



The Dome

| | |
|---|---|
| Searching for a Coordinator/Partner for | The Green Deal – Farm to Fork |
| Topic | LC-GD-6-1-2020: Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy |
| Subtopic | Achieving climate neutral farms by reducing GHG emissions and by increasing farm-based carbon sequestration and storage. |
| Organisation Details | <p style="text-align: center;">About</p> <p>Murphy Inventions Limited (MIL) was incorporated in 2014, in the Republic of Ireland.</p> <p>MIL is a Sustainable Irish Company which focuses on the development of environmentally conscious, clean energy projects in order to reduce society’s carbon footprint.</p> <p>We offer bespoke low cost, low maintenance, renewable energy solutions for business customers and are at the forefront of design-thinking.</p> <p>The company has at its core a professional team, all with the expertise for developing and delivering sustainable solutions which benefit businesses and consumers. The team has been successful in attaining a range of patents/protectations for various projects. Two projects are presently being funded by the European Union and its junior funding Partners.</p> <p>The company’s network of industry experts ensure that its inventions are at the leading edge in design & manufacturing and have the potential to make significant impact in the renewable energy marketplace when fully implemented. The business works with a range of cross-sector industry associates including experts in the energy sector in Ireland, Brazil, China and other countries internationally.</p> <p>Working with their Partners, Service Providers, Associates and EU/ International support, MIL’s technologies can transform the renewable energy sector by creating sustainable power alternatives which will negate the requirement for fossil fuels.</p> <p style="text-align: center;">Vision</p> <p>To reduce humanity’s dependence on fossil fuel-based sources enabling future generations to coexist more harmoniously by way of blue and</p> |





The Dome

| | |
|--|---|
| | <p>green energy production.</p> <p style="text-align: center;">Mission Statement</p> <p>MIL develop innovative, renewable energy concepts into working models, prove that they are competitive within their corresponding markets and develop them for sale or licensing within a global marketplace.</p> <p style="text-align: center;">How We Operate</p> <p>MIL with its diverse range of inventions, effectively sourced several experts with specialized knowledge to ensure that these inventions obtain the best possible chance for success and are professionally managed through the technology readiness levels, ensuring investors are frequently updated and comfortable with investing throughout the project stages.</p> |
| <p>How we can contribute to this topic</p> | <p style="text-align: center;">Executive Summary</p> <p>This Project is a 21st Century Sustainable Ruminant Farming solution with a goal towards reducing carbon, methane and pollution caused by large herds of Dairy Cattle, Beef and Buffalo.</p> <p>In 2018 and 2019 a detailed Feasibility Study for the project was carried out and funded by the European Union and its funding Partners under the EU's Low Carbon Program.</p> <p>At present each farm has the capacity to comfortably house 800 Ruminants and multiple layouts can be configured on sites. The farms will be self powered.</p> <p>The protected, coated, self cleaning structure has at its Apex a sensed mechanism for negating the environmental impact of airborne Ch4 and CO2 produced by the ruminants.</p> <p>This farming system is fully automated and uses modern technologies to ensure good husbandry, safety and comfort for the animals. The quality of the dairy produce from the cattle will be at the highest level and will be constantly monitored through computerized technologies.</p> <p>There are numerous automatic milking machines, showering and cleaning stations for the animals.</p> <p>When a number of these farms are positioned in close proximity, it will</p> |





The Dome

| | |
|--------------------------|---|
| | <p>also encourage farmers to create a bottling and packaging plant on site for products which can then be directly transported to supermarkets.</p> <p>Multiple farms together will provide energy from the Anaerobic Digester and Solar thermal systems, there will also be charge points for Electric Vehicles and farm machinery on site.</p> <p>This Project brings Ruminant Agriculture from the existing 17th-century farming into a 21st century clean, low carbon, zero waste solution and promotes a circular economy on all levels.</p> <p>Multiple businesses and opportunities will branch out from the development of these farms.</p> <p>The project will help farmers work towards protecting rivers, lakes, streams, oceans, flora and fauna, the entire ecosystem will be safe guarded from the hazardous impact caused by traditional outdoor farming methods.</p> <p>This environmentally conscious project will be a catalyst for future jobs, economic productivity, growth and the sustainable development of the Agricultural sector.</p> <p>If you wish to promote sustainable development goals, create circular economy, reduce air pollution and become International Leaders in Sustainable Agriculture, Murphy Inventions Ltd. and our Associates at Tesla Eco Solutions look forward to hearing from you.</p> |
| <p>Other information</p> | <p style="text-align: center;">Benefits of the System</p> <ul style="list-style-type: none"> • All pollutants collected from animals will be managed accordingly. • Environmentally friendly farms which negate the impact from airborne Methane and Carbon emissions using bespoke technologies. • Fertilizers, manure, silage cannot enter rivers and groundwater. • Potentially 0% waste management. • Grasslands are artificial fertilizer free (promoting the return of wildlife e.g. the honey bee). • Small farms can join together, sharing the workload, therefore deemed as more financially feasible. • Less work and better efficiencies for farmers through automation (no spread of nitrogen or grass seed, no fencing repairs, no manual milking) and enhanced quality of life for farmers. |





The Dome

| | |
|--|---|
| | <ul style="list-style-type: none"> • Production of renewable electricity/methane for farmers and the country. • Freeing up of arable land for other profitable activities. • Cattle cannot destroy grasslands during rain & flooding. • Less chance of TB, mastitis and other bacterial infections. • Digest Treatment Plant (DTP): The slurry that gets treated in the Biogas plant can be used as fertilizer. The DTP will turn more than 80% of digestate into greywater, which can be used for cleaning, watering or environmentally conscious discharging. • The solution can also biogest milk to make methane. • Further profits from fertilizer sales. • The farm is run by electricity generated from anaerobic digesters and solar thermal panels. • Sites can be camouflaged into their surrounding environment for a natural setting. • Increased, cleaner and better quality milk yield. • Systems equipped with state of the art technologies. • Automated milking and cleaning systems. • Animal's health and movements are monitored using computerized technologies which will be viewed using an app. • Fully compliant systems following regulations for health and safety and fire safety including sprinkler systems and providing the required number of emergency access/ egress points. • Continuous air filtration and mechanical ventilation providing constant clean and fresh air. • Natural sunlight for the animals accessible through skylights. The animals metabolize vitamin D and maintain good health. • Animals have freewill to perform daily routine. |
| <p>Previous Horizon 2020 projects</p> | <p>MIL's Dome Project and Electa Project were both funded under the European Union's Low Carbon Programme and Feasibility Studies have been completed.</p> |
| <p>Contact Details, Name, Email & phone number</p> | <p>Company: Murphy Inventions Ltd. Contact: Mr. Marcel Murphy (Director of Communications and Market Development). Email: marcelmurphy@gmail.com Telephone: 00353 8686 09731 Website: www.murphyinventions.com LinkedIn: https://ie.linkedin.com/in/marcel-thomas-murphy-55060235</p> |
| <p>Irish NCP</p> | <p>Matthew Clarke Matthew.Clarke@agriculture.gov.ie +353871026192</p> |

