

# Report on industrial FEFTS solutions

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# **Document Summary**

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#### **Abstract**

This document presents the registered industrial Fossil Energy Free Technologies and Strategies (FEFTS) solutions in the inventory of AgroFossilFree and gives an initial analysis based on current collection status. Until September 2021, 178 industrial technologies are registered by the consortium. The majority of the collected technologies are from Europe. The majority of attention is paid to open-field agriculture, but livestock and greenhouses are also vital. Improvements in energy efficiency, as well as renewable energy production and soil carbon sequestration, are all important, hence many technical applications are common. Most of the technologies focus on farmers, as well as companies and industry. These technologies are mainly complete solution and hardware and can mostly be used in open field agriculture. However, many technologies also can be implemented for livestock and greenhouses. The agricultural applications of collected technologies are mostly agricultural filed practices and energy provision. Most of the FEFTS are under the clean energy supply category and the least in soil carbon sequestration. Overall, collected commercial technologies can directly reduce fossil energy use through the reduction of building electricity consumption and indirect energy inputs reduction through pesticide, fertilizer and tillage reduction. The process of registration of industrial FEFTS I continuous and will go forward until the end of the project lifetime to build an informative platform for everyone to access.

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# 1. Introduction

# 1.1 Background Information

Novel Fossil-Energy-Free Technologies and Strategies (FEFTS) that are related to more sustainable energy production and use, have been developed by industry and research entities. More specifically, they refer to the tools that are required to address cleaner and more efficient energy production and use in all kinds of agricultural activities. The main focus of this document, is to provide a report about the commercial FEFTS solutions that are collected as part of AFF repository. These kind of FEFTS can (or could potentially) be used by a wide variety of agricultural stakeholders towards defossilization of EU agriculture.

According to the methodology and standards provided by D2.1, an already commercial technology or strategy could be considered as FEFTS, after an initial identification, where its specific characteristics are effectively categorized in a series of fields of interest:

- a) the agricultural application field (for which purpose the energy is produced/used)
- b) the way that they promote/contribute to defossilization:
  - (i) Supply of Clean Energy (either for energy production or storage) to substitute fossil energy
  - (ii) Energy Efficiency Improvement in comparison to conventional technologies/practices
  - (iii) Soil Carbon Sequestration which is an auxiliary category that mainly plays a Greenhouse Gas (GHG) compensation role (rather than green energy production or fossil fuel reduction (or elimination) means).

In more detail, Clean Energy Supply is primarily subdivided to energy production and storage systems, then the Renewable Energy Source type, the type of used energy (electrical, kinetic, chemical, etc.) and finally the specific technology used. The Energy Efficiency Improvement category is subdivided to the specific kind of energy improvement (efficiency on buildings, vehicles, tools, precision agriculture or livestock farming, etc.) and the corresponding technologies used for the aforementioned purposes. Soil Carbon Sequestration is further analyzed in terms of methods such as soil organic matter, minimum/ no tillage, nutrient management, crop diversification, etc. The FEFTS categories and subcategories are presented in Table 1.

Table 1. FEFTS categories and level 1 and level 2 subcategories.

FEFTS category	Level 1 sub-category	Level 2 sub-category
Energy	Agricultural technology	heating and cooling of buildings
User/Consumer	applications	process heat/cold
		lighting
		agricultural field practices
		vehicles
		tools
		energy sales to external consumers
Clean Energy Supply	Renewable Energy Sources	solar
		wind
		hydro
		geothermal
		bioenergy
		free energy
	Energy types	heating
		cooling
		electricity

		mechanical energy
		chemical energy
_	Energy Technologies	photovoltaics
		solar thermal
		wind mills
		hydropower
		heat pumps
		geothermal
		solid biomass conversion
		biogas / biomethane production
_		liquid biofuels production
	<b>Energy Storages</b>	heat storage
		electricity storage
		cold storage
		intermediate bioenergy carriers
Energy Efficiency	Energy savings	efficient buildings
Improvement		efficient vehicles
		efficient tools
		precision agriculture
		precision livestock farming
		conservation agriculture
Carbon sequestration	Carbon sequestration	soil organic cover
		tillage (Conservation Agriculture + CTF)
		nutrient management
		crop diversification
		soil and water conservation techniques
		fire management
		grassland management

Under FEFTS level 2 sub-category, practical methods are clarified (for details, see FEFTS level 3 sub-category from Deliverable 2.1, Table 4 to Table 10).

Main aim of this deliverable is to present industrial FEFTS solutions that the task leader and external partners registered according to FEFTS categories above and give an initial analysis based on current collection status.

## 1.2 Methodology

In order to create the AgroFossilFree (AFF) database in a use-friendly way, WIP and other partners followed the three phases methodology that was developed in D.2.1 in order to register commercial FEFTS (Fossil-Energy-Free Technologies and Strategies).

During Phase 1 (Initial Identification), all AFF partners conducted desk work (internet search) in order to identify commercial FEFTS. The whole concept was to identify all kinds of such technologies and strategies (complete solutions, hardware, software, methodologies, components, and procedures) that promote the defossilization of EU agriculture and are commercially available. This was done by creating search queries (using popular search engines) on the internet based on the 3 level categorization (and especially keywords/terms of level 3) provided also on Deliverable 2.1. In terms of sources targeted, all the commercial technologies mainly come from FEFTS manufacturers and retailers and are useful for a series of stakeholders (individual farmers, producers associations, energy generators, contractors, advisory services, companies, industry and even policy makers).

During Phase 2 (Survey), the consortium collected commercial technologies into an online survey document (Google Forms) which contains all necessary information that will be used in Chapter 3 (Analysis). According to the next steps foreseen in D.6.5 - 2<sup>nd</sup> Meeting Minutes, the Project Management Team (CERTH) together with WP2 and WP5 partners decided to prepare means of communication (letter, email, video) including clear benefits for companies to join the future platform in order for all partners to communicate the same/similar message while engaging with potential stakeholders. In this way, the contribution of commercial products by the manufacturers/companies themselves would be significantly reinforced (especially after the launch of AgEnergy platform). In this context, a promotional letter was provided to all AFF partners so that they could send/share with commercial FEFTS producers/manufacturers of their choice (see Annex).



Figure 1. Promotional Letter

In this way, externals (companies/manufacturers) could directly submit their technologies to the Google Forms (for the time being) and in the AgEnergy platform in the future once it is launched. Apart from that, INI created a video (see Annex) to attract companies and stakeholders to register their FEFTS.



Figure 2. Promotional video

Finally, during Phase 3 (Data Aggregation), the survey results and collected metadata from previous phases is scheduled to be cleared of malicious, duplicate and incomplete entries in order to ensure data integrity and unbiased analysis in later phases of the AgroFossilFree project.

As it is clearly stated in all the deliverables of WP2 (D2.2, D2.5, D2.11, D2.14), after the beginning of FEFTS registration process and the achievement of our first internal milestone of submitted commercial FEFTS (200 products) in the inventory (until the end of September 2021), the screening process is scheduled to begin before the launch of the platform. In this way, the AgEnergy platform will be filled with high quality and relevant innovative commercial FEFTS. However a first step has already been done, as all records were screened in order to delete duplicate, malicious and incomplete entries. "Incomplete entries" were considered those lacking an exhaustive description and information, thus making their evaluation impossible. For these records, partners were asked to insert additional information. If not available, those entries were completely deleted from the inventory. This initial screening round was carried out for each FEFTS category by the corresponding Task Leader. In the case of commercial FEFTS (products), WIP was responsible for the procedure. In order for all the Task Leaders to complete the screening process, acceptance and exclusion criteria had to be set. To do so, frequent meetings between the Task Leaders were arranged (through Microsoft Teams platform), in order to discuss the matter and agree on the screening procedure for every FEFTS type.

During these meetings, it was decided that a FEFTS Quality Committee consisting of the Task Leaders of WP2 would be set for the aforementioned purpose. The main role of this Committee is the screening of all the FEFTS submitted on the platform. It should be mentioned that the FEFTS submitted from each Task Leader were already checked for their appropriateness, to be uploaded in the inventory, based on the methodology followed by each Task. However, our database will be open for public entry so that interested stakeholders will also be able to input additional data. Their entries will be unpublished until they are validated by the FEFTS Committee. By doing so, the accuracy and reliability of the platform's information regarding its relevance with the objectives of the AgroFossilFree project is guaranteed.

# 2. Survey

The structure of the conducted survey is extensively defined in Deliverable 2.1. The form (see Annex) consists of 4 basic sets of questions. The first section is about general information of the identified commercial FEFTS such as the FEFTS name and category, as well as some basic information of the person registering the FEFTS, his/her contact email and the respective organization. The second section is about more detailed information on the commercial FEFTS such as the product name and general information about the manufacturer/company (such as the number of employees, headquarters' address, etc). The third section is about the FEFTS specification (such as the most applicable agricultural domains, keywords) and the application field. The fourth section is the most important one as it consists of detailed information on the type of FEFTS that is being submitted. The three categories to choose from are: Clean Energy Supply, Energy Efficiency Improvement and Soil Carbon Sequestration, followed by specific sub-categories. The last section is the general assessment of the FEFTS. In this section, the user must answer some questions on the socioeconomic, environmental and general status of his/her FEFTS based on the available information.

It should be mentioned here that both the structure of the survey as well as the analysis of the FEFTS that are presented in Chapter 3, are based on the structure established on D2.1. A basic schematic of this structure is already provided in Table 1.

#### 2.1 Data Collection - Partner's Role

By the end of September 2021, a huge number of commercial technologies were registered by the consortium in total. The consortium worked as a unified partnership with all beneficiaries contributing with their maximum effort. We achieved 178 registered commercial products out of 200 that was our target set our project's 2nd plenary meeting on May 25th, 2021 (~90%), thanks to teamwork and the overall diverse contribution. Given the KPI of 1700 FEFTS (of any type) for our repository until the end of the project, both the initial goals that had been set and the vivid reaction of all partners, led to the collection of more than the half FEFTS in total.

FEFTS TYPE	Partner	Target set	Collected
Scientific Papers	CERTH	493 (approx. 500)	490
	All other partners		
Research Projects	IUNG-PIB	100	107
	All other partners		
Commercial	WIP	200	178
Technologies	All other partners		
Training	WIP	36 (approx. 40)	37
Material	All other partners		5/
	AU	48 (approx. 50)	46
Financing Mechanisms	CERTH		
Wicendinalia	All other partners		
	Total	877 (approx. 900)	858

Table 2. Overview of collection status

The whole identification and registration process was supported by an online thread for Task 2.4, which was created in Microsoft Teams platform to serve as a helpdesk for questions about commercial FEFTS registration.

#### 2.2 Acceptance and exclusion criteria

For the case of commercial FEFTS, they had to have clear agricultural application potential, represent innovative energy saving or clean energy supply (production or storage) technologies. In general, the most appropriate commercial technologies or strategies are the ones having strong potential to be used by a farmer in his/her farm (i.e. energy saving market-ready FEFTS solutions, new ways to produce energy in a sustainable way, etc). Regarding the exclusion criteria, as invalid records were considered entries without clear alternative solution for the fossil fuel use in agriculture.

## 2.3 General information about the collected commercial FEFTS

In this section, general information about the companies of the collected commercial FEFTS will be presented. The origin country of the companies is shown in Figure 3, and the sizes of the companies are sown in Figure 4.

As shown in Figure 3, most of the companies come from Germany (45). Other countries such as Poland, the Netherlands and Denmark have 18, 19 and 20 companies respectively collected by the consortium. Other European countries, such as Spain (7), Italy (13), Greece (7) and France (4) also had some commercial products with the potential to be included in the AgEnergy platform. Outside of Europe, companies from England (6), Ireland (10), Switzerland (8), America (12) and China (6) also provide a great amount of technologies, with a total number of 42.

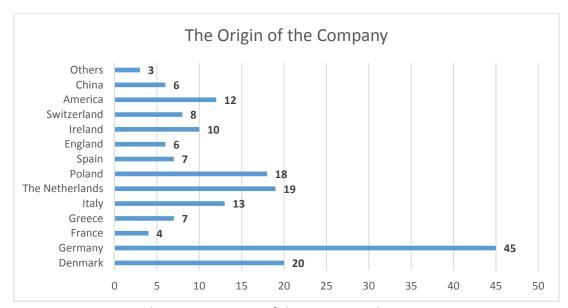


Figure 3. The origin country of the commercial FEFTS companies

Figure 4 presents the size of the companies. This data is not published by most of the companies, hence 133 (75%) of them remains unknown. Other than that, 14 (8%) companies have 51-250 employees. 31 (17%) companies have more than 251 employees.

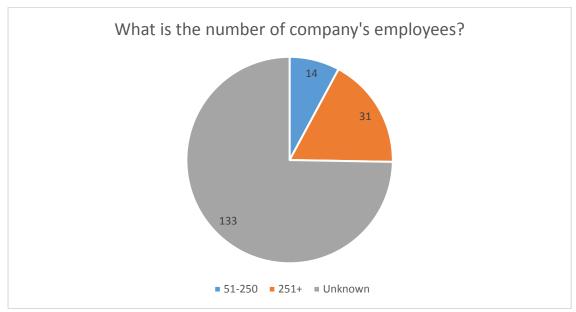


Figure 4. The number of the collected companies' employees

# 3. FEFTS Analysis

# 3.1 FEFTS specifications and applied sector

Figure 5 shows the intended users of collected commercial FEFTS technologies (for each FEFTS, multiple users could be selected). Farmers appear to be the most interested stakeholders, as 171 different FEFTS are targeted to their needs. Industry, producers' associations and companies are the second most interested types of stakeholders (84, 77, 71 FEFTS respectively). Energy generators are also important, as 49 technologies are intended for them. Contract and advisory services appear to be of less interest regarding these technologies with only 24 and 18 technologies for them respectively. Finally, 9 FEFTS could be considered as important ones for Policy makers.

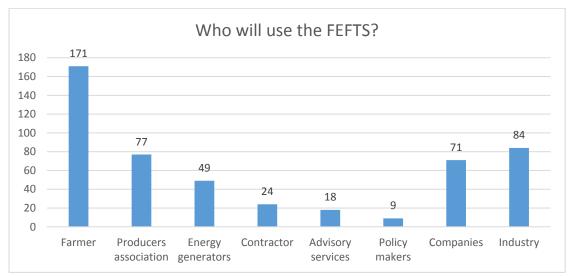


Figure 5. User groups for which the commercial technologies are intended

Next, the FEFTS technology type is analysed (Figure 6). The majority of the commercial FEFTS submitted are complete solutions (152) and hardware (112). Whereas, 17 commercial technologies are software, while 6 are methodology and 9 are procedure.

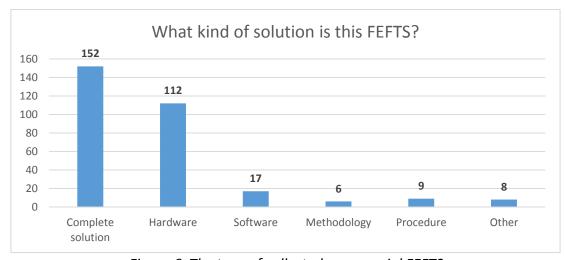


Figure 6. The type of collected commercial FEFTS

Regarding the agricultural domain of these FEFTS (open field agriculture, livestock and greenhouse), most of the commercial FEFTS can be used in open-field agriculture (127). 96 of collected technologies can be used in livestock and 85 are applicable in greenhouses. This shows that most of the technologies are accessible in multiple agricultural domains (see Figure 7).

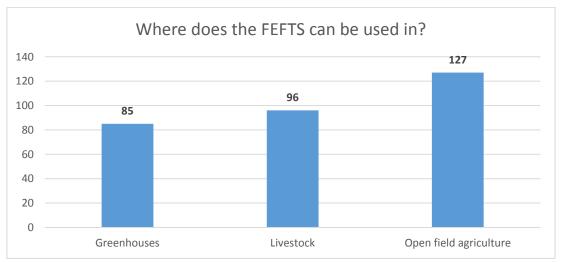


Figure 7. The agricultural domain of the collected commercial FEFTS

# 3.2 FEFTS application field

In the next diagram (Figure 8), the types of agricultural application of the collected commercial technologies are presented. Most of the technologies are agricultural field practices, multiple technology applications and energy provision, with 40 38 and 37 commercial products respectively. Heating and cooling for agricultural constructions get 22 technologies supported, while both energy sales to external consumers and vehicles have 13 technologies registered each. 7 technologies are registered under tools, 4 for process heat/cold and 3 for lighting.

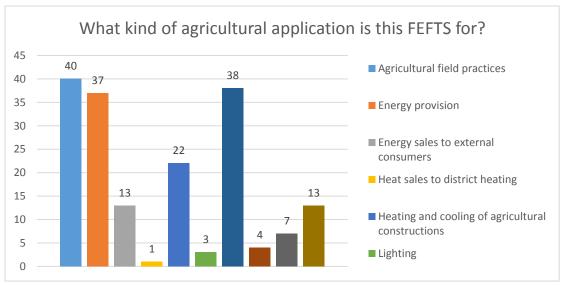


Figure 8. Types of agricultural application of collected FEFTS commercial technologies

As it was mentioned before, commercial FEFTS tend to belong (in terms of where they can be applied) to multiple sectors. This is evident from Figure 8, where it can be seen that the category multiple technology applications is the second biggest category (38 registered). It should be mentioned here that during the first months of the FEFTS registration process to the database, if the user chose multiple technology applications for his/her FEFTS then the survey would skip the categorization in relevant application fields. However later on, this was found to be quite problematic, as a part of commercial FEFTS (9) were not categorized adequately. In order to fix this problem and have the best possible categorization, the Google Forms survey was amended so that if multiple technology applications was chosen, then the user would be prompted to choose (mandatory) the most relevant type for this FEFTS (clean energy supply or energy efficiency improvement or soil carbon sequestration). This means that the analysis presented hereafter does not include the entries which were not categorized. However, these entries will be fully categorized once the AgEnergy Platform is ready and will be included in the following analysis in the updated version of this deliverable (D2.9 on M24, September 2022).

Regarding the types of the collected commercial products it can be seen in the next pie chart that most of them (56%) are under Clean energy supply category, with 95 available solutions, followed by 65 commercial products listed under Energy efficiency improvement, with the ratio of 38%. Soil carbon sequestration has the least registration, with 9 products which correspond to 6% of the total submissions.

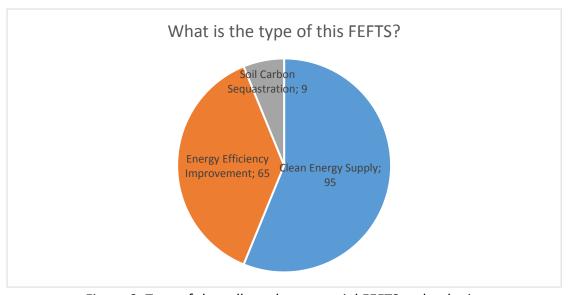


Figure 9. Type of the collected commercial FEFTS technologies

#### 3.2.1 Clean Energy supply

The pie chart below shows the energy type of the technologies under the clean energy supply category. Energy production system technologies are mostly registered (87, 92%), while energy storage systems only stand for 8% (8 products listed in total).

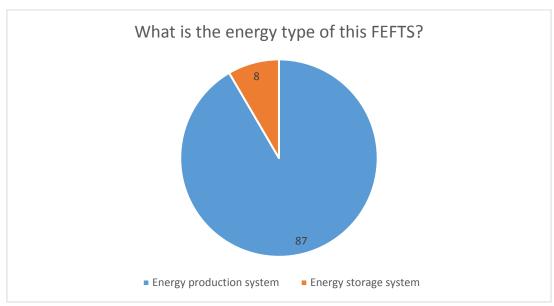


Figure 10. The Energy type of collected FEFTS commercial technologies

As energy production system is the predominant type of technology, it is important to analyze the next category which is the renewable energy used. Figure 11 shows that most of the renewable energy sources are solar (29 out of 87), followed by wind and biomass, with 17 (out of 87) products registered in each. Sewage treatment plant and biogas had 10 commercial products registered.

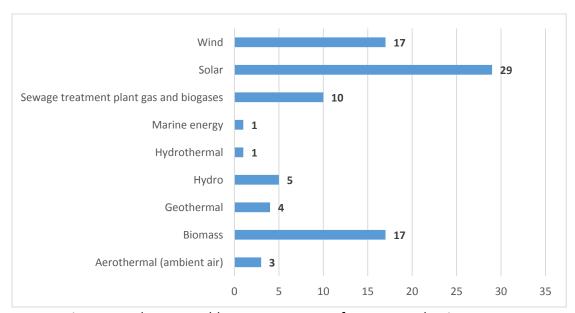


Figure 11. The renewable energy sources of Energy production system

For energy storage systems, 5 renewable energy sources are dedicated to biomass, 1 to solar, with 2 based on other kind of sources.

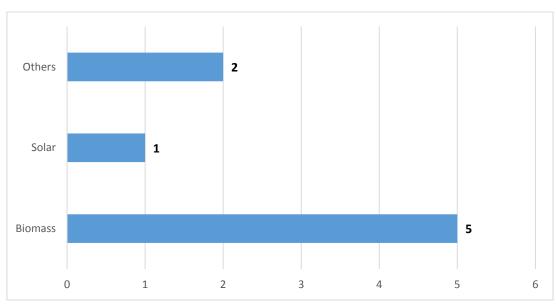


Figure 12. The renewable energy sources of Energy storage system

Regarding the specific technologies for energy production systems, based on Figure 13, most of them are photovoltaics (24), wind turbines (17) and solid biomass conversion (17).

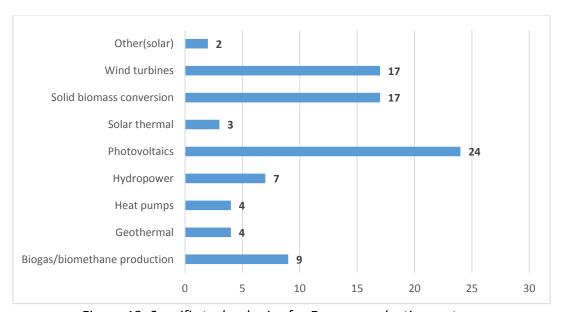


Figure 13. Specific technologies for Energy production systems

Among Photovoltaics, 11 of them are about Agri-PV systems, 10 of them are about PV-arrays. Only 2 are PV on tools and vehicles (Figure 14).

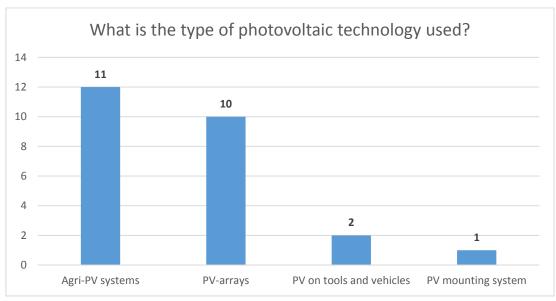


Figure 14. The submitted commercial technologies of the photovoltaic technology type

As it was shown in Figure 15 wind turbines are the second biggest category when referring to specific technologies for energy production systems. As a result, a further analysis of this category was done. Figure 16 shows the energy range of the collected wind turbine technologies, 11 of them are small wind turbines ranging from 1-50KW, 4 of them are medium wind turbines ranges from 50-999KW. This graph, in correlation with figure 5, shows that mostly farmers tend to invest in small wind turbines for the farms in order to produce the energy required to cover their needs. Whereas, bigger solutions tend to be used from companies and industries.

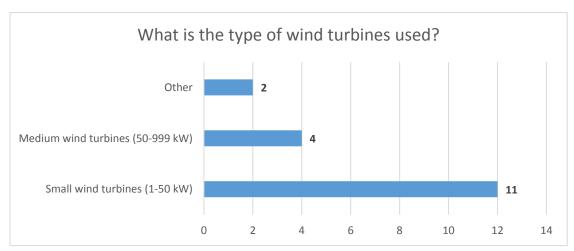


Figure 15. The submitted commercial technologies of the wind turbine type

Regarding solid biomass conversion technologies, agricultural residues are registered the most, with 14 solutions dedicated. Wood chips, energy crops and pellets have 8, 9 and 7 technologies submitted. 5 technologies are from wood log under biomass (Figure 16).

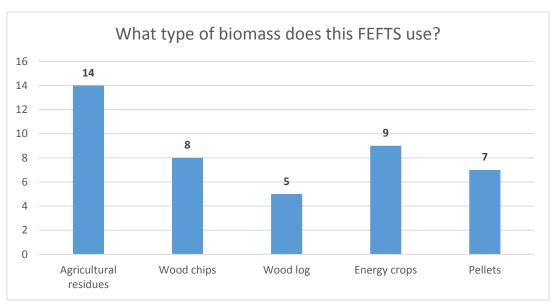


Figure 16. The submitted commercial technologies of the biomass technology

Figure 17 shows the specific technologies for energy storage system. 5 of them are intermediate bioenergy carriers, other 3 are electricity storage.

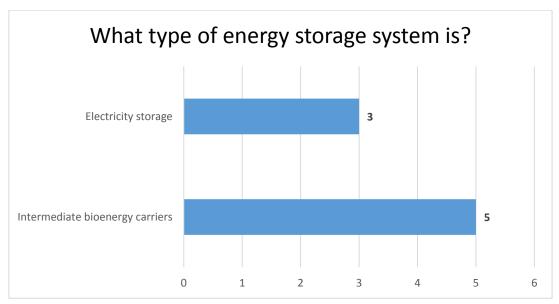


Figure 17. Specific technologies for Energy storage system

## 3.2.2 Energy Efficiency Improvement

Despite Clean Energy Supply, Energy Efficiency Improvement is also important. It can be seen from Figure 9 that 38% of the registered commercial technologies are for energy improvement measures.

Analyzing the results from this category it can be seen that most technologies are for efficient vehicles and precision agriculture (20 and 19 respectively). Efficient tool is also important with 15 technologies registered. Precision livestock farming and efficient Buildings are submitted with 2 and 9 technologies separately. The detailed results are presented in Figure 18.

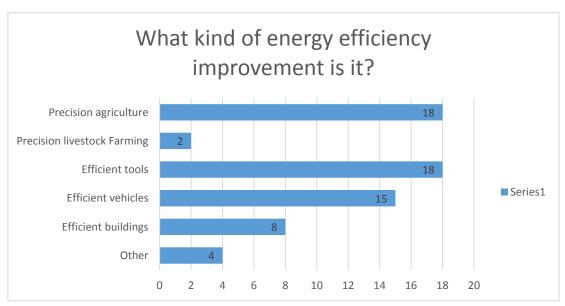


Figure 18. The submitted commercial technologies of the energy improvement type

By analysing further the efficient vehicle category, the majority of answers is dedicated to tractors (electric and methane). Another type of efficient vehicles were drones, lifts and maintenance systems for efficient tyre pressure adjustment (to avoid soil compaction) The next category is precision agriculture, with the majority of the products being dedicated to pesticide reduction, followed by seed, fertilizer and manure reduction. The remaining 4 answers do not follow into the aforementioned categories and are listed as "Other". The last category that can be further analysed is the efficient tools. The majority of the products gathered are about the livestock sector (such as milking machines, feeding machines, refrigerators and heat recovery units), followed by open field agriculture (such as irrigation pumps, drip systems, dryers, no tillage drill) and greenhouses (such as virtual greenhouse simulations (for management of greenhouse productive activities).

#### 3.2.3 Soil carbon sequestration

As shown in Figure 9, not many technologies are registered under Soil carbon sequestration category. Figure 19 illustrates that most of the technologies under this category is tillage (10, 77%), other technologies such as nutrient management, soil organic matter and soil and water conservation techniques have only 1 registered by the consortium.

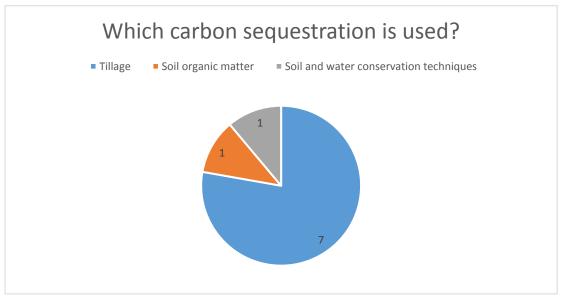


Figure 19. The technologies collected based on carbon sequestration method

#### 3.3 FEFTS Environmental Assessment Result

Overall, when combining the 3 aforementioned categories (Clean Energy Supply, Energy Efficiency Improvement and Soil Carbon Sequestration), fossil energy reduction is achieved either directly or indirectly. Regarding the direct energy inputs, a great number of FEFTS have direct fossil energy use reduction through buildings' electric consumption (61). Followed by Buildings' heat use (48), tractors and vehicles fuel consumption (45) and tools and equipment electricity consumption (38). From Figure 20 it can be seen that most of the commercial products are dedicated to solutions about buildings and how efficient heating conditions while reducing electricity consumption.

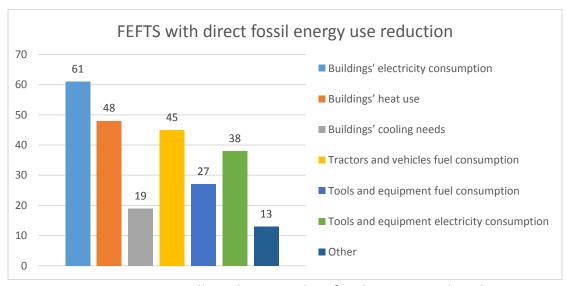


Figure 20. How collected FEFTS reduce fossil energy use directly

Regarding the indirect energy inputs, it is evident from Figure 21 that, fossil energy use is reduced indirectly mostly through pesticide reduction (22), fertilizer reduction (21) and tillage reduction (20), followed by Animal health care. By analysing this figure, it can be seen

that pesticide, fertilizer and tillage are the dominant indirect energy inputs. This corresponds with the results of AgroFossilFree's report D.1.1 on energy consumption in EU agriculture, thus showing the need for commercial products specifically dedicated to reduce these inputs.

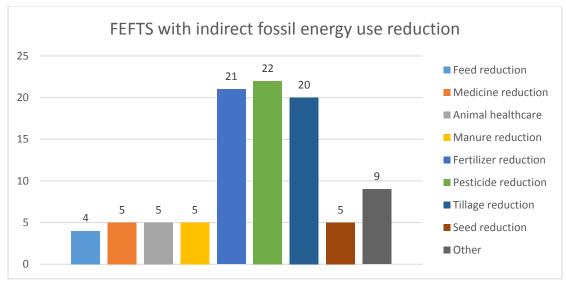


Figure 21. How collected FEFTS reduce fossil energy use indirectly

#### 4. Conclusion and Reflection

The awareness and promotion of currently available industrial FEFTS technologies is crucial for reducing agriculture's reliance on fossil energy. As it is the endpoint of the reduction of fossil use, and with a good development it will stimulate more research and innovations to happen, to form a positive circle. In this project, industrial FEFTS technologies will be collected, screened, and assessed to be included in AgroFossilFree's platform, which will serve to fulfil the need of related consumers and incentive to minimize fossil fuel consumption.

Three phases were planned to collect FEFTS commercial technologies. The FEFTS categories (see Deliverable 2.1) are defined in the first step. During phase 2, the consortium collects and registers related industrial technologies under FEFTS categories through Google. The registered technologies will be cleansed of malicious, duplicate, and incomplete entries in the following phase, phase 3, to ensure data integrity and unbiased analysis in the AgroFossilFree project's succeeding phases.

Starting with a goal of 200 commercial technologies, the consortium was able to collect 187 industrial technologies. Many of the collected technologies are from Europe, especially Germany, and are from companies with many employees. The majority of attention is paid to open-field agriculture, but livestock and greenhouses are also vital. Improvements in energy efficiency, as well as renewable energy production and soil carbon sequestration, are all important, hence many technical applications are common. Most of the technologies focus on farmers, as well as companies and industry. These technologies are mainly complete solutions and hardware and can mostly be used in open field agriculture. However, many technologies also can be implemented for livestock and greenhouses. The agricultural application of collected technologies are mostly agricultural filed practices and energy provision. Most of the FEFTS are under Clean energy supply category, the least in soil carbon sequestration. For clean energy supply category, most of them are energy production systems. These system mostly usesolar, wind and biomass as the basic renewable energy

sources. Regarding solar energy, agri-PV systems and PV arrays are mostly exploited. For wind energy, many technologies are registered as small wind turbines with energy ranging from 1-50 KW. Agricultural residues, energy crops and wood chips for solid biomass conversion technologies are mostly used. Regarding the industrial technologies that aim at improving the Energy efficiency, efficient vehicles is the dominant category followed by precision agriculture and efficient tools. Tillage techniques which include conservation agriculture and CTF methodologies are the most popular technology registered under the Carbon sequestration category. Overall, the majority of the commercial products submitted are about solutions to reduce directly fossil energy inputs through buildings' electricity consumption and heat use. Regarding the indirect energy inputs pesticide, fertilizer and tillage reduction are the basic pillar in which commercial products tend to focus on.

For next Phase (Data Aggregation), the registered technologies will be cleared of malicious, duplicate and incomplete entries in order to ensure data integrity and unbiased analysis in later phases of the AgroFossilFree project.

Furthermore, in order to reach the KPI of 1700 FEFTS, partners will keep on collecting and submitting FEFTS in the coming 2 years so as for the AgEnergy platform to be up to date. Also, two update reports showing the progress achieved will be created.

## Annex

Annex A: Commercial Products retrieved from survey

The following link is the online spreadsheet which contains all the commercial products retrieved from the survey until the  $24{\rm th}$  of September.

FEFTS registrations until September 2021 - Google Sheets

# Annex B: Commercial Products Survey

The following link is the online survey that was used to submit all the categories of identified FEFTS.

 $\frac{https://docs.google.com/spreadsheets/d/1kdl7ZSUUMnZ8jg7pSQurx2wf7sm7G9sYoxwnRDc}{awsl/edit\#gid=0}$ 

Annex C: Promotional letter for the companies to register their commercial products.



Dear Sir/Madam,

Taking into consideration the profile of your company we would like to inform you about the AgroFossilFree Project (https://www.agrofossilfree.eu/), which is supported by the European Union through the Horizon 2020 programme, and its goals that would also benefit your entity in multiple ways.

The main goal of AgroFossilFree project is to pave the way for the de-fossilisation of the European agriculture by diminishing fossil energy dependence of all agricultural domains (open-field and controlled-environment crops and livestock). To do so, AgroFossilFree will:

- evaluate the current energy use status of EU agriculture
- assess farmers' needs and interests
- discuss solutions thoroughly with all related stakeholders through online and physical workshops
- recommend a dedicated research roadmap and policy guidelines for the EU

to achieve more efficient and alternative energy use in agricultural activities with simultaneous GHG

In this context, the project's main instrument to reach out to stakeholders will be an informative and easy-to-use ICT tool, named AgEnergy Platform, which will provide information regarding available Fossil-Energy-Free Technologies and Strategies (FEFTS) that could be applied in the agricultural environment. As an auxiliary tool, the Platform will be accompanied by a Decision Support Toolkit (DST) to propose interventions and financing tools based on users' requirements.

AgroFossilFree is expected to become very popular due to its currently "hot" subject and its diversity of production systems and agro-climatic zones, but also due to its AgEnergy platform that is expected to:

- gain high visibility (EU channels, social media, etc.) for the next 3 years, plus at least another 5 years that will remain open and fully operational after the project's end
- be a one-stop shop for your technologies and strategies to be presented to possible customers
- contain all important information for your technology, directly given in a single-webpage mock-up card in an easy and understandable way especially for farmers as end-users
- allow your technology to be searched by end-users with multiple criteria and a DST, so to be found from the stakeholders that could act as possible customers

We kindly invite you to register your products in the relevant Google Forms\* and consult the relevant  $submission \ \underline{tutorial\ video}{}^{**}.\ Your\ technology\ will\ be\ available\ to\ end-users\ after\ the\ launch\ of\ AgEnergy$ platform on October 1st, 2021.

For those of you who do not have the time to upload your technology, we can do it for you after your consent.

Yours sincerely, AgroFossilFree Team



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# Annex D: Video on FEFTS registration

The following link is the video that INI created to attract companies and stakeholders to register their FEFTS.

https://www.youtube.com/watch?v=ouquCgDuFsY&ab channel=AgrofossilFree

