

Survey on national/local plans allocating resources for soil management practices that include the utilisation of compost

Introduction

In order to point out the key aspects of national or local policies put in place so far to stimulate the adoption of good land management practices aimed at preserving soil health and fertility, that include the reintegration of organic matter by means of compost, we have collected and analysed some of the most significant incentivising schemes adopted in some Member States, here shortly summarised.

The following case studies were considered:

- Local humus build-up CarboCert (Germany, GE1)
- RETERRA - CarboSoil (Germany, GE2)
- Healthy Soils for Healthy Food (Austria, AU1)
- Humusprojekt (Ökoregion Kaindorf, Austria, AU2)
- Utilisation of organic fertilisers in place of mineral fertilisation (Italy, Region Piedmont, IT)
- French Carbon Standard CARBON AGRI (France, FR)

Organic Farming Schemes

The schemes are equally divided into public and private funded initiatives, mostly still active (or about to end), and all of them address farmers as the beneficiaries (in the GE2 case, organic soil improvers issuers are possible beneficiaries as well).

Despite all these schemes are focussed on the return of organic matter to soils and can thus be considered as “carbon farming” initiatives, some differences emerge; while some of them (GE2, FR, AU2) are specifically aimed at offsetting CO₂ emissions to the atmosphere through the storage of organic carbon in soils, other ones put the emphasis on other aspects, such as the replacement of mineral fertilisers (IT) or the improvement of soil health through the commitment of farmers in adopting good agronomical practices (AU).

Since the effects of the use of compost can be observed on the medium-to long-term, all the schemes are long lasting (5 years, with possible monitoring of soil beyond the end of the program, in order to assess the evolution of organic matter). At least two schemes (AU, GE, AU2) include a specific training to farmers, so to make them aware of the importance of soil organic matter and the agricultural practices that are “soil friendly”.

The rewarding of the schemes analysed can either depend on the results obtained or on the simple adoption of a list of activities foreseen by the agreement between farmers and the scheme manager. In the first case (FR, GE, AU2), farmers are paid in proportion to the amount of organic carbon (or effective organic matter) they have stored in their soils along the duration of the activity. It is more interesting to note that some schemes (AU, IT) acknowledge the simple commitment of farmers in making specific actions in favour of soil health, according to an undersigned agreement between the parties (in one case, the scheme manager is a public entity, Region Piedmont: in the other one a private company, the Spar supermarket chain).

Depending on the rewarding approach (results or activities based) the paying methods are different:

- Obtainment of carbon credits that are purchased to the farmer by the scheme management entity at a price in line with the market of the Emission Trading Schemes (accounted as per tonne of CO₂ offsets);
- Purchase of the vegetables cultivated at a price higher than their market value, taking in account the additional efforts made by farmers;
- Fixed payment per cultivated surface (€/ha) that has been managed according to the good agricultural practices and replacing mineral fertilisers with compost.

In one case (GE2) the reward does not consist in a monetary payment, but in the assignment of a label that certifies the commitment of the farmer to a proper soil management, and a calculation of the amount of humus stored in soil.

A monitoring activity is foreseen by all the schemes. In one case (IT), the monitoring is based on records that must be kept by farmers through random inspections; the other schemes include the periodical sampling and analysis of soil by independent qualified inspectors until the end of the program, basically to evaluate the evolution of soil organic matter (or the effective organic matter).

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About the European Compost Network (ECN)

The **European Compost Network** (ECN) is the leading European membership organisation promoting sustainable recycling practices by composting and anaerobic digestion of organic resources and guarding over the quality and safe use of the recovered organic fertilisers and soil improvers. With 68 members from 27 European Countries ECN represents more than 4500 experts and plant operators with more than 45 million tonnes of biological waste treatment capacity.

Summary tables of the case studies collected

	AU	FR	GE1	GE2	IT	AU2
Managing authority	SPAR supermarket	French Government	CarboCert GmbH	RETERRA-CarboSoil	Region Piedmont	Ökoregion Kaindorf
Type of managing authority	private	public	private	private	Public	public
Status on 31/12/2020	still active	still active	still active	still active	still active	n.a.
Beneficiary	farmers growing vegetables	bovine cattle or cash crop farmers	farmers, issuers	farmers	farmers	farmers

	AU	FR	GE1	GE2	IT	AU2
Main goal	Soil conservation	Carbon reduction in atmosphere, climate change mitigation	Local humus built up	Promotion of organic fertilization Improvement of farmers reputation. Calculation of Carbon storage for emission trading	Promotion of organic fertilization Increase of organic matter in soils	Increase of organic matter in soils
Short description	Support, training and rewards to farmers. SPAR buys the final crops	Emission reduction credits related to good agricultural practices. Long term assessment (5 years) of the retained humus	Calculation of humus build up; release and purchase of Carbo-Certificates	Calculation and statement of Carbon build-up or binding through compost; Training to farmers Label	Farmers are awarded for replacing mineral fertilizers with organic fertilizers	Actions to increase good quality organic matter. The role of compost is considered important. Knowledge dissemination and coaching of farmers

	AU	FR	GE1	GE2	IT	AU2
Eligibility criteria	All farmers that grow vegetables	Projects with additional climate mitigation actions than simply following current/legal practice	none	RETERRA compost users	Ranking based on soil classification score	n.a.
Financing approach	Activities based. Currently, price increase per product unit, based on the additional effort associated with soil friendly production.	Results driven (CO ₂ savings per production unit or, in case of carbon storage, per exploitation unit)	Results driven (positive changes in soil organic carbon content)	Based on both farming practices and results (carbon stored)	Based on farmer's management practices	Results based

	AU	FR	GE1	GE2	IT	AU2
Monitoring	Soil samples during 5 years by an independent specialist	Action plan review and calculation through a tool	By an independent institute	Calculations carried out by qualified RETERRA technicians	Based on records and random inspections	n.a.
Rewarding criteria	Bonus to the farmers	Credits per net ton of CO ₂ avoided	Carbon sequestration certificate	Training and label for marketing purposes	Incentive paid by the managing authority	Carbon credits
Rewarding details	n.a.	Credits given after 5 years and traded for payments	€45 /t CO ₂ as certificate for issuer (2/3 of the price goes to the farmer)	No monetary payments	From €180 to €300 per hectare on a yearly basis	€ 45/ton CO ₂ , of which € 30 to the farmer and € 15 for scheme management (including sampling, analysis, etc.)