



# EPC+ Financial Toolbox

Financial modules for all types of EPC+ contracts

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[www.epcplus.org](http://www.epcplus.org)

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## 1. GENERAL DESCRIPTION AND EXPLANATION HOW-TO-USE

Financing of EPC+services is an integral part of the contract that has to be disclosed between client and SPIN-network – whether it would be financing by the client himself, financing by the SPIN through a third party or a mix of both. Therefore the EPC+ project developed model contract modules that can be considered and adapted by the applying SPIN to the specific needs of project and client.

As financing of the services is inevitably connected to the contract between the client and SPIN, it is the best solution to integrate all financing agreements into the contract. Therefore several chapters address financing; according to the chosen financing form these chapters have to be altered and modified in the contract.

The described financing modules shall be implemented directly in the model contract, which is also provided within the EPC+ project (D4.5/D4.6). The respective chapters for the model contract are therefore marked with the appropriate paragraph description in the EPC+ model contract.

The main differentiation is between financing by client and financing by SPIN while almost all specific variations – financing through loan, forfaiting, revolving funds and others – can be applied to both solutions. However, in the variant of client's financing the SPIN is not involved (except for providing technical and economic information and the contractual guarantees), while in the other variant the SPIN assumes substantial obligations and risks.

## 2. FINANCING BY CLIENT

### 2.1. Own equity / cash reserves / loans

If the client is able to finance the investment through own equity or loans, this is the easiest and least risky solution for the SPIN. In this context it doesn't make a difference for the SPIN whether the client uses cash-reserves or borrows funds from a third party – may it be loans or revolving funds – for the EPC+ project.

For the contract between SPIN and client this means, that the remuneration has to be agreed on basically for

1. a one-time-payment for the investment and
2. frequent payments for any maintenance- or operational services (if not already included in the investment costs)

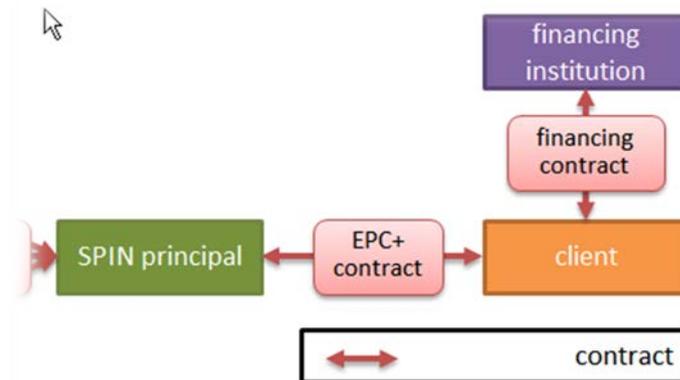


Figure 1: contractual relationships in financing by client

The key aspects of financing by client are:

- The SPIN is responsible for the implementation of the energy efficiency measures and receives financing from the client
- The EE-investment is paid out of the client's own capital or credit line and respectively (in parts) from subsidies or from maintenance reserve funds
- The client's payments for the investment can be either a building cost subsidy or the remuneration of an equipment supply contract (in the latter case, VAT is due on the complete investment at once)
- The customer finance model is advisable, if the customer has better finance conditions than the SPIN

For this variation a paragraph in the EPC+contract in this form is advised:

#### § 6-1-V1 BASIC REMUNERATION INVESTMENT – FINANCING BY CLIENT

As basic compensation for his services, the CONTRACTOR receives the full investment at the amount of €\_\_\_\_\_ plus VAT right after formal acceptance with full proof of energy saving.

Payment conditions: .....

The achievement of the agreed on savings guarantee is independent from the financing of the investment, any deductions or bonuses of the SPIN's remuneration have to be processed according to § 6-3 of the model contract.

## 2.2. Private Equity Investment

If financing institutions are reluctant to offer loans to a client because of a lack of equity, the client can consider building up equity through a crowd funding platform or a private equity investment fund. Equity is more costly than debt and has therefore a higher leverage factor. This means that regular financing institutions are more inclined to grant loans, respectively are able to grant higher volumes of debt.

For the EPC+ contract there are no additional requirements than mentioned in chapter 2.1

Remark: the option of building up own equity is only relevant in case of higher investment. For low investments the transaction costs are rather high and make this process economical unattractive.

### 3. FINANCING BY SPIN

The financing of the investment should optionally be an additional service provided by the SPIN. The possibilities are diverse and the main forms will be described in this chapter, starting with simple and economically advantageous constructs, which may be considered first, and ending with infrequently used and partly new models of financing that need higher expertise on the SPIN's side.

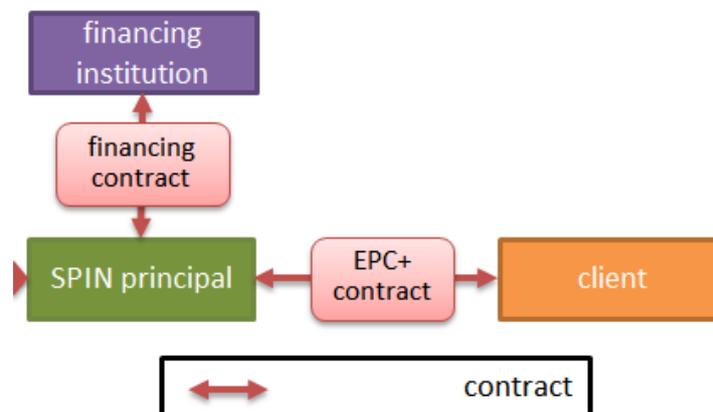


Figure 2: contractual relationships in financing by SPIN

#### 3.1. Loan/credit on accounts of the SPIN

This includes financing of part or all of the investment, from a member of the SPIN with refinancing of the investment through payments from the client to the financing SPIN-member in relation to the energy performance (achieved energy cost savings)

The financing needs not necessarily be provided by the SPIN's principal, but can also be provided by another SPIN-partner, i.e. if the financing conditions for a SPIN-partner are significantly better than the ones for the SPIN's principal.

The key aspects of credit-based financing are:

- The SPIN is responsible for the energy efficiency measures and refinances the investments from a credit line.
- The customer pays a contracting rate which includes a re-finance share to the SPIN (subject to the performance of the SPIN's savings guarantee)
- The SPIN uses the re-financing part of the contracting rate to repay the loan

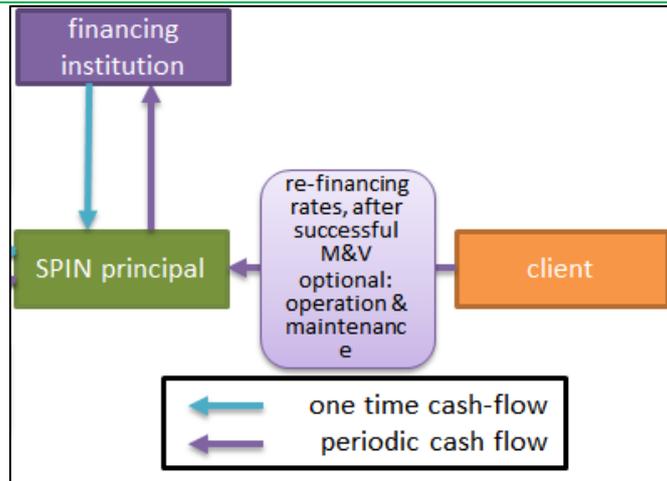


Figure 3: cash flows in SPIN-based financing (generic)

For this variation a paragraph in the EPC+contract in this form is advised:

§ 6-1-V2 FINANCING BY CONTRACTOR

The CONTRACTOR is billing the whole investment right after formal acceptance with full proof of energy saving and receives instalments according to the payment plan in Appendix “Payment Plan”.

The appendix “Payment Plan” should include:

- The financing conditions (i.e. interest rate fixed/variable, monthly/quarterly/yearly payments, in advance/hindsight)
- Terms regarding early termination of the financing agreement
- Terms of foreseen procedures, if payments are delayed or omitted

Optional payments for operation & maintenance (c.f. model contract §6-4) are not subject of the financing agreement, if these payments are not included in the comprehensive investment volume.

### 3.2. Sale of claims

The credit can either be taken by the SPIN on own accounts (i.e. on own accounts of one of the SPIN-members) or it can be ceded to a financial institution.

Financing on own accounts of the SPIN (i.e. one of the SPIN-partners) features the problem, that the investment adds up to the assets on the clients side, while it increases the debt (financial leverage) of the SPIN-member. As a result of the low creditworthiness, the company is unable to attract financing for further projects.

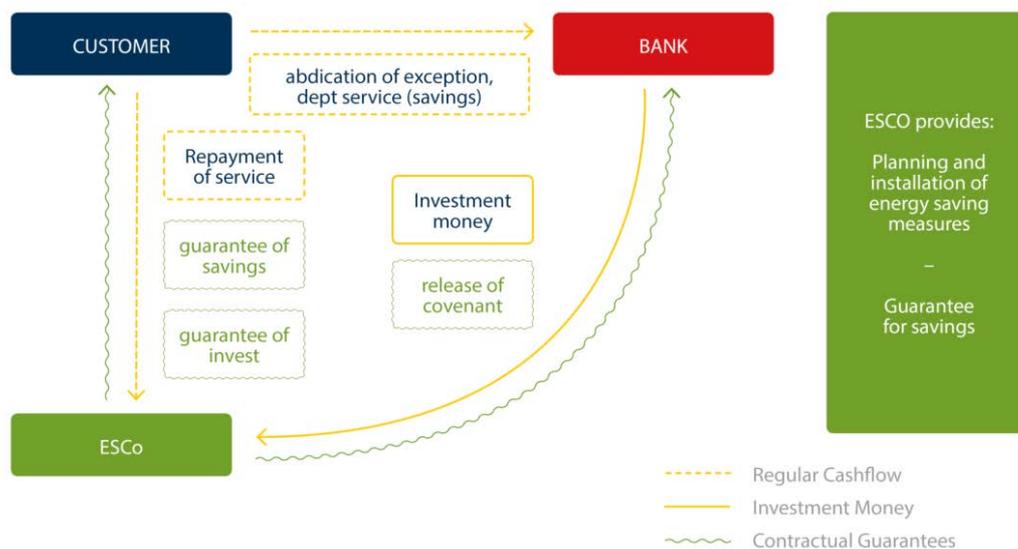


Figure 4: concept of sale of claims; source: Graz Energyagency (EESI2020)

Financing through cession or forfeiting on the other hand gives the opportunity to the SPIN to base the credit conditions on the client's creditworthiness while the credit lines of the SPIN members are kept clean from the project investment. Therefore a paragraph to enable forfeiting must be included into the EPC+contract. The EPC+ model contract should be extended in this case through the following paragraph:

#### § 6-2 MODULE SALE OF CLAIMS

The CONTRACTOR is allowed to sell a fixed percentage of these payments (to meet with this contract incurred investment costs connected with its execution to a finance company.

This percentage of the basic salary is a maximum .... %. The finance company will inform the CLIENT of the assignment. The CONTRACTOR shall provide the financing company with the requested authorization to announce the assignment. Until revocation of the finance company the CLIENT remains obliged to perform the assigned claims of the financing company to the CONTRACTOR, who so far is authorized collect. The CONTRACTOR will in regard to the sold claims give a renunciation of rights to object including the renunciation to the finance company of objection to account set off and withholding. The CLIENT shall make claims to reduction because of shortfall of the savings warranty under § 6 6.2's of the guaranteed success contract, exclusively towards the CONTRACTOR, but not the financing companies. The CLIENT shall upon request of the finance company allow it to inspect the approved budget, respectively it publication and make notice of the funding source available.

This option can be integrated into all variations of SPIN-based financing.

### 3.3. Revolving funds

Revolving funds are handled like regular loans. They can either be used by clients or by ESCOs, respectively SPINs. The financing conditions are in most cases the same compared to regular loans. The added value in relation to regular loans is that these funds normally provide specific support to energy-efficiency projects and dispose of energy-efficiency-experts unlike most commercial banks.

Services that are offered by revolving funds are (among others):

- Loans
- Guarantees, if an ESCO of a client take a loan from a commercial bank
- ESCO portfolio guarantees that become effective, if clients of ESCOs do not pay
- Technical assistance
- Purchase of claims

Besides to the special features of the revolving funds the contractual modules are the same as for client's financing (cf. chapter FINANCING BY CLIENT) or respectively for financing by SPIN (cf. chapter Loan/credit on accounts of the SPIN) as most of these revolving funds allow both options.

An example for a revolving fund is the Bulgarian EERSF. More information about this specific fund is available under <http://www.bgeef.com/display.aspx?page=about>

### 3.4. Crowd investment

Crowd investment is a financing form that gives SPINs the opportunity to raise its own equity. Equity is more costly than debt and therefore has a higher leverage factor. This means that higher volumes of debts can be borrowed.

Moreover a SPIN could aim/search for ecological crowdfunding platforms: assuming that the investors into "green projects" are not primarily aiming at receiving a high return on investment for their money but at doing "good deeds" to environment, society and world climate, the interest rate could be more attractive for building up a basis of own equity and further for financing EPC+ projects than through "regular" crowdfunding platforms. Nevertheless the interest rate will be higher than the one of a regular loan, therefore the desired volume of own equity should be considered thoroughly.

Crowd investment could also be considered, if a regular bank loan is being denied at all (out of various reasons). In this case higher interest rates have to be considered for the whole investment volume.

For the EPC+contract a paragraph in the following form is necessary (similar to loan/credit on accounts of the SPIN):

§ 6-1-V2

## FINANCING BY CONTRACTOR

The CONTRACTOR is billing the whole investment right after formal acceptance with full proof of energy saving and receives installments according to the payment plan in Appendix “Payment Plan”.

The appendix “Payment Plan” should include:

- The financing conditions (i.e. interest rate fixed/variable, monthly/quarterly/yearly payments, in advance/hindsight)
- Terms regarding early termination of the financing agreement
- Terms of foreseen procedures, if payments are delayed or omitted

Institutions offering crowd investment to investors as well as to SPINs are predominantly webbased platforms that are presently founded in high numbers. If a SPIN is going for such a financing source the marketing competence of the SPIN should be adequate as the effort for marketing is significant.

General remark: it is important not to mistake crowd investment for crowd funding in general, which also features other forms, i.e. donation-based or reward-based crowdfunding (i.e. [www.kickstarter.com](http://www.kickstarter.com), [www.indiegogo.com](http://www.indiegogo.com))

If considering crowd investment in the next step it is crucial to consider the national legislation for crowd investment in the respective country: indeed the maturity varies from country to country. Thereby UK seems to be furthest developed in this respect with significant volumes of financing for SMEs (10% of SME funding provided through alternative finance in UK<sup>1</sup>), also 8 other EU-countries (see therefore Figure 5: Finance Maturity Index) feature advanced framework-conditions that enable crowd investment also for EPC+ financing. Still there are also EU-countries with insufficient regulations for this financing option, so in these countries there could be significant barriers for it.

A concise description of the current national situations in 2016 (legislation and providers) is also available in “Current State of Crowdfunding in Europe”

Additional information about the European status of crowdfunding in general is available on [http://ec.europa.eu/finance/general-policy/crowdfunding/index\\_en.htm](http://ec.europa.eu/finance/general-policy/crowdfunding/index_en.htm).

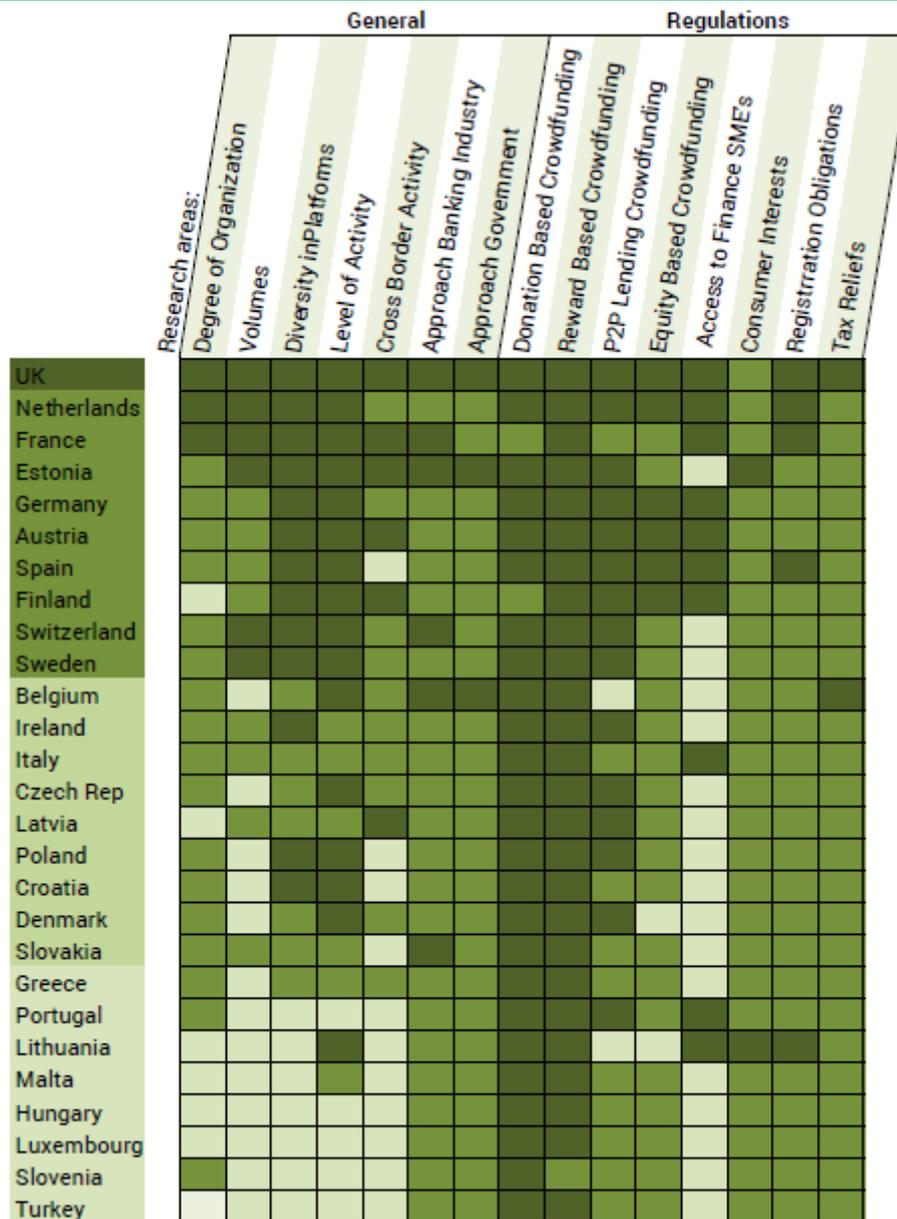


Figure 5: Finance Maturity Index<sup>1</sup>

### 3.5. National and regional subsidies

Using national and regional subsidies is not a financing form on itself but can contribute to the whole financing construction for the project. There are different forms of subsidies, depending on

- Who is permitted to apply for and who will receive them
- Refundable or not refundable subsidies

<sup>1</sup> Current State of Crowdfunding in Europe: CrowdfundingHub <http://www.crowdfundinghub.eu/the-current-state-of-crowdfunding-in-europe/>

- Direct grant or interest subsidy

In the following paragraphs we will differentiate between those forms and describe the impact on the financing agreements.

### **3.5.1. SPIN is permitted to apply for subsidies**

For this case it is advised not to incommode the client with more than the necessary tasks to justify the subsidies. This also includes that the subsidies should already be included into the comprehensive final package of measures that is the basis of the contract. A clause in the contract should clarify that the right to apply for subsidies is transferred to the SPIN:

The acquisition of subsidies is in custody of the SPIN. The SPIN is obliged to act on behalf of the client. All achieved subsidies belong to the SPIN, even if the client supported the SPIN with necessary data provision for the application for subsidies.

### **3.5.2. Client is permitted to apply for subsidies**

For the case that only a client or owner of a facility is permitted to apply for a certain subsidy it is necessary to transfer the tasks and responsibilities of the subsidy acquisition to the SPIN. This is advisable, because subsidy acquisition can be time-consuming, if there is a lack of experience on the client's side and because most information necessary for the application is technical and economic data related to the measures to be implemented. This data is the domain of the SPIN. Moreover in most cases the effort of subsidy acquisition is a main barrier and pain (in the sense of the value proposition canvas after A. Osterwalder) in an energy efficiency project and should therefore be averted from the client.

For the EPC+ contract this means that specific paragraphs should arrange this transfer of tasks and responsibilities:

- (1) The acquisition of subsidies is in custody of the SPIN. The SPIN is obliged to act on behalf of the client to investigate various subsidy schemes, to report about the resulting opportunities for subsidies and to perform the necessary tasks.
- (2) In this way acquired subsidies will be subtracted from the investment costs. For all acquired subsidies the SPIN is entitled to claim 15% of the total subsidy volume for his effort.
- (3) SPIN and client agree to support each other mutually and timely in all aspects of actual and prospective subsidy proposals for this project

### **3.6. Lease finance, special-purpose-vehicle-solutions**

These financing forms, that are sometimes used for standard EPC solutions are considered to be suitable for large investment volumes, because basic transaction costs are higher than for loans, grants and other forms of financing described above. Therefore for EPC+ this financing solution could become interesting, if a high number of projects can be bundled/pooled either on the clients or on the SPINs side.

For further information about these financing forms it is advised to consult the manual for finance options of energy services: [http://www.grazer-ea.at/eesi/upload/download/diskussionspapiere/gea-eesi\\_finance\\_options\\_for\\_energy-contracting\\_080328.pdf](http://www.grazer-ea.at/eesi/upload/download/diskussionspapiere/gea-eesi_finance_options_for_energy-contracting_080328.pdf)

## **4. Tools for the proper calculation of investment, risks, payment rates through net present value**

Before designing the financing construct of an EPC+ project it is necessary to elaborate the finance-related project figures. These are a result of the technical design phase after determining investment costs, changes to running costs, particularly savings on energy costs. The figures of dynamic payback, net present value, internal rate of return and cash flow analysis are specifically useful and necessary for the communication with the client as well as with financing institutions.

The EPC+ project produced a specific toolbox for the elaboration of these figures, the toolbox with the name “EPC+\_D42 financial toolbox calculation tools\_en” can be downloaded from the EPC+ website: <http://epcplus.org/energy-service-packages/#>