Energy Performance Contracting Plus

Analysis of opportunities, barriers and requirements of SME Partnerships for Innovative Energy Services

June 2015

Co-funded by European Union

Stefan Amann and Klemens Leutgöb

e7 Energie Markt Analyse GmbH
Walcherstraße 11/43
A-1020 Vienna
T: +43 1 907 80 26
E: stefan.amann@e-sieben.at

This document has been elaborated within the *Energy Performance Contracting Plus* (EPC+) project and is available on the project website.

www.epcplus.org

Task: 2.1.
Deliverable: 2.1.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 649666.

Content

1. Background on SME Partnerships for Innovative Energy Services

The EPC+ project aims at developing and promoting **new business models for the implementation of energy efficiency services through cooperation of Small and Medium-sized Enterprises (SMEs)**.

Through cooperation **innovative energy efficiency services (EES)** can be offered. Cooperation enables SMEs to offer novel and high quality energy services, which they could not provide as stand-alone company. Such services are serious alternatives to standard energy efficiency services provided by energy service companies (ESCOs) and may provide promising opportunities. Therefore, on the one hand this will create more competition among energy efficiency service providers, on the other hand this leads to new market demand and additional money flows. Through cooperation of SMEs a certain new market potential arises. Advantage can be taken of this business opportunity.

Within the frame of the EPC+ project the cooperation of SMEs with the aim to offer joint EES to the market is described as **SPIN**. Such **S**ME **P**artnerships for **I**nnovative E**n**ergy Services are organized clusters of independent companies that jointly supply novel energy efficiency services to existing or new customers. The partnership sets commonly agreed objectives, valid for a structured and long-term cooperation.

Creation of a partnership or network can be simple, if cause and effect links are well-known. However, cooperative or collaborative approaches may turn out to be complex, where cause and effect links are not so clear or even unpredictable. Such approaches may be even chaotic, but at the same time offer room for the creation of innovative practices. Therefore, **complex affairs need innovative answers – SPINs**.

In order to support the development and the management of SPINs accordingly organisational tools, e.g. a model contract which rules risk sharing, remuneration, etc., are required. These tools help SPIN members to establish a functional and market oriented partnership. The project supports SMEs that are interested to form SPINs by means of standardized contracts and technical as well as financial tools. This leads to a reduction of transaction costs and will provide collaborating SMEs with a competitive advantage. The organisational tools will support potential SPIN members or potential SPIN managers during the creation process and during the management process of SME Partnerships for Innovative Energy Services. Organisational tools can be at www.epcplus.org.

As a first step in towards the creation of a SPIN, this document investigates opportunities and barriers for a SPIN and derives conclusions on indispensable features for success of SPINs on the market. It is assumed that innovative energy services provided by SPINs feature promising advantages compared to standard services offered by ESCOs. For instance, the supply of innovative energy services leads to higher quality services due to the specification of each partner and capability to respond better to customer needs.

In order to come up with concrete recommendations a SWOT analysis (strengths, weaknesses, opportunities and threats) is carried out. Recommendations are derived and explain necessary preconditions for well-functioning SME partnerships. They set the basis for the development of certain organisational, technical and financial tools.

2. Analysis on Strengths, Weaknesses, Opportunities and Threats

In this chapter a SWOT analysis is illustrated. Strengths, weaknesses, opportunities and threats of SME Partnerships for Innovative Energy Services are investigated. An overview is provided in

Figure 1.

Strengths	**Weaknesses**

▪ services can be offered in higher quality compared to services offered by ESCOs;
▪ services can be provided at lower cost to the customer;
▪ allow a quick and efficient response upon customer needs and market demand;
▪ allows transfer of know-how among SPINs to persist in fast changing environment;
▪ SPINs face less project risk in contrast with ad hoc cooperation forms;
▪ allow access to wider customer groups.
	▪ insufficient identification of the staff with the offered service and the SPIN;
	▪ insufficient definition of an appropriate SPIN-management structure;
	▪ different approaches from experts lead to higher development costs;
	▪ absence of a SPIN-framework leads to:
	  ▪ less transfer of sales opportunities;
	  ▪ limited know-how sharing.
	▪ transfer of a sales opportunity creates higher overhead cost;
	▪ trust of clients in services provided by SPINs is ambiguous;
	▪ smaller customer group as willingness to pay decreases;
	▪ SPIN members may not fully understand the complexity and duties.

Opportunities	**Threats**

▪ there is growing demand for specialized, innovative and high quality energy efficiency solutions;
▪ Small scale services providers seem to be less anonymous;
▪ local SMEs are likely to be preferred by some clients;
▪ SPINs can be also capable to cover bigger areas;
▪ various backgrounds of SPIN members helps to be more resilient.
	▪ Little or no identification with the SPIN can result in the collapse of the SPIN:
	  ▪ retention of know-how of SPIN experts due to mistrust;
	  ▪ interest of the own company is seen as more important as the success of the SPIN.
	▪ Know-how sharing may leads to a growing number of competitors;
	▪ unfavorable market conditions may hinder the supply of services of SPINs.

Figure 1: Overview SWOT analysis of SME Partnerships for Innovative Energy Services (Source: own illustration).

2.1. Strengths

On an entrepreneurial level several strengths for SME partnerships could be identified:

- SME partnerships are capable to offer and implement their **services in higher quality** compared to existing energy efficiency services offered by (multinational) ESCOs. This is due to the utilization of specialized know-how of each SPIN partner in the network. Such multi- and transdisciplinary approaches have a unique creation force. The common analysis of the market situation, the common development of tools and services and the common definition of a sales strategy is beneficial.
- Probably innovative energy services can be **provided at lower cost to the customer**, due to the *EPC+ approach*. The EPC+ approach features the standardization of a model contract and provides technical and financial tools, which can be applied easily. Standardization certainly leads to decreasing transaction cost. However, a lower retail price must not necessarily reflect strength. Offering innovative niche services may have comparatively higher costs but at the same time provide comparatively higher quality and satisfy customers' needs better.
- SME partnerships include the strength of **a quick and efficient response upon customer needs and market demand**. Due to short communication channels within and among SMEs, in comparison with competing divisions in bigger enterprises which need to stick to their core business, the convocation of phone calls or meetings might be faster. Therefore, smoother collaboration is inherent to such partnerships. Also the quick start-up of new projects on the basis of existing SPIN can take place quickly.
- Further strength is seen with the **transfer of know-how among SPINs**. Mutual learning, sharing of experiences and good practice examples are key elements for SMEs to persist in a fast changing environment.
- Due to the common definition of long-term objectives **SPINs face less project risk** in contrast with ad hoc cooperation forms. Being after common objectives and having a common identity leads to an increase in mutual trust. The prosecution of common objectives are underlined by network contracts, which clarify remuneration issues, risk sharing, (transfer of) ownership, etc.
- SME partnerships allow **access to wider customer groups**. The individual SPIN partner will benefit from having access to the clients of another SPIN member. SPIN partners can be easily introduced to new clients, even if the offered service is outside the frame of SPIN. Additionally SPINs will reach new customer groups due to the supply of so far not available services. On the one hand, very likely this leads to an increase of turnover of each SPIN member and, on the other hand, sales costs are lowered as the partnership approach allows access to different clients.

2.2. Weaknesses

In spite of the big opportunities created by a SPIN, the current practice shows that there are only a few good practice examples. The reasons for this are some important barriers, for instance:

- The experts working on the services provided by the SPIN belong to different companies and therefore have different organisational and disciplinary backgrounds. A weak point can be seen with **insufficient identification of the staff with the offered service and the SPIN**. A strong team needs a common identity. If the creation of a common identity is missed this will clearly lead to motivational problems and – in the worst case – will lead to mistrust.
- An **insufficient definition of an appropriate SPIN-management structure** and limited authority of the SPIN manager (to be defined in a common SPIN framework) may leads to vague assignment of tasks and responsibilities, in contrast to the accomplishment of tasks of the own company.
- Different approaches from experts with respect to product development, marketing and sales may leads to unequal problem perception. This might end up in **higher development costs** as there are no standard processes at hand.
- Due to high-quality services it is possible that higher costs need to be charged. This will lead to a **smaller customer group as willingness to pay decreases**.
- The transfer of sales opportunities between SPIN partners would increase the overall sales and turnover of the partners of the SPIN. However, the **transfer of a sales opportunity from one partner to another partner creates higher overhead cost** for the first partner (e.g. time spent for communication).
- The **absence of a SPIN-framework** (e.g. rules about sales commission), a lot of **sales opportunities will not be transferred** among SPIN partners. Transfer of sales creates the risk that the client will be absorbed by the other partner, while it does not generate immediately an advantage.
- The **absence of SPIN-framework leads to limited know-how sharing** and conflict. An energy audit company typically has difficult access to reliable cost estimates of energy saving investments. Having this information could increase considerably its competitive position. This latest information is usually available at an engineering company, but for them it is not advantageous to share this know-how as the information sharing requires their expertise and time. Also there is the risk that the energy audit company could use this information to a later point in time to compete with the engineering company itself.
- Due to the lack of good practice examples **trust of clients in services provided by SPINs is ambiguous**. Additional explanations and awareness rising leads to higher cost on the side of one SPIN member.
- Another weakness lies with the organisational complexity and the understanding of the complexity of its SPIN members. **SPIN members may not fully understand the complexity and duties** which can lead to excessive demand. This weakness can be wiped out with the definition and agreement on a common SPIN framework (SPIN contract).

2.3. Opportunities

Opportunities refer prevailingly to the situation on the market and the preferences of potential clients

- Experiences show that there is a **growing demand for specialized, innovative and high quality energy efficiency solutions**. These services typically can be delivered better by smaller, independent and flexible market players, instead of big ESCOs. It is assumed that SPINs are capable to respond better and faster to customer's specific needs.
- Some customers prefer smaller SMEs structures as they are more transparent. **Small scale services providers seem to be less anonymous** in comparison with multinational companies and communication is easier in cases of (temporary) absence contact person.
- **Local SMEs are likely to be preferred by some clients** instead of purchasing energy efficiency services provided by big ESCOs. The local availability and the fact that the value added chain remains in the local area can be seen as incentive by some clients.
- SPIN members may be spread all over a region, country or even transnational. So **SPINs can be also capable to cover bigger areas** and this will increase the responsiveness to customers. In line with that highly improved internet based communication possibilities (online meetings and online file sharing systems) facilitates cooperation on wide distances and decreases the competitive advantage of big ESCOs that have all expertise in one building under one roof.
- The **various backgrounds of SPIN members** and their multi- or even transdisciplinary approach **helps to be more resilient**. With this respect resilience describes the ability of a SPIN and its members to "bounce back", if the market is very challenging. It is assumed that a SPIN and its members possess the opportunity to use better creative thinking and potential in multi- and transdisciplinary teams.

2.4. Threats

- Because of **'egoistic' free rider behaviour** (e.g. some partners do not transfer sales opportunities or share know-how), other partners will feel unfairly treated and tensions and mistrust will start to grow. This might be due to the fact that there is not enough identification with the SPIN. This **can result in the collapse of the SPIN** or even open conflicts between previously collaborating network partners. The retention of know-how of SPIN experts and retention of sales opportunities undermines the strength of a SPIN. Clearly this is a threat as the whole success of the SPIN is at risk.
- It is possible that the response time of a SPIN, respectively its members, is not as fast as initially assumed. This might be due to the fact that there is not enough identification with the SPIN and the **interest of the own company is seen as more important as the success of the SPIN**. Also this can result in the collapse of the SPIN.

- Know-how sharing can be beneficial for the SPIN in the short run. However, **in the long run know-how sharing may leads to further competitors**. This conflict of interest arises if know-how sharing is insufficiently ruled by the SPIN contract. Clearly this can result in a collapse of the SPIN and may causes financial and reputational damage to some SPIN partners.
- **Unfavourable market conditions** (political and financial) **may hinder the supply of services of SPINs**. This can be due to the fact the new laws are enacted and political priorities change, only little or no money is spent for energy efficiency services or even due to the fact that cooperative approaches are perceived negatively. This can lead to a collapse of the SPIN and even its members.

3. Derivation of preconditions for a well-functioning SPIN

From the analysis in chapter 2 various preconditions for a well-functioning SPIN can be derived. On the one hand they are related to the market presence and strategic orientation of the SPIN, on the other hand they refer to the SPIN's internal organisation and management.

3.1. Market approach and strategy

From the point of view of market approach and strategic answers to market demand a successful SPIN has to cope with the following challenges:

a) **Joint commitment to strategic alignment of the SPIN:** The SPIN needs to develop a clear strategy, which is shared by all members of the SPIN. This means, that it is not enough to have a *good* strategy taking into account a specific demand of the market, but it is even more important that all SPIN members are committed to the strategic alignment and move in the same direction.

b) **Selection of suitable customer segments:** Costumer segments where SPIN partners are already represented are predestined for the provision of SPIN services. This means that SPIN partners mutually support the access to customer segments and thus support "cross-selling" of services. Furthermore the customer segments to be addressed need to open to SMEs and innovative forms of collaboration of SMEs.

c) **Common process of strategic product development:** Of course, the service product provided to market needs to be convincing and beneficial to the customer segments addressed. According to the Changebest-Guideline (Leutgöb et al., 2011) on strategic product development of energy efficiency services the following issues need to be addressed and elaborated:
   - Putting together the elements of the energy efficiency service to be provided to the market (position at the value chain, market segments and customers, technologies and processes);
   - Assessment of needs of the (potential) customers;
   - Definition and strengthening of competitive advantage;
   - Making use of links to other business fields;
   - Comprehensive assessment of economic viability of the EES solution;
   - Financing;
   - Risk Management;
   - Specific marketing and sales for energy efficiency services;
   - Putting together a business case including multi-level calculation of contribution margin.

d) **Longer-term perspective of SPIN collaboration:** The necessity of developing and sharing a joint strategic alignment including the development of joint products underlines the fact that SPIN members need to be willing to resume tasks and duties on a long-term basis. Otherwise ad-hoc collaboration on a case-by-case basis would be easier and more useful.

3.2. Internal organization and management

Whereas the necessity of strategic alignment is the same for SPINs as for stand-alone companies

a) **Definition of the roles (responsibilities and duties) of each partner in the SPIN:** The definition of roles creates safety among the SPIN members. Roles need to be defined for the tasks related to the provision of EES products as well as to “overhead” functions.
b) **Solid protection of the know-how shared by the SPIN-partners:** Otherwise the motivation to share know-how and experience will be limited, because partners that do not obey the rules might give way to the temptation to make egocentric use of the know-how of others without giving access to own knowledge. Solid protection of the k shared now-how is a way to overcome the prisoner’s dilemma that is inherent to all kinds of professional partnership.
c) **SPIN management:** The assignment of a SPIN-coordinator or manager that is finally responsible for the well-functioning of the SPIN will be necessary in most cases – mainly for larger SPINs. For smaller SPINs of 3-5 members it seems feasible, to divide up management tasks between partners.
d) **Incentive system stimulating the partners bringing in sales opportunities:** It is important that SPIN partners are motivated to introduce project opportunities into the SPIN instead of trying to implement a smaller project as independent company. One possibility is to remunerate successful sales by means of commissioning fees for the partner that has initiated the project.
e) **Stimulation of networking and continuous exchange of (informal) information:** Inside companies information can flow more easily. SPINs have to find ways to compensate this disadvantage be using instruments that ensure networking and exchange of informal information across company boundaries. Just to give a few examples: Regular workshops on upcoming tasks; fixed dates for web-based communication etc.
f) **Fair distribution of overhead cost among partners:** Management, marketing, acquisition as well as general administration represent overhead costs which have to be carried by the SPIN partners. The SPIN can only work successfully if these overhead costs are distributed to the SPIN partners in a fair way. In this context, fairness in distribution of cost is closely connected to fairness in distribution of benefits that arise from the SPIN for the participating partners.
g) **Clear and transparent contract:** All relevant rules – most of which refer to the issues mentioned above – need to be summarized in a SPIN framework (contract) which has to be signed by all SPIN partners.

Organisational tools can be found at www.epcplus.org.

4. Recommendations and solutions

This chapter provides further inputs for the development of a SPIN and includes a self-test for potential SPIN-partners: Am I really willing to accept the core responsibilities and duties – DOs and DON'Ts – of a SPIN partner? Or should my company follow other ways to enhance the portfolio of EES products, such as growth and expansion of the own company or prolongation of ad-hoc cooperation?

All SPIN partners need to have a **common understanding on the following important questions** (compare also chapter 3):

- Which innovative energy service do you want to offer, respectively what is the objective of your SPIN?
- Is there a market demand for the service the SPIN wants to offer?
- What is the USP of the SPIN in comparison with existing providers?
- How will the SPIN be managed?
- Who is the face to the customer?
- What has priority: Provision of SPIN services or the provision of services of the own company?

DOs for SPIN-partners

- Create a common identity and keep motivation high;
- Create a common SPIN framework (written down in a contract)
  - Know-how sharing;
  - Transfer of sales: How to deal with higher overhead costs; is it allowed to absorb a customer from a SPIN member;
  - Sharing of additional transaction and management costs, partly due to required additional explanation of the SPIN approach to clients;
- Be willing to respond quickly upon customers request;
- Be willing to allow and absorb ideas of other SPIN members;
- Be willing to resume tasks and duties on a long-term basis.

DON'Ts for SPIN partners:

- Keep knowledge inside the company even if the project development and implementation requires sharing of know-how among SPIN partners;

- Limit communication and exchange of ideas to employees of the own company;
- Focus on own strategical targets.

Through cooperation innovative energy efficiency services (EES) can be offered. Cooperation enables SMEs to offer novel and high quality energy services, which they could not provide as stand-alone company. Such services are serious alternatives to standard energy efficiency services provided by energy service companies (ESCOs) and may provide promising opportunities. SME Partnerships for Innovative Energy Services are organized clusters of independent companies that jointly supply novel energy efficiency services to existing or new customers. The partnership sets commonly agreed objectives, valid for a structured and long-term cooperation. Creation of a partnership or network can be simple, however, some approaches may turn out to be complex, where cause and effect links are not so clear or even unpredictable. Such approaches may be even chaotic. Therefore, complex affairs need innovative answers – SPINs.

5. References

Leutgöb, K., Irrek, W. et al.: Strategic product development for the Energy Efficiency Service market, The ChangeBest Energy Efficiency Service Development Guide, 2011 (www.changebest.eu).