

Green Deal Collider: Sustainable Futures

Smart Fish Counter for Automated Large-Scale Aquatic Biodiversity Monitoring in European **Rivers**

Team Name: Go Fish 🐟

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Project Category: Biodiversity Preservation in European Rivers

Potential for Impact

Project description and its contribution to a more sustainable future

A team of scientists has developed the BFG smart fish counter, an automated fish counting device to monitor fish migration in European rivers. Monitoring fish movement is important for protecting and restoring migrating fish and their inhabitants.

This would assist the responsible parties in reducing the risk of further annihilating aquatic biodiversity in European rivers. Furthermore, this device will contribute to the achievement of the Sustainable Development Goals (SDGs) defined by the UN. Additionally, several industries have regulatory obligations to limit their environmental impact over time.

The target problem of our project and how we solve it

The developers of the automated fish counting system haven't considered different ways to generate income. Nevertheless, they have a temporary agreement about data sharing with the German government. However, in order to keep the company operating after the deal with the German government expires, our developers will need to discover new sources of income. Therefore, our team is helping the developers find other sources of revenue generation by finding potential investors or partners to keep the invention running.

Novelty

– How is the solution innovative compared to existing ones (if exists)?

The Developers we work for haven't given much thought to the many forms of revenue generation, but we've identified ways to assist the company in earning revenue in various ways. We discovered that, rather than focusing just on the device, the company could also sell data on a subscription basis. This will allow the company to continue producing revenue even when its contract with the German government expires. We've also discovered that our company can attract investment by using blue bonds to keep it functioning. Not only that, but our company could partner with numerous NGOs working for the protection of aquatic biodiversity and sell our data to keep our business running.

Feasibility

– How do we provide/present the feasibility of your solution?

We started a survey of a large number of potential users, but we have yet to obtain results. Because we have established technology and a client base, we can conclude that the technology is feasible. The most innovative components of our strategy (blue bonds, data access services) are novel in this context, but their existence in other domains demonstrates the validity of individual solutions.

- What would be your ambition/the next steps with the project?

Following receipt of our survey responses, we will analyze the results and provide offers to the customer based on a roadmap of product/service offerings over several years, allowing time to build those components that are scalable to all river systems. We intend to hire more ichthyologists to train the data as the loads and locations expand since we intend to build our device in such a way that it can be used to monitor fish movement not only in rivers but also in seas, lakes, and ports, among other places.

Inclusivity (Industry, Potential Users, Multiple Disciplines Engaged)

– Who are the stakeholders (company partners, expected users, etc.) involved in the process of solution development?

Regulated industries, Impacted communities, Environmental consultants and researchers, Camera selling companies, The German government (existing), governments from other nations, Hydropower plants and Fishing companies, and Investors looking to add biodiversity projects to their portfolios.