"Green” Investments in sustainable farming systems: a survey among Italian enterprises

Lucia Vigoroso1, Giorgia Bagagiolo1\*, Giulia De Paolis2, Niccolò Pampuro1, Eugenio Cavallo1, Federica Caffaro2

1 Institute of Sciences and Technologies for Sustainable Energy and Mobility (STEMS), National Research Council of Italy (CNR), Strada delle Cacce 73, 10135 Torino, Italy ([lucia.vigoroso@stems.cnr.it](mailto:lucia.vigoroso@stems.cnr.it), [giorgia.bagagiolo@stems.cnr.it](mailto:giorgia.bagagiolo@stems.cnr.it), niccolo.pampuro@stems.cnr.it, [eugenio.cavallo@stems.cnr.it](mailto:eugenio.cavallo@stems.cnr.it))

2 Department of Education, University of Roma Tre, via del Castro Pretorio 20, 00185, Rome, Italy ([giu.depaolis3@stud.uniroma3.it](mailto:giu.depaolis3@stud.uniroma3.it), [federica.caffaro@uniroma3.it](mailto:federica.caffaro@uniroma3.it))

\* Correspondence: giorgia.bagagiolo@stems.cnr.it, +39 338 859 2064

**Keywords.** Green Deal, water resources, emissions, renewable energies, sustainable practices.

**Abstract.** The promotion and diffusion of sustainable agricultural practices, together with technological innovations, play a pivotal role in climate change mitigation and/or adaptation. The present study reports the results of a national-scale survey investigating the diffusion of sustainable agricultural practices and technologies among Italian farming enterprises, also in the light of EU’s goals of reaching climate neutrality by 2050. An online questionnaire was administered to a sample of 456 farm managers and contractors. Participants were asked to evaluate their rate of adoption, intention to adopt and willingness to invest in sustainable practices and technologies aimed at limiting the impact of their agricultural activity on the environment and on climate (e.g. a wide range of practices aimed at saving water, reducing agrochemical inputs, reducing emissions and producing renewable energies from biomass). Results showed that the majority of the participants have already adopted practices and technologies aimed at reducing agro-chemical inputs (54.8%), whereas practices and technologies aimed at reducing emissions and generating renewable energies from agricultural biomass have a more limited and recent diffusion (16.0% and 12.2%, respectively). However, 59% and 47% of participants respectively expressed the intention to adopt them in the short/medium term. The increasing interest in these practices may be due to the positive pressure exerted by the ambitious targets of the European Green New Deal. Only 7.4% of the respondents are prone to invest more than 100 k€ in “green” practices, whereas more than half of the enterprises (54%) would be willing to invest a maximum of 10 k€ in the next future. This willingness to invest may vary according to agricultural sector and farm size, whereas it does not seem to be influenced by the personal characteristics of the respondents (e.g. age, education). The present study allowed to glimpse future lines of investments and identifying intervention measures aimed at fostering the “green” transition within the Italian agricultural sector.