland Oy	Wire harnesses and electrical installation equipment.	Areas related to the manufacturing of Energy products and services.	Large
14	eGen Oy	Development, sales and marketing of Sterling engines which use renewable energy to produce electricity.	Areas related to the manufacturing of Energy products and services.	Small
15	Etha Ab	Provides management consulting and network development to companies within the energy and environmental sector.	Planning and consulting	Small
16	Elekrometalli	Contract manufacturer in sheet metal mechanics.	Metal Industry subcontracting	Large
17	Elektromaster Oy	Subcontracting: manufacture of control centers and switchgears.	Metal Industry subcontracting	Small
18	Enmac Oy	Technical design and product development services.	Planning and consulting	Large
19	Escarmat Oy	Manufacture of power distribution and monitoring devices.	Areas related to the manufacturing of Energy products and services.	Large
20	EPV Energia	Power generation	Areas related to Energy sales and supplies.	Large
21	EPV Bioturve Oy	Peat harvesting for energy industry	Areas related to Energy sales and supplies.	Large
22	(EPV).Rapid Power Oy	Hydroelectric power generation	Areas related to Energy sales and supplies.	Large
23	EPV Tuulivoima	Wind power generation	Areas related to Energy sales and supplies.	Large
24	Etelä-Pohjanmaan Alueverkko Oy	Regional grid company subordinate to the parent company EPV Energia Oy (EPV).	Areas related to Energy sales and supplies.	Large
25	Fintos Oy	Sole supplier of industrial liquid cooling applications.	Metal Industry subcontracting	Small
26	Green Fortune Oy	Consultancy in wind energy business.	Automation services for energy sector.	Small
27	Hiirikosken Energia Oy	Power generation, sale, and transmission.	Areas related to Energy sales and supplies.	Large
28	Incap Oy.	Manufacture of electromechanical devices and sub-modules.	Metal Industry subcontracting	Large
29	JMC Engine Oy.	Subcontracting: Manufacture of metal parts and related assembly	Metal Industry subcontracting	Small
30	KGN Tool Oy Ab	Specialized in manufacturing tools.	Areas related to the manufacturing of Energy products and services.	Large
31	Koskienergia Oy	Hydroelectric power generation	Areas related to Energy sales and supplies.	Large
32	Kyrönmaan CNC Koneistus Oy	Cooling elements, subcontracting machining.	Metal Industry subcontracting	Small
33	Lämpökäsittely Oy	Subcontracting: Improving the strength and wear properties of metals and steels by means of heat treatment.	Metal Industry subcontracting	Small
34	Laine-Tuotanto Oy	Subcontracting and contract manufacturing, metal industry.	Metal Industry subcontracting	Large
35	Leinolot Group	A group of 6 companies that provide a wide range of service concepts within the metal industry.	Metal Industry subcontracting	Large
36	Leimec Oy.	Leimec delivers ventilation systems and produces high quality sheet metal products.	Metal Industry subcontracting	Large
37	Mateve Oy	Sale of low-energy networks and energy pipes.	Areas related to the manufacturing of Energy products and services.	Large
38	Mervento Oy	Development and delivery of modern innovative direct-drive multi-megawatt wind power applications, both land-based and sea-based.	Areas related to the manufacturing of Energy products and services.	Large
40	Mapromec Oy Ab	Subcontracting: Parts for diesel engines and electric motors.	Metal Industry subcontracting	Large
41	Oy Merinova Ab	Technology center which helps develop the energy enterprises in the region and facilitates innovation activities and the	Planning and consulting	Large

		establishment of new enterprises by means of various programs and projects.		
42	Oy Rikta Ab	Wire harnesses and cables, spiral cables, assembly work.	Areas related to the manufacturing of Energy products and services.	Large
43	Oy KWH Pipe Ab	Subcontracting: plastic pipe systems (incl. insulated pipe systems) and related technology, machinery, and equipment.	General category subcontracting companies	Large
44	Oy Buorre Creation Ab	Industrial design and product development, package design, technical documentation (installation and user instructions), graphic design and marketing.	General category subcontracting companies	Large
45	Pintaa Coatings Oy	Subcontracting: Surface treatment and coatings.	General category subcontracting companies	Small
46	Preseco Oy	specialized environmental technology application, from design to implementation: water purification, waste processing, and production of bioenergy.	Planning and consulting	Large
47	Plastweld Oy.	Subcontracting: Manufacture of plastic products with rotational casting.	General category subcontracting companies	Small
48	Poltoväri Oy.	Subcontracting: Metal surface treatments, powder and wet coating as well as Delta MKS coating and assembly.	General category subcontracting companies	Small
49	Primo Finland Oy	Subcontracting: Manufacture of plastic products.	General category subcontracting companies.	Large
50	Rapid Power Oy	Hydroelectric power generation.	Areas related to Energy sales and supplies.	Large
51	Ravera Oy	Construction of power distribution and other networks.	Areas related to Energy sales and supplies.	Large
52	Ricomix Oy	Subcontracting, with the main products in valve components for diesel engines and rotors for electric motors	Metal Industry subcontracting	Small
53	Schneider Electric Finland Oy	Products and solutions for Electrical distribution and automation, switchgears, transformers, breakers Energy efficiency solutions.	Areas related to the manufacturing of Energy products and services.	Large
54	Suomen Merituuli Oy	Wind power generation	Areas related to Energy sales and supplies.	Large
55	SEAM -Group Oy	Production of energy saving services, as linked with the management of investment funds, purchase and management of emission allowances.	Planning and consulting	Large
56	Selecon Oy	Power and automation systems designing.	Planning and consulting	Small
57	SMTEC Oy	Procurement services, system deliveries, development projects	Planning and consulting	Small
58	SOP-Metal Oy	Subcontracting/Contract manufacture for power and energy industries.	Metal Industry subcontracting	Large
59	TC Connect Oy	Solutions for remote reading (Smart Metering) and control of energy consumption. Voice and data Communication solutions for authorities and e.g. energy companies.	Areas related to the manufacturing of Energy products and services.	Small
60	The Switch	Power systems for renewable energy production. Power converters. Permanent magnet generators.	Areas related to the manufacturing of Energy products and services.	Large
61	TK Engineering Oy	Automation design and fieldbus applications.	Areas related to the manufacturing of Energy products and services.	Small
62	There Corporation Oy	Provides a platform for Home Energy Management solutions.	Automation services for energy sector.	Small
63	TJK Tietolaite Oy	Subcontracting: supplier of embedded systems research and development services.	Electronics and software subcontractors.	Small
64	Tarkmet Oy	Subcontracting: Metal industry.	Metal Industry subcontracting	Small
65	Uwira Oy.	Subcontracting: Welded products and components.	Metal Industry subcontracting	Large
66	Ultracut Oy	Subcontracting: High-pressure water jet cutting and semi-finished products.	Metal Industry subcontracting	Small
67	Vaasa Engineering Group	Automation, drive and power distribution systems.	Areas related to the manufacturing of Energy products and services.	Large
68	Vaasan Ekolämpö Oy	Uusiutuvan lämmön erillistuotanto	Areas related to Energy sales and supplies.	Large
69	Vaasan Sähkö Oy	Power and district heat	Areas related to Energy sales and supplies.	Large
70	Vaasan Sähköverkko Oy	Power transmission and distribution	Areas related to Energy sales and supplies.	Large

71	Vaasan Sähköpalvelu Oy	Sale and installation of electric, telecommunications, and safety products.	Areas related to the manufacturing of Energy products and services.	Large
72	Vaskiluodon Voima Oy	Power and district heat generation	Areas related to Energy sales and supplies.	Large
73	Vacon Oyj	Frequency converters.	Areas related to the manufacturing of Energy products and services.	Large
74	Veslatec Oy	Subcontracting: Laser cutting	Metal Industry subcontracting	Small
75	VNT Management Oy	Capital investments in Clean Tech companies.	Planning and consulting.	Large
76	Vamp Oy	Protection relays, arc flash protection systems, secondary substation monitoring equipment.	Areas related to the manufacturing of Energy products and services.	Large
77	VM Group Oy	Core competence: sheet steel processing, light steel structures, deliveries of ready-to-use assemblies, and active cooperation with customers.	Metal Industry subcontracting	Large
78	Wärtsilä Finland Oy	Machinery, applications, and services in shipping and energy industries.	Areas related to the manufacturing of Energy products and services.	Large
79	Welas Oy	Subcontracting: fine mechanical laser machining, laser cutting, laser drilling, laser welding and laser marking.	Metal Industry subcontracting.	Large
80	Westenergy Oy Ab	Refuse incineration and energy generation	Areas related to Energy sales and supplies.	Large
81	Wapice Oy	Subcontracting: IT applications and software.	Electronics and software subcontractors.	Small

4.1 Criteria of assigning `Scale of Business`

The criteria we have used to assign the `Scale of Business` in the above list is the aspects we have considered after analyzing the following dimensions of each Company:

4.1.1 Physical Size and infrastructure

This refers to the Company's Physical local infrastructural and financial standing as well as its global outreach through international Positioning and recognition.

4.1.2 Operational Spread and network

This fact refers to the company's organizational operational strength and recognition.

4.1.3 Staff Strength

Employee strength that a company holds in the local as well as international scene, if applicable.

4.1.4 Nature of Business (product and services etc.)

Products and services the company offers.

4.1.5 Any Special Feature if associated with the Company

This fact refers to any special circumstances that should be considered while assessing the company's size.

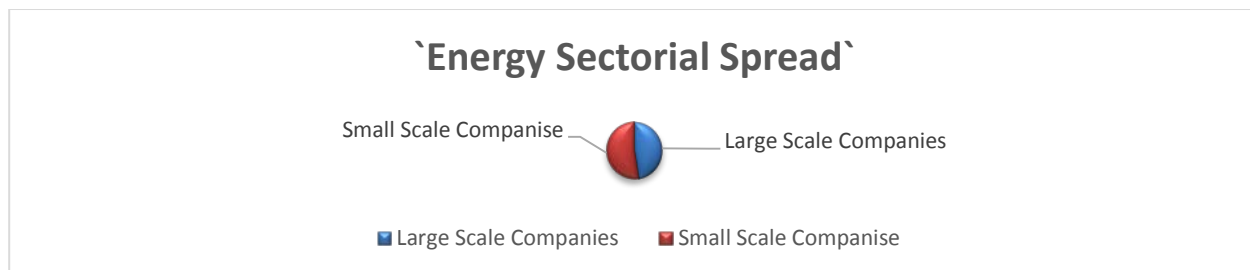


Figure 6. Graphic Representation of `Energy Sectorial Spread` in accordance with the scale of Businesses (Large or Small): The pie chart is based on the above list. The total number of the `Small` and `Large` companies has been arrived at on the basis of following facts:

The above list of 81 companies has been arranged after an extensive web search. One of the companies (i.e., Leinolat Group) in the list is an Industrial group of 06 Companies; therefore the total has been added with 05 Large Companies more to be specific. In addition, after considering the list as having 86 Companies instead of 81, we have also subtracted 86 from the total number of Ostrobothnia energy companies (i.e., 120) to get the additional `Small` Scale Companies whose information could not be search through current net search.

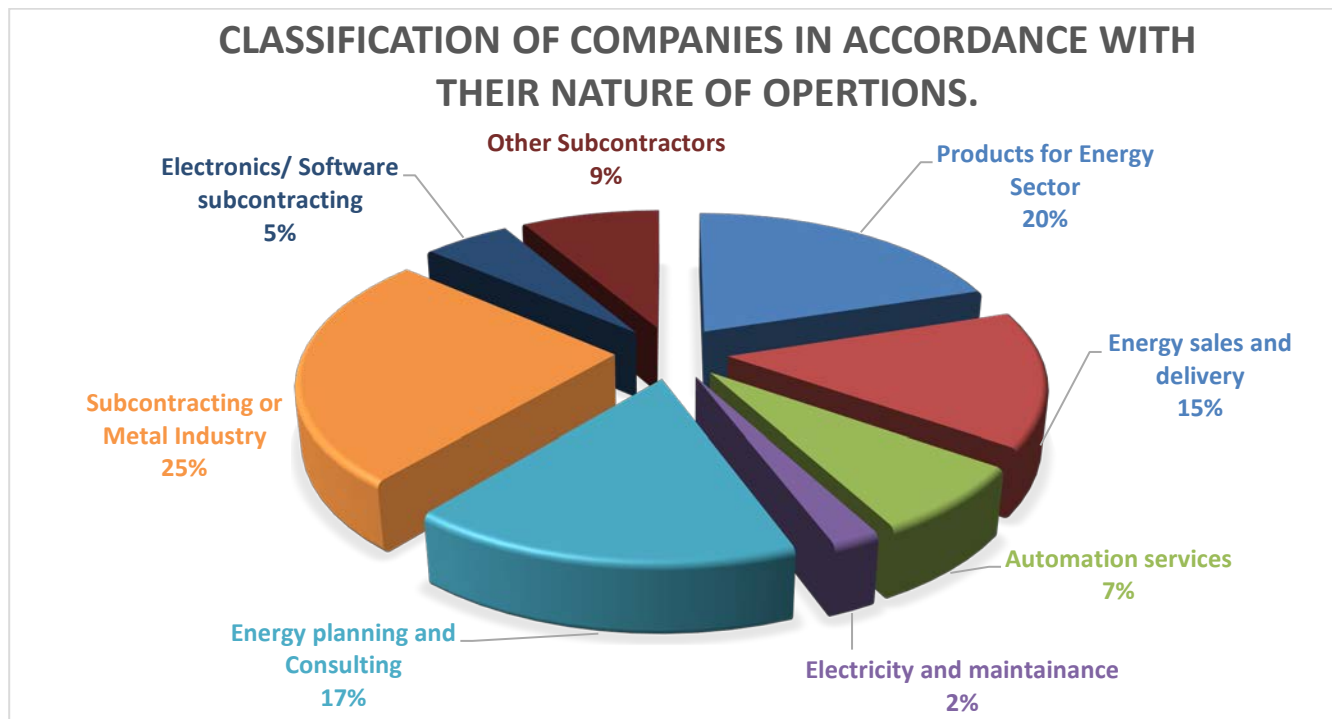


Figure. 7 Graphic representation on classification of companies in accordance with their `Nature of operation`

The above graphic representation, reveal the sub categorization of the Companies in accordance with the nature of their operations. This dimensional spread will be helpful to understand the areas of their interests while chalking out the plans to achieve their attention and involvement.

4.2 General `Need bases` of Energy Companies in Ostrobothnia Region as Source of Communication

While doing environmental scanning through relevant written material search (through related websites, published articles or word of mouth etc.), following list of key `challenges and concerns` have been collected that can be used as the areas of interest to achieve the attention initiation of communication process with the `Large` and `Small` energy companies of Ostrobothnia.

4.2.1 Management Operational Issues

- Achieve middle- and long-term goals;
- Talent development,
- Reduction of employee turnover ratio,
- Challenges of outsourcing and sub-contracting,
- Create new operations or extend the initial line of operation as `Smart` and `Lean Ways`.

4.2.2 Challenges of Competitiveness

- Searching environmentally sustainable methods
- Deal effectively with today's challenges;
- Deliver sustainable solutions and results.
- New inventions and innovations by the Competitors
- Enhance innovation.

- Coping the effects of economic and financial uncertainty,
- Searching the best means of cost effectiveness,
- Increased costs of materials, services and their handling,
- Scarcity of material and best quality services.

4.2.3 Effects of Internationalization

- Cultural differences,
- Fluctuation in Currency exchange rates,
- Connection building ,
- Facilitate export growth,
- Quality issues linked with `Trade beyond borders`,
- Coping with the pressures of international market competitiveness,
- Impact of lengthy supply chains,

4.2.4 CRS- Going green

- Green drive and industrial waste management,
- Ways and means to reduce product wastage on assembly lines,

4.4.5 Effects of Globalization

- Global trend linked to economic recession,
- Global trend on law and order situation fostering economic uncertainty.

5. Finding and discussion

The detailed analysis indicates intense suitability of suggesting `Future Center` for Ostrobothnia energy sector, keeping in view the suitability of location, its infrastructure as well as the allied facilities. This fact further supports the communication process formulation through the key elements of `emotional intelligence` and `contextual intelligence` to assess the `Need` of the target population (i.e., Large and Small Energy Companies of Ostrobothnia).

6. Future avenues

Current research investigation can open following avenues for exploration in future.

- The actual need assessment of the target population through specialized means of feasibility testing,
- The actual establish of `Energy Future Center` for Ostrobothnia,
- This exercise will provide base for suggesting formation of `Future Centers to support other interest fields` as well.

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