



Sustainability policy and management frame.
Thorverk Ltd. Reykhólum

EFNISYFIRLIT

Thorverk Sustainability policy	2
Preamble	2
Vision and long term policy	2
Goals and targets.....	2
Safety in all aspects of operation	2
Human development.....	3
Social responsibility	3
Environment and resources.....	3
Green bookkeeping	3
Timeframe and revisions.....	3
Allocated roles and tasks for central managers	4
Communication policy.....	4
Thanks, awards and premiums.....	4
References	4

THORVERK SUSTAINABILITY POLICY

PREAMBLE

An algal drying plant at Reykhólar, North of Breiðafjörður, West -Iceland was first established in 1976. The initiative was launched by Sigurður Hallsson, supported by regional farmers and funded by the Icelandic state. According to Icelandic law all resources that may be found within 60 fathoms (115m) from lowest tide line belong to the respective landowners, so they are automatically stakeholders in the harvest conducted in this rich kelp (*Laminaria* sp) and rockweed (*Ascophyllum nodosum*) grounds.

Research on dispersion, growth, biomass and regeneration of kelp (*Laminaria hyperborea* and *Laminaria digitata*) was conducted by Karl Gunnarsson in the 1980s and published in the Journal of the Marine Research Institute, (Vol 12,1) Reykjavik, 1991. At the founding of Þörungaverksmiðjan hf, or as hereafter Thorverk, it was already decided to harvest according to the main findings of Karl Gunnarsson's research and harvest only every 4 years or more rarely on the same shore-sites in Breiðafjörður and pay resource rents to farmers for Asco and to government for access to Laminaria.

Not only relies Thorverk on the renewable algal resources but also on the renewable geothermal heat that nature provides from the bedrock in Reykholar and the people that live in the region for services, knowledge and skills. Thorverk sets therefore its goals according to the following policy and management system for of all its activities and business. The main aspects look to safety and human equity for employees and neighbours, sustainable use of local, regional and global ecosystem services as well as social responsibility in its strive for knowledge, reliability, excellence and diversification.

VISION AND LONG TERM POLICY

- Thorverk's activities and business are based on respect for natural, human, economic and social values as well as infrastructure, (economic values and societal infrastructure)
- Thorverk depends on the fabric of healthy, just, and equitable society, not the least in the regional context and will support these values within and out of the industrial activities, (social values)
- Thorverk offers valuable and meaningful jobs, with opportunities for training and education, (human values)
- Thorverk aims for value added production and diversification that are beneficial to their customers, (economic values, minimizing waste and emissions)
- Thorverk uses service streams of renewable resources and respects their regeneration pace, (natural capital)

GOALS AND TARGETS

SAFETY IN ALL ASPECTS OF OPERATION

Thorverk tolerates no casualties or accidents. All incidents and near misses are scrutinized to facilitate future avoidance. Thorverk's employees are the most valuable assets for both the community and the industry. Therefore, personal safety equipment, raising safety awareness and training for standard operation procedures is a constant element for improvement. Thorverk operates with zero tolerance for accidents and strives for rich safety culture.

SUSTAINABILITY POLICY AND MANAGEMENT FRAME

HUMAN DEVELOPMENT

Thorverk offers the staff vocational training, guest lectures and discussions that have educational value. Thorverk operates with zero tolerance for mobbing and harassment or discrimination against religion, gender, age, nationality and religion. Thorverk does not allow smoking during work and drug abuse leads to loss of work. This is due to safety procedures where heavy and dangerous machinery is constantly in use. Thorverk offers annual health check and counselling for good spirits and health tips.

SOCIAL RESPONSIBILITY

All employees keep to a code of conduct that they sign. All are treated equally considering for instance, gender, ethnic origin, religion, age or personal views. Thorverk realizes the importance of a friendly workplace and camaraderie. A welcome worker comes gladly to work. Daily staff meetings can therefore address any common matters that members of staff suggest. Incorporation of immigrants that have a different mother tongue than Icelandic is addressed in all ways possible.

ENVIRONMENT AND RESOURCES

Thorverk realises that the natural geothermally heated fresh water that flows freely at Reykhólar belongs to Icelanders. Its energy is only rented temporarily but the full responsibility of using it in a sustainable way is in the hands of the industry. Thorverk protects this resource with the aim of giving future generations the opportunity to use it as they see fit. The seaweed and kelp in Breiðafjörður are likewise a renewable natural resource that must have the capacity and time to regenerate. Thorverk supports research that adds to general understanding of the Breiðafjörður ecosystem. Also, studies of the impacts of harvesting and novelties in procedures to add value from diversification of products made from macroalgae, especially Laminaria and Asco. Thorverk will not overexploit this resource and strives to protect it from any form of damage. The needs of other species that rely on Breiðafjörður as their habitat are respected and protected.

GREEN BOOKKEEPING

Thorverk facilitates green bookkeeping for its activities with the aim of understanding the aspects and effects that are expected from its activities; energy use, emissions and pollution. Measurements for this bookkeeping as well as the core business results sets the frame for further progress in respecting resource limits.

TIMEFRAME AND REVISIONS

Short term goals and ranked list of actions for this long-term policy are reviewed bi-annually with the aim of constant progress yet adjustment to reality.

ALLOCATED ROLES AND TASKS FOR CENTRAL MANAGERS

- The CEO of Thorverk is responsible for communication about action tracking and reminders of annual goals in all sustainable categories. This includes keeping up codes of conduct, revisions and communication to those who have roles in the central management system.
- The head of industrial operations along with the head of workshop is responsible for the human policy goals, health and education.
- Safety manager is responsible for goals and actions in training, preventive measures and safety procedures. They allocate daily, weekly, monthly safety audits and surveillance.
- The captain of Grettir is responsible for implementation and renewal of CMS on sea, all categories and exercises.
- The resource managers are responsible for following up on environment and resource management, production-research and revisions. The resource manager is also an assistant to all the above and attends the renewal of the policies.
- The captain of the harvesting ship and sub-contractors in harvesting are the main sources of information about the resources. They are responsible for following up on ethical conduct out on sea.

All employees have a role in keeping the facilities clean. A clean operation is a well-functioning operation and shows Thorverk's ambitions.

COMMUNICATION POLICY

All central managers have the duty to communicate to employees about the common mission, ethics and internal plans and latest development. All employees communicate freely about any concerns or ideas to their superiors or their chosen confidential union leader. Topics can be brought up on daily morning meetings, weekly safety meetings or formal or informal informative meetings about the policy or central management system and help to find the best ways to run the operations. Harassment policy has been updated and documents lie in the coffee room.

THANKS, AWARDS AND PREMIUMS

Thorverk has been awarded for its safe operations, good business practices and leadership in sustainable resource use. **The goal of the policy still is progress, not paper waste.**

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