

Deliverable D3.4

S-PARCS IAT E-BOOK AND THE REPORT ON POST-PROJECT S-PARCS IAT STRATEGY



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Envisioning and Testing New Models of Sustainable Energy Cooperation and Services in Industrial Parks

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DELIVERABLE 3.4 – VERSION 2

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DEM	Demonstrator, pilot, prototype, plan designs	
DEC	Websites, patents filing, press & media actions, videos, etc.	
OTHER	Software, technical diagram, etc.	

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CO	Confidential, restricted under conditions set out in Model Grant Agreement	
CI	Classified, information as referred to in Commission Decision 2001/844/EC	

Annex			
Number	Name	Content	Format

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S-PARCS presents a sound concept for reducing energy costs and energy consumption in industrial parks, while, at the same time, increasing renewable on-site energy production. The pre-assessment of the seven "Lighthouse Parks" from Spain, Portugal, Italy, and Austria, which participate in the study, has shown a high potential for joint energy actions, many of which are transferrable to the community of S-PARCS Followers in the UK, Sweden, Turkey, Russia, Italy, Portugal, Austria and Norway.

More information on the project can be found at <http://www.sparcs-h2020.eu/>

Disclaimer

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Executive summary

Before the project end, the S-PARCS partners set-up a strategy about the best-possible future use of the S-PARCS Initial Assessment Tool and platform. The S-PARCS partners have defined a 2-year post-project phase for which trouble shooting with potential software issues and online availability of the S-PARCS IAT will be guaranteed. During the runtime of S-PARCS, the management of the tool and platform will be under CIRCE's responsibility, and it will be located in a virtual server.

The *Guide for users* e-book presented in this document, will serve as a user-friendly guide on how to use the S-PARCS IAT and platform and will provide users with a virtual tour through the platform and the tool's menus and contents. The post project report will detail how the S-PARCS partners will ensure the post-project availability and usability of the SPARCS IAT.

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1 INTRODUCTION

One of the core outputs of the S-PARCS project is the **e-Platform S-PARCS COMMUNITY** and the Industrial Park Service Initial Assessment Tool, short **S-PARCS IAT**.

The **Industrial Park Service Initial Assessment Tool (S-PARCS IAT)** forms part of the wider supporting **e-Platform “S-PARCS community”** for companies and parks.

The S-PARCS e-Platform will create a community of interest within the industrial sector to transfer all the material developed in the S-PARCS project that may be of wider public interest. Guides and technical material will serve as support tools, meeting point and coverage for the IAT, it will encourage and engage parks and companies willing to participate in energy related cooperation activities and mutualised energy services.

The outcome of Task 3.4, *Post project exploitation strategy of S-PARCS IAT*, will flow into the Exploitation plan (D6.3). Task 3.3, *Internal testing and Improving*, and 3.4 will provide the S-PARCS IAT e-book guiding users when using the tool, so called *Guide for users*.

2 S-PARCS IAT and community post-project strategy

The post-project strategy will serve to ensure the sustainability of S-PARCS IAT and community.

The central exploitable results of the S-PARCS project are the Industrial Park Service Initial Assessment Tool (IAT) and the S-PARCS platform which have been developed in WP3 under the coordination of S-PARCS partner CIRCE and serve as collectors of the information and activities developed in the project.

2.1 S-PARCS IAT and community post-project exploitation

The IAT and e-Platform will serve as both a key result of the S-PARCS project as well as a dissemination and communication channel of the project during and especially after the project's end. Thereby, it is in itself an exploitable result of S-PARCS. For the time being, the S-PARCS consortium plans to exploit the IAT and the e-Platform in the following ways:

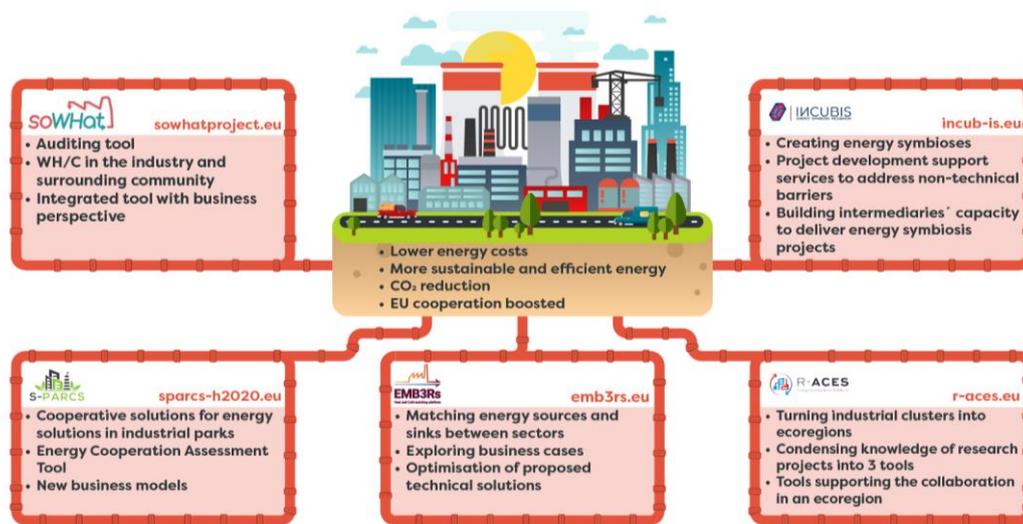
- **Exploitation of the Community of Lighthouse and Follower Parks:** S-PARCS, which is a coordination and support action, will use the IAT and e-Platform to establish the community of Lighthouse and Follower parks by presenting the actions undertaken in and in between them as the first best-practise examples for energy cooperation in industrial parks of different sizes and organisational structures. Research and analyses done in SPARCS (especially in WP1, *State of the art of energy cooperation in industrial parks*, and WP2, *Envisioning innovative instruments and business models for enhanced energy cooperation*) show, that the lack of successful energy cooperation strategies in real-life situations is a major roadblock for more intensive activities in the sector when it comes to cooperation.
- The consortium currently investigates how the e-platform and the IAT can be opened up also to **best practise case studies** from outside the Lighthouse and Follower parks. In this regard, the consortium considers launching an application process so anyone can apply to be labelled

as an S-PARCS™ best practise project. For the latter purpose, a set of indicators and quality criteria has to be developed, that is practicable, plausible and complete, in order to show the information in simplified mode. By that, the aim is also to attract potential investors to get on board in the real-life implementation of promising solutions.

- To get in touch with companies, investors, funding agencies, auditors, researchers or further experts, a meeting module has been implemented in the IAT. This module aims at supporting successful matchmaking between parks/companies in parks and relevant stakeholders which can enlarge the S-PARCS network as well as keep them alive. Partners will continue their efforts in disseminating the IAT and the e-platform in their own countries but also at EU and, when possible, international scale. This will be done through regular publications of article in specialised press and webzines as well as a follow-up of the social media activities during 2 years after the end of the project. In particular, every significant event (e.g. new parks contributing to the platform) will be disseminated as often as possible. If needed, webinars and training sessions will take place to ensure an uptake of the project results.

- The S-PARCS consortium is aware that an important aspect of the IAT and e-Platform will be to provide relevant and interesting information and opportunities from the very launch of the platform. Therefore, the S-PARCS consortium aims at further strengthening cooperation with other projects and to make use of potential synergies. In this sense, the consortium has detected already several projects:

- SPIRE SAIS, Skills Alliance for Industrial Symbiosis – a Cross-sectoral Blueprint for a Sustainable Process Industry (Co-funded by the Erasmus+ Programme of the European Union), where CIRCE, RINA and SSSA participate as partners, which main aim is to increase the skills of EU citizens on Industrial Symbiosis. S-PARCS IAT and platform can be disseminated through them in order to give capacity building on energy cooperation solutions.
- Hub of cooperation: S-PARCS has started to cooperate with four other Horizon 2020 projects that aim at increasing energy cooperation and symbiosis activities the European industry. These projects are SO WHAT (GA#847097), EMB3Rs (GA#847121), R-ACES (GA#892429) and INCUBIS (GA#894800). The cooperation started with a workshop (organized by the SO WHAT team) dedicated to Heat recovery and Energy Cooperation in European Industries, moderated by Francesco Peccianti (RINA-C, coordinator of the SO WHAT project and S-PARCS partner), which took place (virtually) on the 18 November 2020 and attracted more than 100 people. This cooperation builds on two activities: firstly, the dissemination and communication managers of these projects held a meeting to discuss common D&C activities to provide each other support and enlarge the audience and out-reach of the projects' findings. Secondly, the coordinators of the projects mentioned are in the process of designing a common Initiative and to follow this activity up by proposing joint activities. The first proposal is to encourage the other projects to test and use the S-PARCS tools with S-PARCS partnership support, as the S-PARCS project being the most mature project from the technical perspective and therefore the most exploitation oriented one (with the S-PARCS community and IAT being up and running). Both of these processes have started in October 2020 and are therefore still in their infancy. Further information will be provided in the update to this deliverable in June 2021.




 These projects have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 847121 (EMB3Rs), No 894800 (INCUBIS), No 892429 (R-ACES), No 847097 (SO WHAT), No 785134 (S-PARCS)

Figure 2-1: Assessment of cooperation potentials between S-PARCS and four other Horizon 2020 projects (illustration designed by the EMB3Rs project team, GA# 847121)

• Furthermore, the step-by-step process developed in S-PARCS which tightly links barriers, instruments and solutions allows replicability of the strategies developed for and in the Lighthouse and Follower Parks as well as in current running EU funded projects, working in different sectors of activity that could likely take advantage of the tools already developed such as:

- frESCO H2020 project, New business models for innovative energy service bundles for residential consumers, GA 893857, coordinated by CIRCE and where EI-JKU and RINA-C participate as partners.
- BAMBOO H2020 project, Boosting new Approaches for flexibility Management By Optimizing process Off-gas and waste use, GA 820771, where CIRCE, EI-JKU, RINA-C participate as partners.
- As well as the four projects shown in Figure 2-1. These projects also aim at developing tools for the assessment of energy cooperation activities. S-PARCS aims at providing them with insights into the IAT, lessons learned and at finding common dissemination activities.

• It has been identified, that this step-by-step procedure opens up the possibility to use this process as well as the structure and functionalities of the IAT and e-Platform for other, similar or comparable topics in the upcoming Horizon Europe calls.

• In addition to this, the potential extension of the platform and the IAT with other complementary tools (in future research projects) is under scrutiny, as well as using the platform and the IAT to detect non-energy cooperation opportunities (and benefits) in industrial parks.

Thereby, S-PARCS partners aim to exploit the IAT and e-platform as a highly relevant reference for future projects and business opportunities. Once project extension due to COVID-19 is approved by the European Commission, the exploitation strategy beyond the project will be redefined and Deliverable 6.3 *Exploitation Plan*, will be updated if required.

2.2 S-PARCS IAT and community post-project availability and usability

The specification of the S-PARCS IAT and the e-Platform were developed within Task 3.1, *Specifying data, algorithms and output*. The workflow of defining the system specification is based on the analysis of the parks and the output of work packages 1, 2, and 4, *Park assessment and coordination framework*.

S-PARCS IAT has been implemented as part of a multi-platform application based upon previous, related experiences of the WP leader, CIRCE. Though, it was decided to use a different approach in terms of concept of the platform as a community which includes two tools and basic information related to energy cooperation in industrial parks. The technical specifications of the web hosting server are:

- Virtual server VPS 2 (2vCPU, 4GB RAM, SSD 60 GB)
- OS: Linux
- MySQL: For databases storage.
- Plesk: Web hosting platform

To access these tools the user needs the common requirements for any website: a device with an Internet connection (mobile phone, PC, tablets, etc.) and a web browser. There are no requirements for OS compatibility, but an updated version of the browser is advisable in order to guarantee the proper visualization and interaction of the websites. The use of the platform is and will be free-of charge during the 2-year post-project period.

The S-PARCS community platform and S-PARCS IAT, published at the end of month 30, complies with GDPR according to the Data Management Plan (D7.1) of the S-PARCS project.

A paramount aspect will be the formulation of the strategy for ensuring the durability of the IAT and e-Platform (also in connection with the S-PARCS website) after the project end as well as the decision-making about rights and responsibilities related to the tool (also with regards to extending it) after the project ends.

Possible options to maintain the networks and diffuse S-PARCS IAT have been discussed, as well as the IPR (Intellectual Property Rights). Thereby, continuity and maintenance of the online platform and the IAT beyond the project runtime will be ensured. In this regard, in order to ensure IPR and GDPR issues CIRCE will be unique responsible for the S-PARCS IAT and platform resource management during the project duration and post-project period. CIRCE is under registration process of the programmed code of the IAT and the platform. Once the project is finished, however, if another consortium member wishes to use technology/data from the project, such use will need to be the subject of a separate agreement between the parties concerned (as described in detail in the project's consortium agreement).

Respecting GDPR, databases only store the user email address from the registration and other stored information comes from the questionnaire's answers in the S-PARCS IAT (company

and park level); Park and Stakeholders information when filling out the user profile at the S-PARCS community, and Energy cooperation solutions and support needed from the park and stakeholders forms at the S-PARCS community. In this sense no personal information is managed through both the S-PARCS IAT and platform. Therefore, both, the IAT and the platform accomplish with the DGPR rules regarding forms, and privacy policy.

The data will be stored on the web hosting server rented by CIRCE for at least the 2 years post-project. During this time, the maintenance of both websites, the S-PARCS community and IAT, is also guaranteed as well as the required analysis and calculations, which will be performed automatically in the same server. The data and the obtained results are private and only the users themselves will be able to access them. However, they could agree to share some of their private content with others if they are interested in.

2.3 Legal requirements, terms and conditions for use for post-project period

The S-PARCS community e-Platform has been designed to comply with specific technical and legal requirements, among which it is important to note the following ones. These requirements are specified in the contract signed with the external company that developed the programming tasks:

- Web servers, bandwidth, hardware and software that meet features needed to implement the resources and tools included in the project, so that they are accessible fluidly and easily by different users.
- Responsive Web Design (RWD design), which ensures the correct appearance of the web in the various existing mobile devices such as laptops, tablets, smartphones, e-books, etc.
- Service Level Agreement, SLA. It means availability of service, under which must be guaranteed a level of service of at least 99%.
- Data protection legislation. The e-platform includes legal information regarding processing of users' personal data, privacy statement and acceptance of the use of cookies in accordance with the EU directive.

Additionally, specific issues have been addressed regarding Personal Data Protection:

- Establishment of a Privacy Statement of the S-PARCS e-platform that must be accepted in order to become a registered user.
- Guarantying the user's consent and rights of access, rectification, cancellation and opposition to the given personal data, according to the Spanish/European regulations.

As for the requirements of the Grant Agreement of the European Commission, the interface of the S-PARCS community e-Platform clearly shows the disclaimer informing this project has been funded from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 785134.

The e-platform also informs the general public that the content included reflects only the authors' views, and the funding agency is not responsible for any use that may be made of the information it contains.

3 Guide for users

The guide for users gives an overview of all resources available in S-PARCS community and provides support on how to navigate through all sites included in the e-platform.

When a registered user enters the S-PARCS community the guide for users can be accessed through the link shown in the figure below, in the figure, from the S-PARCS community tool:

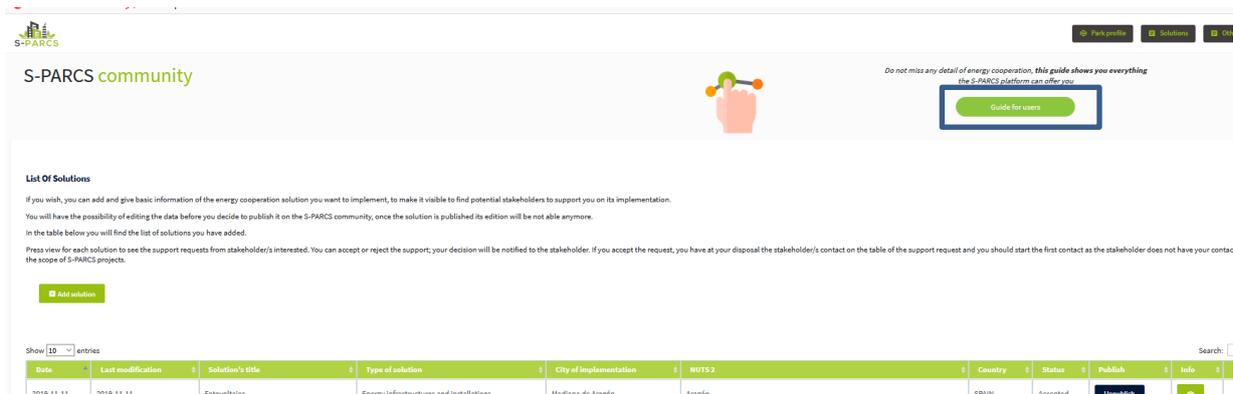


Figure 3-1: Access to the guide for users

It guides you through the steps to make right use of the platform, IAT an S-PARCS community, it explains the steps according to the role you have chosen in the registration process. It is available only when the user register and it can be open any time the user needs it, as well it can be close in any moment. It is designed in this way in order to make easier the use of the tool through being accessible from the platform itself, as a complement of it.

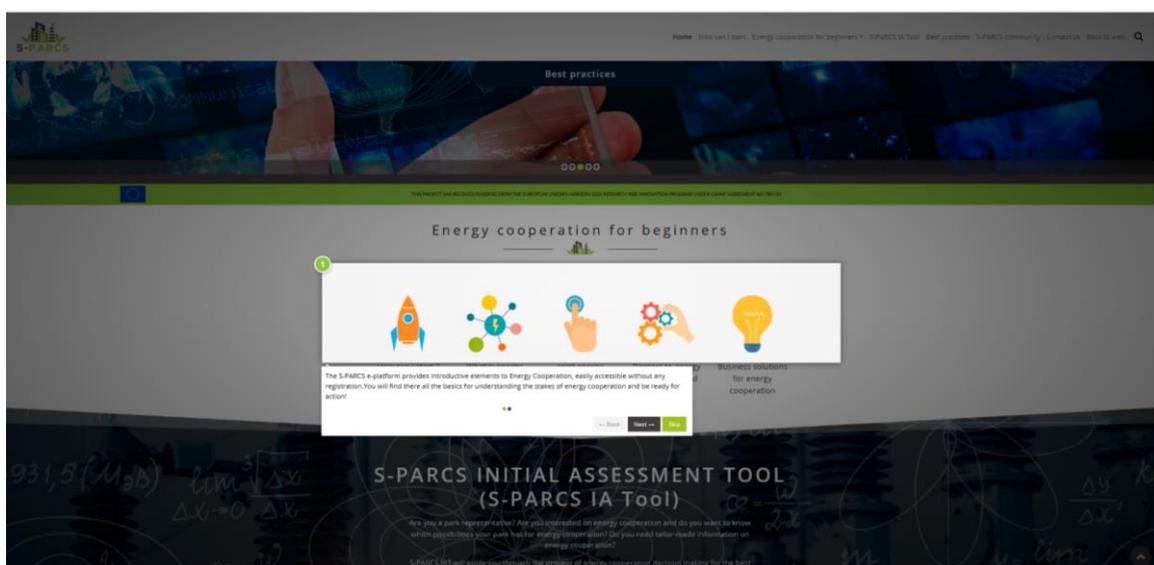


Figure 3-2: Guide for users for energy cooperation for beginners' section

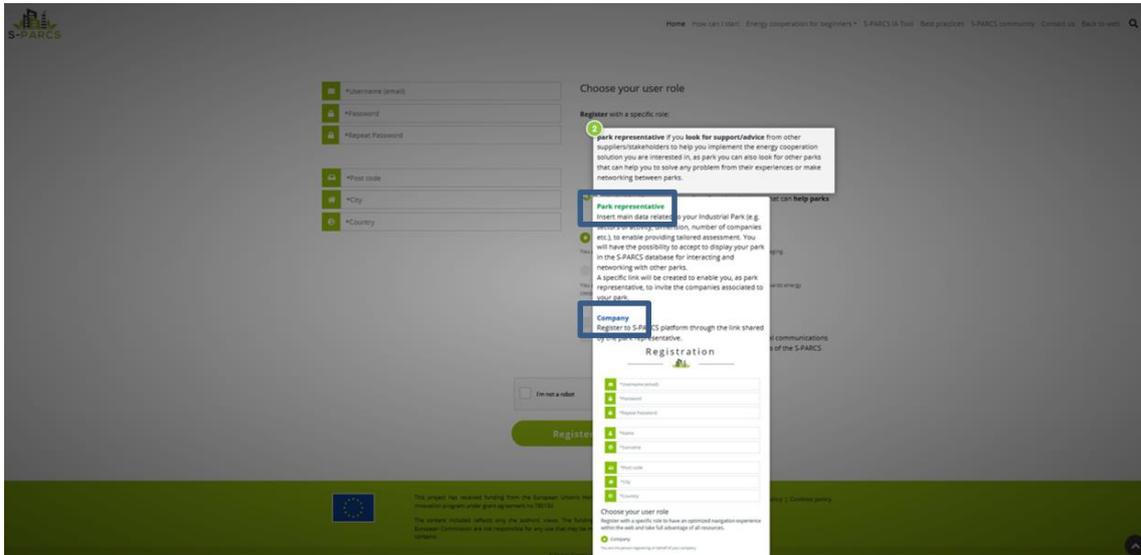


Figure 3-3: Guide for users guiding depending for the different roles

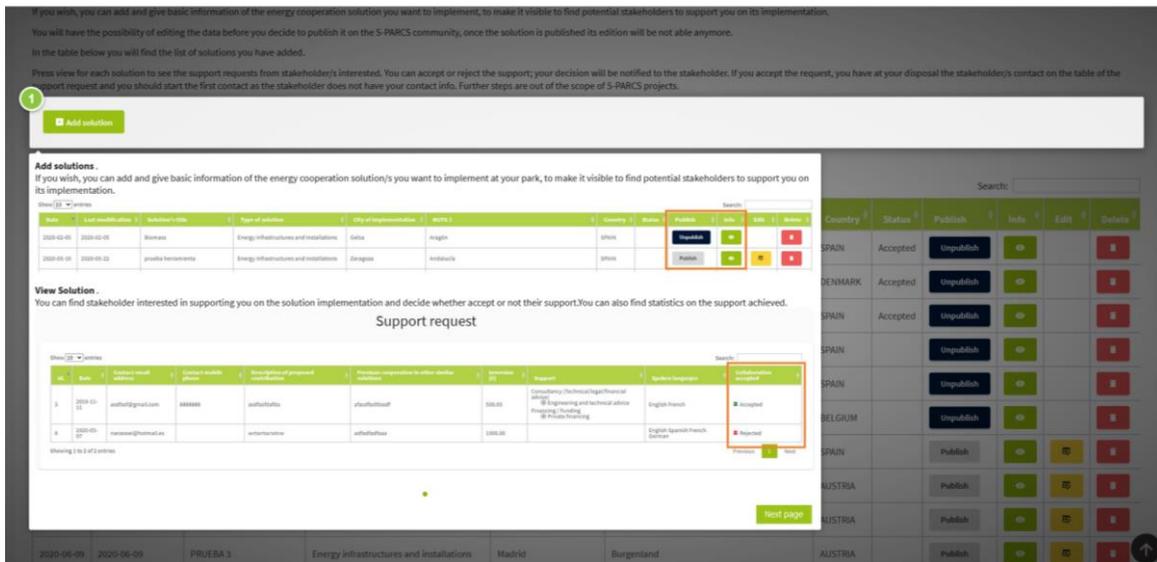


Figure 3-5: Guide for users guiding on the matching process of the S-PARCS community tool

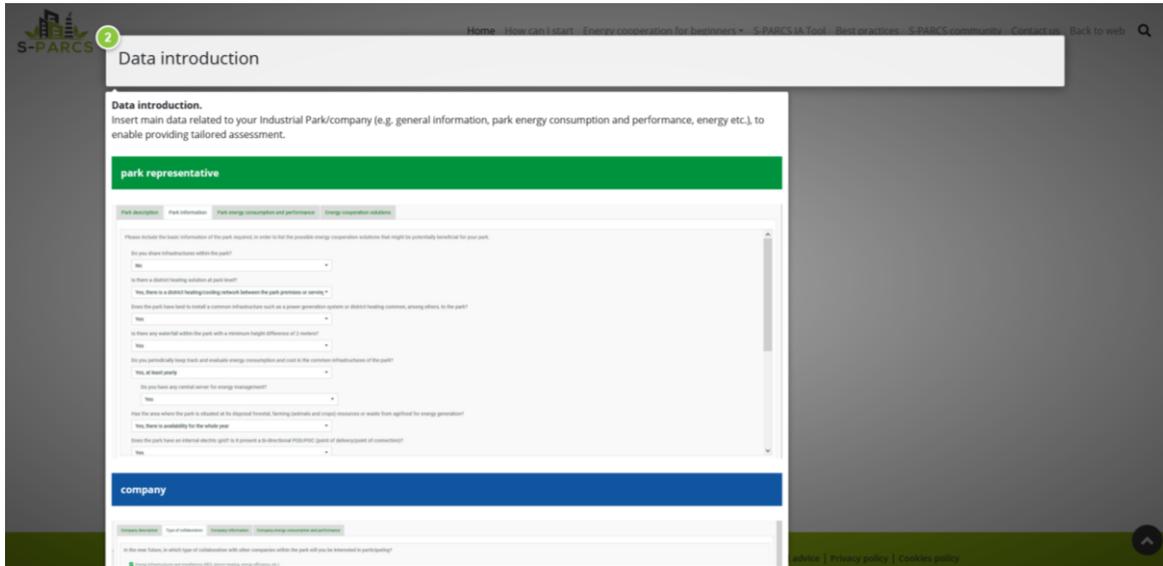


Figure 3-6: Guide for users guiding on the S-PARCS IAT data introduction

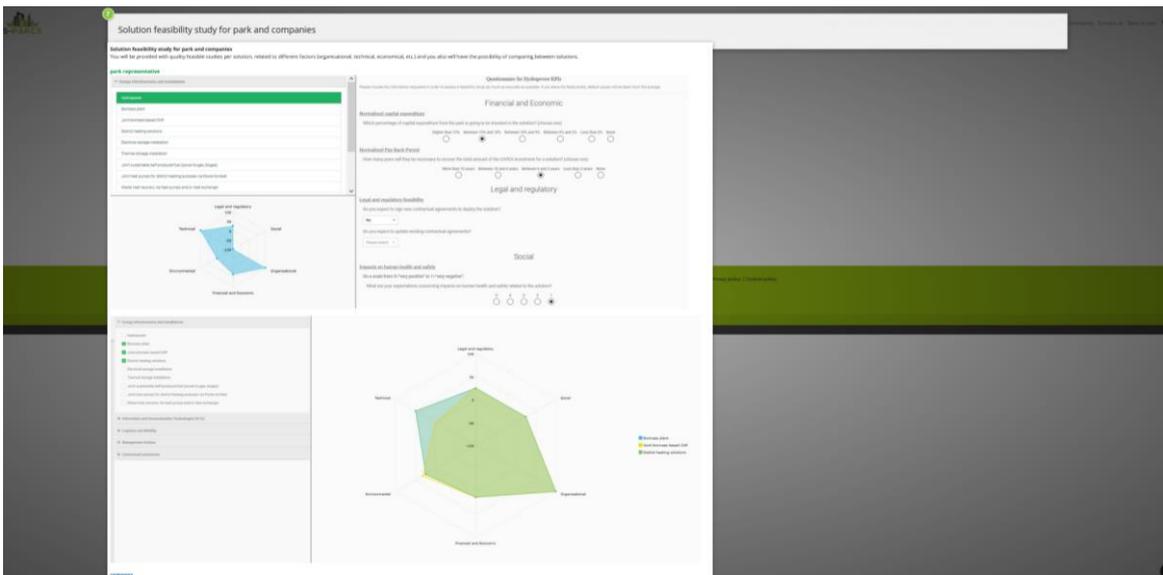


Figure 3-7: Guide for users guiding on the S-PARCS feasibility studies for the energy cooperation solutions