## Green Protein Alliance

## A case study

31 May 2019





Innovation:	Private governance initiative to promote dietary change	
Intervention:	Green Protein Alliance	
Case Study by:	Maria Tziva (Utrecht University), Simona Negro (Utrecht University)	
Methodology:	21 semi-structured in-depth interviews, 2 site visits (plant-based product exhibition Veggie World, London, April 2017; Green Proteins Summit, Wageningen, October 2017). The GPA is an on-going initiative. This analysis takes into account developments up until January 2018.	
Case Study Overview		
Sector(s):	Meat and dairy	
Value Chain Stage(s):	Consumption	
Type of Intervention:	Social	
Date & Duration:	Founded in 2016 and on-going	
Location:	The Netherlands	
Initiating Actors:	The Planet (Het Planeet) DuurzaamDoor programme - Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland (RVO)) New Foresight	
Actor Constellation:	Members: Alpro, Appel, Bonduelle, Boon, Dutch Soy, the Dutch Weed Burger Garden Gourmet, GoodBite, Grow, HAK, Intersnack, Jumbo, Marley Spoon Menken Orlando, Next Foods, Oljik, Purple beehive, Quorn, Rotterzwam, So Fine, Unilever, Vivera, Zeewaar Partners: Drift, Dutch cuisine, HAS Hogeschool, Luis Bolk Institute, Milieu Centraal, Ministy of Economic Affairs (EZ), Natuur & Milieu, Rabobank prof. AH Kersten (WUR), Voedingscentrum, Albert Heijn	
Short Description of Intervention:	Meat and dairy production contributes significantly to climate change. Meeting the EU 2050 emission reduction targets will require the deep decarbonisation of the EU agri-food sector. Large mitigation potential still exists in reducing meat and dairy consumption. However, due to uncertainties related to the impact of demand-side food regulations, such as consumption taxes on food, and strong industry opposition, governments are reluctant to introduce demand-side regulatory measures that would regulate consumption. The wider diffusion of low carbon innovations, such as a wide range of plant-based protein products, could contribute to an accelerated dietary shift and disrupt meat and dairy consumption. The Green Protein Alliance (GPA) is a multi-stakeholder partnership, which consists of firms from the complete supply chain of plant-protein products, and partners including the Ministry of Economics, the Dutch Nutrition Centre and NGOs. It aims to change the protein consumption balance in the Netherlands to 50:50 protein (plant:animal) by 2025 by providing a space for sector organization activities, including setting sector-wide product standards, inspiring product development partnerships and new product market introductions and implementing consumer awareness campaigns and education initiatives.	
Research Theme Summe	aries	
1. Innovation History & Dynamics:	The GPA was launched in 2016. Initially 14 firms across the supply chain of plant-based protein products, including incumbent retailer Albert Heijn, invested in the initiative and officially became members. In 2017, the GPA organised a public event to introduce GPA and present its strategic plan, the Green Growth Plant. The overarching vision of a healthier and more sustainable food system was recognized as guiding the activities of the members in the alliance. The plan committed the GPA to set specific standards for plant-based products to comply with the dietary guidelines of the Dutch Nutrition Centre. All members of the GPA committed to efforts that aimed to make plant-based products the "easy" choice for consumers. The event introduced two initiatives for the long-term development of the plant-based protein sector including a subsidy scheme for the development of innovative plant-based	

	protein products and a partnership between two producers of plant-based protein products and a university of applied sciences to train students for the needs of the plant- based products industry.
2. Governance Arrangements & Agents of Change:	The alliance is governed by a governing board consisting of four representatives of different plant-based protein product firms and has an official spokesperson. The different members and partners of the GPA have diverse roles. Producing firms have a role in product innovation, in co-operating and in sharing knowledge. The role of business-to-consumer firms, such as retailers and food service firms, includes providing consumers with more opportunities to purchase and consume plant-based protein products. The partners have a role in developing and sharing credible dietary information for healthy and sustainable diets. All members and partners have a role in communicating
	the shared message of striving for a healthy and sustainable food system.
3. Transformative Capacities:	Models for sustainable sector transformation developed by the consultancy firm New Foresight were the underlying principles in the development of the GPA. New Foresight's approach stipulated a set of interventions to leverage the positive drive firms in a sector have to develop in order to transform markets towards sustainability. These interventions relate to the structuring of supply, demand and the environment of the sector. Public and private stakeholders need to work together towards a coordinated tailor-made plan. In the case of the transition to plant-based protein consumption, first several barriers for plant-based protein demand, supply and the environment of the sector were identified. To overcome those barriers, the shared message for a healthier and sustainable food system and the goal of 50:50 (plant:animal) protein consumption by 2025 were set and the Green Growth Plan was introduced. The low carbon quality of the initiative was communicated in most of the GPA activities. It was made distinct by quantifying the impact the GPA goal will have on CO <sub>2</sub> emissions. Particularly, it is argued that achieving the goal of 50:50 (plant:animal) protein consumption by 5200 kton. In the case of the GPA, apart from low carbon qualities, the overall health benefits of the initiative were also made distinct. The GPA argues that by achieving 50:50 (plant:animal) protein consumption, the nutrition of Dutch consumers will be brought more in line with the proposed dietary guidelines for healthy diets, of the Dutch Nutrition Center. The models of market transformation resonated with the initiators and the GPA members and partners. Hence, it significantly contributed to making the potential of the initiative legible and the establishment of the GPA possible.
4. Assessment & Evaluation:	The first impact assessment of the GPA was included in the Green Growth Plan published in 2017. The impact is measured through the number of members and partners in the GPA, their market share percentage in the Netherlands, the number of new partnerships for product development and the number of new products and meals. The detailed quantified measures are illustrated in table 1. Additionally, the Green Growth Plan argues that in 2016, there has been a 16% increase in the consumption of plant-based protein products. <u>14 founding members</u> <u>16% increase in the consumption of plant-based proteins in 2016</u> 8 new plant-based protein products have been introduced in retail and recipe <u>boxes</u> <u>50% of Dutch retailers represented</u> <u>80% of plant-based protein producers represented</u> <u>12 new partnerships have been forged</u> <u>6 new market parties are affiliated</u> <u>Table 1 Summary of GPA impact</u>
5. Uptake & Consequences:	Table 1, Summary of GPA impact One of the most important perceived successes of the GPA was that the initiating actors managed to develop a partnership, for the promotion of plant-based protein consumption, between important actors in the agri-food sector. The constellation of the members and partners in the GPA was perceived as a central factor in influencing protein consumption. All members and partners have a particular role in order to achieve the goal of 50:50 plant 50:50 (plant:animal) protein consumption by 2025. Moreover, over the course of its implementation, the GPA managed to attract new members such as Unilever, one of the largest agri-food firms globally and Jumbo, one of the largest retailers in the Netherlands. Therefore, the potential impact of GPA projects is growing.

	In terms of broader environmental impacts, due to lower land use, the environmental impact of a plant-based diet is significantly lower than the impact of a diet based on meat and dairy products. Finally, although animal products are good sources of a range of essential nutrients including protein, diets characterized by high animal product intake have been associated with health risks including cardiovascular disease and colorectal cancer. Therefore, a decrease in the average consumption of meat and dairy products can have important benefits for human health.	
Conclusion & Outlook		
Key Learnings:	The novelty of the GPA lies in the scope of the initiative. It is the first multi-stakeholder partnership in the Netherlands and among the very few worldwide which aim to change the protein consumption balance by promoting plant-based protein products. In this respect, it comprises a step in building the necessary conditions for increase in the consumption of plant-based protein products and ultimately a more sustainable protein consumption balance. A large body of scientific literature argues that reducing meat and dairy consumption can have a significant impact on the decarbonisation of the food sector. Private governance initiatives, such as the GPA, are important in promoting food consumption transitions mainly for two reasons. First, demand-side hard regulations in food are almost completely absent and the sector is regulated to a large extent by such hybrid and private governance initiatives. Second, the role of each different organization in multi-stakeholder partnership is important for the implementation of regulation because different actor groups bring in different crucial resources and capabilities. Finally, the case illustrates that the promotion of emerging industries, such as the plant- based protein industry is more likely to secure the necessary support of important stakeholders than the restriction of existing industries. It also offers interesting growth opportunities for mature sectors. Therefore, it can comprise an avenue to bypass lock-in in the industrial sectors and promote decarbonisation.	
Open Questions & Further Research Requirements:	Further research could focus on the impact of broad hybrid and private governance initiatives for decarbonisation and whether they adequately promote transition pathways.	





For Europe to achieve its long-term climate objectives, carbon-intensive industries have to reduce their emissions.

**REINVENT** focuses on plastics, steel, paper and meat & dairy – industrial sectors that are key to our daily lives, but where low-carbon transitions are still relatively unexplored.

To gain a broader understanding of the possibilities of transition, entire value chains of the industries are studied. This includes non-technical factors such as supply chains, financing, trade, and social and economic impacts. Together with forward-looking industry leaders and policy-makers, we explore potentials and capabilities for making transitions in these resource-intensive industries.

## **PARTICIPANTS & FUNDING**

REINVENT is supported by the European Union's Horizon 2020 Research and Innovation Programme (2016-2020). It involves five world renowned research institutions from four countries: Lund University (Sweden), Durham University (United Kingdom), Wuppertal Institute (Germany), PBL Netherlands Environmental Assessment Agency (the Netherlands) and Utrecht University (the Netherlands).

CONTACT

Lars J Nilsson Project Coordinator and Professor Division of Environmental and Energy Systems Studies LTH, Lund University. PHONE: +46-46-2224683, E-MAIL: lars j.nilsson@miljo.lth.se **MORE INFORMATION** 

WEBSITE: reinvent-project.eu

TWITTER: @reinvent\_eu