

**Baltic CHAIN:
Building Structures to enhance the Financing
of small and medium sized Energy Projects**

Tasks of a Clearing House and Country Desks
supporting the relation of project owners
with the financial sector

FINAL REPORT

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Baltic CHAIN - Clearing House and Information Network for Energy Projects. Supported by the European

Union's INTERREG IIC Programme. With partners from all ten Baltic Sea States.

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0. Summary

(1) Considering the situation of the transition countries around the Baltic Sea, there is a close relation between the “triple E” enlargement, employment and environment. The Baltic CHAIN project aims at improving the environmental standards in those countries by creating structures allowing to “release” profitable small and medium sized energy projects and thus providing opportunities especially for small and medium sized enterprises to open up new markets. As the approaches are market oriented, they will help the EU accession countries to comply both with EU environmental and competition standards.

(2) The starting point of the Baltic CHAIN project is the reduction of CO₂ emissions in the Baltic Sea Region and the reduction of the dependence on energy imports. Small and medium sized energy projects like combined heat and power, boiler conversion, fuel switch to gas or renewables, the renovation heat transmission lines and energy efficiency measures in housing and industry have been identified as major issues in the Baltic states, Poland and Russia. So Baltic CHAIN is going to implement mechanisms to enhance the implementation of such projects.

(3) In the past, several projects have been implemented with the help of grants or soft loans from multilateral institutions like the Nordic Investment Bank, other international financing institutions or bilateral agreements, e. g. with the Nordic countries or Germany.

(4) **The demand is exceeding the available subsidies** by far. What is more, the availability of subsidies always depends on public budgets and thus on political priorities which are subject to - sometimes sudden - changes.

(5) At the same time, the conditions of small and medium sized energy projects have changed in most of the countries and face further improvements in the coming years: On the one hand the prices for energy consumption, which were heavily subsidised in the past, are reaching market levels. On the other hand, interest rates for commercial loans are decreasing. Both leads to an **increasing profitability of small and medium sized energy projects under market conditions**. Typical payback periods now range from four to eight years.

(6) As a result, **commercial financing will more and more replace subsidised financing**. In the past, the availability of loans in local currencies corresponding to the payback periods of the projects was a problem which is now disappearing as well: In Estonia and Poland such loans are available, in Latvia and Lithuania they are available with certain restrictions which will probably vanish in the near future. Only in Russia the financing sector is still waiting for further stabilisation, so that, for the time being, most small and medium sized energy projects have to rely on equity (in case of private project owners) or on the public budget (in case of municipalities) and on the grants or special programmes of international financing institutions.

(7) However, even in the case of profitable projects there are **barriers preventing the financing**. The main issues were identified in discussions with project owners, local and international banks and other institutions:

- The information and the **documents** that are presented to banks by project owners are often very **insufficient**. They do not allow for a loan decision, increase the work load (transaction costs) for the banks and limit the interest of banks to deal with the projects.
- If the technology or the market environment of the projects are not standardised, there is a **need for a feasibility study**, which may cost more than most project owners are able or willing to pay.
- The **banks** are usually **not very familiar with** the technology, the market conditions and the legal framework of **small and medium sized energy projects**. This may lead to a reluctance to finance such projects or to an unfavourable risk cost calculation.

- At least in some of the target countries banks still have to improve their **ability to audit project financing** at all, which today leads again to a reluctance to finance such projects or to an unfavourable risk cost calculation.
- **Competition** among banks to finance small and medium sized energy projects may be **low**, which usually makes financing expensive.

(8) To remove those barriers, four options are presented for services a so called Clearing House with local Country Desks could offer for project owners. In three cases, the services can probably be fulfilled by the Country Desks consisting of the local Baltic CHAIN partners in the Baltic countries, Poland and Russia (Estonian Energy Research Institute, Latvian Development Agency, Lithuanian Energy Efficiency Centre, Polish National Energy Conservation Agency and Scientific Research Centre for Ecological Safety of the Russian Academy of Sciences). In the fourth case a co-operation with banks or insurance companies is necessary.

(9) The focus is on market oriented steps aiming at the pre-investment phase, which is usually the stage where a support is most efficient. Subventions for investments are usually more expensive and always imply the risk to distort the local markets.

(10) The first service is the **preparation of documents** for project owners by a specialised Clearing House, enabling project owners for qualified negotiations with banks.

(11) The second option is a Clearing House acting as a **Broker**, supporting project owners by national and international tendering for the financing of projects and in some cases for a combined supply and financing. This will lead to additional competition among banks.

(12) The third option is a **Project Preparation Fund**, pre-financing feasibility studies and filling the gap between a good project idea and the moment where it has been *proved* to be reliable, so that banks are ready to finance the project. If the project is finally implemented, the project owners have to repay the costs of the feasibility study and a margin covering all expenses of the Clearing House.

(13) The fourth option is a **Guarantee Agency** specialised on small and medium sized energy projects. It will be the first contact of the project owner and audit his project even before the banks do. In case of reliable projects it will issue a guarantee for the repayment of e. g. 80 % of the loan. Furthermore it will make its audit available to the banks interested in financing the project.

The risk premium that is calculated by the Guarantee Agency will be, due to its special expertise in energy projects, much more realistic than the one of the banks. Furthermore, the audit of the Agency will enable more banks to decide on loans and thus raise competition.

The special expertise will be provided by the Clearing House, whereas there should be co-operation with banks or insurances on the financial handling of the guarantees.

(14) In nearly all countries where guarantee institutions do exist, there is a counter-guarantee from the state, covering e. g. two third of the payments of the institution. Money that is now spent for small and medium sized energy projects in the form of grants should be used for this counter guarantee, as the number of projects who benefit from such a guarantee will be much higher than in the case of grants. Thus the Guarantee Agency will lead to a **more efficient use of the limited public resources**.

(15) The preparation of documents and the Broker services will help project owners to get a cheaper and faster financing of projects. As the Clearing House will offer "value for money", project owners will pay a fee covering the expenses of the Clearing House.

In the case of the Project Preparation Fund, the Clearing House will be financed by the margin. The higher the success rate of the projects is, the more profitable is the Fund. Profits should be used to increase the fund capital and to allow for more services. However, an initial fund capital is needed to

implement the services. It would be most beneficial for the energy projects if the initial fund capital could be granted by international and bilateral sources.

In the case of the Guarantee Agency the services of the Clearing House will be paid by a defined fee or by a defined part of the aval that project owners have to pay for the guarantee. Commercial banks and international financing institutions have already expressed their interest to become shareholders of the Guarantee Agency; the states and associations of municipalities, private project owners (e. g. chambers of commerce) or suppliers will also benefit from the existence of the Agency and should become further shareholders.

(16) *In all four cases, the Clearing House can work in the long run, after the usual starting period, **on a market oriented basis without subsidies. In order to give the Clearing House the opportunity to act on the market as flexible and customer oriented as possible, it should be privatised.*** The state could be the only or the majority shareholder, in order to ensure that the Clearing House enterprise remains a non-profit institution despite its profitability, i. e. allowing that the profits remain in the Clearing House to enlarge services etc. in favour of the energy projects and the resulting environmental benefits.

Those local Baltic CHAIN partners who are still part of the government administration should make the necessary preparations for an outsourcing of the new services as soon as possible.

(17) The local Baltic CHAIN partners do not all have the full competence needed for the provision of the necessary services. Some additional **staff with complementary skills** (financial analysts, bankers, market researchers, legal experts) might be employed by the Clearing House enterprise. In order to make use of synergies, there should be **competence centres among the local Country Desks**, where each Country Desk provides certain services for all the others. The most efficient way would be a common Clearing House enterprise for all countries participating. If that is not regarded as realistic, very close co-operation agreements are needed.

In any case, **a co-ordinated establishment of the Country Desks forming the future Clearing House is unavoidable!**

(18) The options are described in detail in the report. The report can be regarded as a pre-feasibility study, identifying the needs of the project owners and evaluating the interest of the most relevant actors to participate in the services that are proposed. At least in the case of the more sophisticated and, at the same time, more beneficiary options (Project Preparation Fund and Guarantee Agency), the main work remains to be done. A feasibility study leading to a detailed description of mechanisms and cash flows, negotiations among potential shareholders, discussions on initial financing etc. must follow.

(19) Some international initiatives supporting the ideas, e. g. of the Nordic Council of Ministers or the regular meetings of senior government officials of the Baltic Sea Region (BASREC), would be very helpful to overcome particular interests preventing an efficient overall solution.

(20) Considering the demand for small and medium sized energy projects and the needs of the environment in the Baltic Sea Region, it is worth to keep on the track that has been chosen.

1. Basic Facts and Assumptions, Methods of Investigation

(1) The Baltic CHAIN project contributes to the “triple E” - the closely related aspects of enlargement, employment and environment - by focussing on a decrease of the CO₂ emissions in the Baltic Sea Region (BSR). As small and medium sized energy projects (SMEP) were identified as a key element in any emission reduction strategy, Baltic CHAIN works on mechanisms that allow for a faster implementation of more SMEP in the BSR, giving especially small and medium sized enterprises (SME) like engineers, suppliers or consultants the opportunity to open up new markets.

(2) The ten countries of the BSR,

- Denmark (represented by the Danish Energy Agency),
- Estonia (Estonian Energy Research Institute, Ministry of Economic Affairs),
- Finland (Motiva Information Centre For Energy Efficiency),
- Germany (Energy Foundation Schleswig-Holstein),
- Latvia (Latvian Development Agency),
- Lithuania (Ministry of Economy, Energy Efficiency Centre),
- Norway (Ministry of Petroleum and Energy, Institute for Energy),
- Poland (National Energy Conservation Agency),
- Russia (Scientific Research Centre for Ecological Safety of the Russian Academy of Sciences),
- Sweden (National Energy Administration)

and the International Energy Agency are jointly working on Baltic CHAIN. They develop several approaches for SMEP implementation, among them

- information dissemination (information on technology, environmental issues, financing opportunities etc.),
- the financing of test cases to demonstrate the technologies and financing mechanisms available and
- complementary mechanisms and structures to support the financing of profitable projects.

(3) The Baltic CHAIN project is going to initiate a so called “Clearing House” (CH) with local “Country Desks” (CD), which can fulfil the services that are recognised as necessary. The nature of those services is in detail to be identified by Baltic CHAIN.

(4) Even for profitable SMEP with payback times typically between three and eight years, the lack of financing is regarded as the most relevant bottleneck preventing the projects. So the **main purpose of the work** underlying this report, being one of the Baltic CHAIN efforts, was **to define services and structures of the CH / CD that enable project owners to get financing cheaper, quicker and easier**.

(5) When the work on these aspects started, it was assumed that one of the main reasons for the lack of financing is the small size of the SMEP, ranging from about 100,000 to a few million €, with a typical figure around 700,000 €. The small size leads to relatively high transaction costs and thus makes financing for banks and investors less attractive. Another assumption was that sufficient financing by local sources is not available yet. The conclusion from both was that projects should be bundled in order to get a size attracting international financing.

Taken into account as relevant sources for international financing were International financing institutions (IFI), commercial banks, funds from IFI or funds on a purely commercial basis and investors interested in joint implementation mechanisms and CO₂ emission certificates.¹ At the beginning, there were some considerations how relevant those groups are:

¹ Mechanisms offering services and supply combined with financing (ESCO, BOT etc.) are discussed in chapter 2.1

(6) The financial resources available from IFI or special funds related to IFI are usually subsidised. The subsidy consists in the case of loans or equity with exit options in lower interest rates (resp. returns on investment) or higher project or country related risks that are accepted. Very often they provide financing where no commercial bank is ready to do so. For those reasons the programmes of IFI are usually restricted to special purposes, countries, technologies and/or periods and their amount is limited. They depend on political priorities which are always subject to changes. As the conditions of IFI are favourable, it makes of course sense to make use of such sources as long as they are available, but the building of structures - which is the purpose of this report - should not rely on any special IFI programmes.

However, IFI are taken into account as actors in the institution building process.

(7) Private investors or private funds (e. g. equity funds) investing in projects in transition economies - which are regarded as risky - usually expect returns on investment (ROI) of around 20 % or more in "hard" currency. Even though SMEP are profitable, this ROI can usually not be provided.

(8) There have been some thoughts if companies interested in additional CO₂ emission licences (e. g. electricity producers in Western European countries) might be attracted as investors. However, if the licensing system and emission trading will be fully established in the long run, specialised exchanges for the trading of the certificates (e. g. similar to the newly established power exchanges or related to stock exchanges) will be set up. The companies interested in CO₂ emission licences can then buy the licences at the exchange. So for the companies interested in CO₂ licences, there will be no need anymore to connect the purchase of the emissions licences with *own* investments in CO₂ projects.

In this situation, SMEP can sell CO₂ licences at such an exchange or special facilities² and thus generate an additional income, making conventional investment more attractive. Some advice may be needed for project owners on how to proceed in order to get this additional income.

(9) So finally this report concentrates on local and international banks. Nevertheless, if an individual projects' situations is suitable, the other mechanisms should also be considered.

(10) At first, the information on projects and their financing available from the BC participants was evaluated. The assumptions mentioned in no. 5 and possible solutions were evaluated in pilot discussions with banks and IFI. The results were put together in a discussion paper that was presented to a wider number of local banks as well as banks in the Nordic countries and Germany and to IFI. In the discussion process this paper was revised several times in iterative steps. Those discussions were complemented by meetings with government authorities and other relevant institutions.

The banks and IFI involved in discussions are listed in table 1. Other institutions are listed in table 2. More banks and institutions were contacted, but in some cases meetings could not be arranged for technical reasons or for lack of interest.

(11) The draft report was sent to banks and institutions mentioned in table 1 and 2, giving them the opportunity to react and to provide their expertise again.

² see Nordic Council of Ministers, NIB and NEFCO: "Joint Implementation Facility in the Baltic Sea Region", report submitted by COWI, August 2000

table 1: Meetings with banks, IFI and related institutions

| Name of bank / IFI | Country | Remarks |
|---|--------------|---|
| Алфа Банк (Alfa Bank) | Russia | |
| Bank Austria Creditanstalt Poland | Poland | |
| Bank Ochrony Środowiska (BOS - Environmental Bank) | Poland | |
| Bürgschaftsbank Schleswig-Holstein | Germany | guarantee bank |
| Den Danske Bank | Denmark | |
| Deutsche Investitions- und Entwicklungsgesellschaft (DEG - German Investment and Development Company) | Germany | |
| Eesti Ühispank (Estonian Union Bank) | Estonia | |
| Energy Investors Funds Group (EIF) | multilateral | |
| European Bank for Reconstruction and Development (EBRD) | multilateral | phone interview |
| European Investment Bank (EIB) | multilateral | phone interview |
| European Investment Fund (EIF) | multilateral | |
| Finnvera | Finland | export credit agency, Russian representative |
| Handlowy Bank | Poland | |
| Hansapank | Estonia | |
| Hermes | Germany | export credit agency |
| ОАО "Промышленно-строительный Банк" (Industry and Construction Bank - ICB) | Russia | |
| Kreditanstalt für Wiederaufbau (KfW) | Germany | |
| Kredyt Bank | Poland | |
| Landesbank Hessen-Thüringen (Helaba) | Germany | |
| Landesbank Schleswig-Holstein (LB Kiel) | Germany | Danish branch |
| Lietuvos Eksporto ir Importo Draudimas | Lithuania | export credit agency |
| Lietuvos Žemės Ūkio Bankas (Agricultural Bank) | Lithuania | |
| Merita Bank | Finland | Estonian branch |
| Norddeutsche Landesbank (Nord/LB) | Germany | Lithuanian branch |
| Nordic Environment Finance Corporation (NEFCO) | multilateral | |
| Nordic Investment Bank (NIB) | multilateral | |
| Optiva pank | Estonia | |
| Pekao Bank | Poland | |
| Powszechny Bank Kredytowy (PBK) | Poland | |
| Сбербанк России (Sbarebank - Savingsbank of the Russian Federation) | Russia | |
| Сбербанк-Капитал (Sbarebank-Capital) | Russia | financial consultant / investment company |
| Svenska Handelsbanken | Sweden | |
| Unibanka | Latvia | |
| Vereinsbank Riga | Latvia | |
| WestLB Polska | Poland | |
| Vilniaus Bankas | Lithuania | |
| World Bank (IBRD) | multilateral | phone interview |

table 2: Meetings with government and other institutions

| Country | Institution |
|----------------|--|
| Estonia | Ministry of Economic Affairs, Energy Department |
| Latvia | Ministry of Economy, Municipal Development Fund |
| | Latvian Development Agency, Energy Department |
| Lithuania | Ministry of Economy, Public Investment Department |
| | Ministry of Finance, Public Debt Management Department |
| Poland | Ministry of Finance, Guarantee Department |
| multilateral | GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) ³ , Lithuanian office |
| | Nordic Project Fund (NOPEF) |

³ German public development agency

2. Financing of Energy Projects in the Baltic Sea Region

2.1 “Innovative” Mechanisms for the Implementation of Energy Projects

(1) Besides “ordinary” financing by equity and loan capital, several “innovative” mechanisms have been established to implement projects, some of them with special reference to energy projects. Of special interest are energy service companies (ESCO).

ESCO invest in energy saving measures of their clients, e. g. based on a concession to operate the heating system of the client for several years. Though the energy costs are decreased, the client pays for the duration of the contract the old energy expenditures to the ESCO. The ESCO uses the difference between old and new energy costs as payback for its investment.

Many similar mechanisms with different main concerns do exist.⁴

(2) There are two main purposes underlying most of those mechanisms:

- The special experience of the ESCO regarding establishment and operation of the measure and
- the reduction of the project owners’ initial investment, especially in the case of municipal project ownership.

If a municipality is the project owner and has reached its limit for liabilities or is likely to reach it in the near future, an investment into an SMEP will be prohibited or will restrict its future freedom of action. So the investment into the energy efficiency measure will probably be avoided or at least delayed though it might be highly profitable. If the ESCO is implementing the energy efficiency measure, no investment is needed by the municipality. The financial advantage will be delayed as the ESCO will receive the old energy costs for several years (depending on the payback time of the project), but the measure *is* implemented and finally all benefits are transferred to the municipality.

The same aspects might be relevant for a private company, preferring a long term payment to a higher initial investment as it needs the available credit lines for other purposes.

Furthermore the ESCO is specialised on energy efficiency projects. Therefore it can implement the measure professionally and with high experience. It will also be responsible for the operation (including the operational risks) within the duration of the contract. Both might reduce the construction and operating costs.

(3) The ESCO will in most cases refinance its investment by a loan from a commercial bank. It usually has to pay similar or even higher interest rates than the project owner.⁵ Furthermore the ESCO also has to make an adequate profit which has to be paid for by the client. Considering *the financing only*, the ESCO is in general not cheaper than direct financing by the project owner. This leads to the conclusion that *if* the municipality or private company had (or could buy) the necessary experience itself and *if* a municipality or private company had the opportunity to take additional liabilities, it would be cheaper to implement the project on its own.

⁴ see e. g. Dr. Jobst Klien, Investitionsbank Schleswig-Holstein: “Financing Energy Efficient Equipment in Industry“, International Conference “Investment in Energy in the BSR“, 6-9 April 1999, Riga or Joel Swisher: Seminar Background Paper “Financial Options for Climate-Friendly Energy Technology Projects“, CTI / Industry Joint Seminar in Eastern Europe, Warsaw, 11-12 May 2000

⁵ The risk of the bank usually is the risk of the project owner (insolvency etc.) *plus* the risk of the ESCO as intermediary. Both risks have to be paid for. Special agreements can reduce this to the risk of the project owner, but not lower. Even if the solvency of the ESCO is higher than that of the project owner and if it would be ready to share the risk of the project owner’s insolvency, the ESCO instead of the bank will have to calculate the respective risk premium.

(4) As those two conditions are often not fulfilled, there is an increasing demand for ESCO services. Especially in the case of a weak cash flow of the project owner, the financing by the ESCO might be the only way to implement the saving measures. However, as the funding itself via an ESCO is not favourable, CH and CD services enhancing financing of energy projects implemented by municipalities or private companies on their own are necessary irrespective of ESCO opportunities and thus discussed in this report.

table 3: ESCO services

| issue | positive | negative |
|-------------|--|---|
| financing | decouples financing from implementation and operation | financing aspects alone more expensive |
| technology | special experience as energy services are routine business, often cost saving | experience limited in the case of very complex and individual projects |
| risk | operational and resulting economical risks can be transferred to the ESCO | reliance on external company |
| staff | less own staff needed | reliance on external staff |
| suitability | suitable for municipalities which are close to their limits for liabilities and enterprises with low flexibility regarding the short and medium term cash flow | less suitable for project owners with own technological experience and strong cash flow / ability of additional liabilities and for very complex projects |

2.2 Loans for small and medium sized Energy Projects

(1) In this chapter, global aspects (2.2.1) and special project related features (2.2.2) preventing profitable projects from being financed are discussed. In chapter 3, solutions to solve or to reduce those problems are presented. The options discussed in chapter 3 refer to the relevant paragraphs of chapter 2.2.

2.2.1 Availability of Loans

(1) The development of the banking infrastructure in the Baltic Sea Region (BSR) countries is inhomogeneous. This leads to differences in the availability and to different conditions of loans to project owners.

(2) The interest rate, which will be adjusted according to the development of international markets (e. g. EURIBOR) and the individual country's financial policy, is of course one important issue for the profitability of projects.

(3) As most of the SMEP work on a local level, their income is in local currency. To avoid the risk that a possible devaluation of the local currency exceeds the inflation based rise of project revenues, the loans should be taken in local currency as well.⁶ So even before the interest rates can be considered, **the availability of loans in local currency with a maturity corresponding to the payback times of the projects** - typically between three and eight years - **is the most relevant question.**

In recent years there have been positive developments in the BSR. The maturity available is expanding and will probably face further improvement in the coming years.

⁶ In countries with a high spread of interest rates of loans in local and "hard" currency, e. g. Poland, project owners may tend to take loans in "hard" currencies. This leads to additional risks for the project owner.

(4) In Estonia the situation seems to be very stable. Loans with a maturity of up to ten years are available. The average⁷ interest rate⁸ at the end of the year 2000 (in brackets: prognoses for 2001) is around 7.2 % (7.0 %), with an inflation of 4.5 % (4.5 %).⁹ The difference between interest rates in local and “hard” currency is small.

(5) In Latvia loans in local currency with a similar maturity are in principle available,¹⁰ though the interest rates are only fixed for shorter periods (e. g. up to two years). Average interest rates¹¹ are around 10.0 % (8 %), with an inflation rate around 2.8 % (2.5 %). The difference between interest rates in local and “hard” currency is small.

(6) In Lithuania loans in local currency are only available for up to two or three years, as there is no longer refinancing available for the banks. However, revolving credit lines might be issued, so the situation is similar to the Latvian one, with the risk of increasing interest rates for long term obligations.¹² Average interest rates¹³ are around 13.5 % (13.5 %) with an inflation rate around 3 % (3 %). The difference between interest rates in local and “hard” currency is small.

(7) In Poland loans in local currency with a maturity of about eight years or even longer are available. As interest rates are generally expected to decrease in the long run, project owners might at present prefer short term loans. Interest rates depend very much on the maturity, but can reach up to 20 %¹⁴. Interest rates for loans in “hard” currency are significantly lower. The inflation rate is assumed to be 7.5 % (6.0 %).

(8) In Russia the banks do not get long term refinancing in local currency. From most commercial banks, loans are only available for up to one year (in rare cases up to two years) with interest rates of around 40 %.¹⁵ Interest rates for loans in “hard” currencies for with similar maturity are around 20 %; even in hard currency longer loans are hardly available. Anyhow, interest rates have significantly decreased: In 1999 the interest rates for local / “hard” currency were 50-60 % / 20-25 %, with Rouble credits not available for more than one year. It is expected that the tendency of decreasing interest rates and increasing maturity will continue in 2001 and the following years.

Inflation is expected to be around 20.5 % (15.0 % in 2001). In 1999 it was 36.5 %.

(9) Summing it up, **financing from commercial banks in local currency** with adequate maturity is available in Estonia and Poland, with restrictions in Latvia and Lithuania as well. In Russia, for the time being projects with payback periods exceeding two years have to rely on state or IFI programmes. If projects include a significant amount of imported goods and if a payment of interest rates and discharge in “hard” currency is acceptable, longer loans from foreign banks supported by export credit insurances will also be available.

(10) Even if loans are available from local banks, the interest rates may be so high that they endanger the profitability of the projects. One of the reasons - namely in Poland and Russia - are the generally high interest rates leading to high refinancing costs for the banks. However, lack of competition

⁷ The actual interest rate for a loans depends on the project, the project owner, the maturity etc.

⁸ average interest rate of commercial banks for short term loans for private and corporate customers, weighted according to the size of the loan

⁹ All figures, unless otherwise stated, from “Mittel- und Osteuropa Perspektiven - Jahrbuch 2000/2001“, F.A.Z.-Institut für Management-, Markt- und Medieninformationen GmbH, Frankfurt/M., August 2000

¹⁰ Due to the fiscal policy restricting the amount of Lats available, at least higher loans might be a problem in practice and revolving loans could replace long term agreements.

¹¹ weighted average interest rate of commercial banks for loans with payback periods up to one year for private and corporate customers

¹² which is, of course, at the same time a chance of decrease

¹³ weighted average interest rate for all loans for local customers

¹⁴ weighted average interest rate for loans with low risk profiles

¹⁵ Figures on Russian interest rates from “Sources of financing for SMEs available in North West Russia“, St. Petersburg Foundation for SME Development, St. Petersburg, 2000

may also be a reason, e. g. because the number of local banks is limited¹⁶ or because only a limited number of banks has sufficient experience in SMEP, so that other banks will not offer financing at all or at least not with acceptable interest rates.

(11) As competition always stimulates the market, it is wise to **involve foreign banks into financing** as well. To simplify matters, foreign banks can be divided in those who regard the BSR as their market and those who do not (due to country risk, size of the market etc.).

- Banks of the first category usually have bought shares in local banks or built up branches or new banks of their own. They will not compete with their local subsidiaries.
- The latter will not compete for principal reasons. However, they will become engaged if a foreign (e. g. Scandinavian or German) supplier, whose house bank they are, urges them to do so.

(12) Therefore the most promising way to increase competition by including international banks is to procure for combined supply and financing. To avoid that local banks might be excluded if there are no local suppliers, both the options of combined and separate offers for supply and financing could be procured.

(13) In the case of **municipal** projects, another obstacle for loans may be the **limits** they have **for liabilities** (see Annex I): If those limits are reached, even investments in highly profitable projects might not be implemented. There are at least two ways to avoid this situation: The involvement of an ESCO (see chapter 2.1) or the implementation by a municipal utility which is at least formally privatised¹⁷.

(14) As far as **municipal enterprises** are concerned, the banks will adjust their interest rates to the credibility of the company. To provide municipal guarantees is usually no practicable way to increase this reliability, as they will count as a form of municipal liability. Therefore the utility must have a reliable and profitable structure. The independence of its management from political influence, the contracts with the clients and its freedom to adjust tariffs according to cost changes are among the most important issues from the banks' point of view.

(15) In order to get a loan, it is not sufficient to present a profitable project: Only in the case of bigger projects, cash flow of which is in a legal way separated from the rest of the company or municipal budget, the bank will regard their loan as project finance. Then usually a special purpose company is founded, which is only responsible for the implementation and operation of the isolated project. This separates the liabilities and the income of the project in a legal way from those of the project owner.

In most cases the attitude of corporate finance will prevail, making the audit of the general **financial strength of the company or municipality** more important for the banks than the audit of the SMEP itself.

2.2.2 Project related Barriers for Financing

(1) In the preceding chapter, the availability of loans and global aspects affecting the financing of SMEP were discussed. Besides those global aspects - which of course cannot be changed by the project Baltic CHAIN - there are some special characteristics of SMEP which significantly influence the availability or at least the interest rates of loans.

(2) In nearly all discussions with banks there were complaints that the preparations of documents¹⁸ by project owners are insufficient - no matter if the project owners are municipalities, municipal enter-

¹⁶ e. g. in Estonia the three biggest banks share more than 95 % of the market

¹⁷ i. e. the municipality can still be a 100 % or the majority owner

¹⁸ For a detailed lists of documents required see e. g. Joel Swisher: "International Project Finance Opportunities for the Baltic Clearinghouse", paper without date, chapter "Information Needs for Project Finance" or homepages of relevant banks (e. g. <http://www.merita.ee/e/corpo/finans/> or http://www.optiva.ee/default_ns.asp → business banking → project finance / loans → investment loan → documents required to apply for a loan or guarantee)

prises or private companies. Project owners and even a lot of consultants are very often represented by technical staff, usually emphasising the technical aspects in depth, but neglecting the financial analyses, the legal audit of the contracts underlying the project income or the discussion of collateral.¹⁹ Even if the project is discussed in the necessary details, the information about the project owners, whose credibility might be more important than the project itself, might be insufficient.²⁰

(3) The insufficient preparation of documents can lead to different bank reactions, which are all negative for the financing of SMEP:

- Some banks might give a loan, accepting the lack of information. They will regard the risk as high and thus calculate an adequate risk premium. As a result, financing gets expensive.
- Other banks might ask for additional information and try to compile a sufficient documentation in lengthy co-operation with the client. The work load for the banks reacting this way is high - especially considering the small size of the projects - and they will calculate an adequate margin covering their work. As a result, financing gets expensive.
- Lots of banks might reject to finance the projects as the chance to get an adequate margin, covering their risk or work load, is considered to be low. This will reduce competition. As a result, financing gets expensive.

(4) The results of the inadequate preparation of documents leading to high interest rates is intensified by a lack of familiarity of the local banks with SMEP or even project finance in general.²¹ Even if the capacities for the auditing of such projects are in principle available, there will often be a lack of knowledge on technology, future fuel prices²², local energy markets²³, the legal situation of the project owners etc. The ability of the bank to check the documents presented by the project owner might be limited, especially if the documents are insufficient.

(5) If the technology to be established in a SMEP or if the market conditions are not standardised, especially in the case of higher investments, the simple preparation of documents might not be sufficient. Instead, a detailed feasibility study (FS) will be required, which may cost 10,000 € or more.

As every project owner needs a certain amount of equity (typically between 20 and 40 %) to finance his project, parts of this equity could in principle be used to finance the FS. In practice, the financing of FS can be a major barrier:

- Municipalities might be ready to invest in energy *projects* (equipment etc.), where the result of the investment has direct and visible benefits, but local politicians are often reluctant to pay for studies, where the result is “paper only”.
- Similar thoughts might prevail in the case of small and medium sized enterprises (SME), who might not have the necessary amount of equity but who could look for it with the help of a FS .
- Banks and most IFI will not finance a FS as they expect to receive the result of the FS before making any decisions on financing.

(6) As a result, there is in many cases a gap between the good project idea and the moment where the documentation is sufficient to apply for financing.

¹⁹ Quotation of a bank manager “Some of them don’t even know what a cash flow is. How should we discuss project finance with them?”

²⁰ see chapter 2.2.1 (15)

²¹ It was reported that some of the local banks, e. g. in Lithuania, strongly concentrate on retail banking and on “business with 200 % securities”.

²² e. g. long term development of the cost of wood chips

²³ E. g. if a CHP stations sells heat to residents and to a local industrial estate, the reliability of the cash flow calculations depends on the future economic development of the industrial estate, which in return depends on the development of its own markets.

3. Functions of a Clearing House and Country Desks

- (1) Based on the analyses of the current situation, four options are recommended for future services of a CH or CD in chapter 3.1. Those are the priority options, i. e. they should be implemented first.
- (2) More options were discussed with banks and other institutions and are described in chapter 3.3. However, those options do not promise to have an adequate relation between efforts and benefits or there are other reasons why they should not have first priority.

3.1 Priority Options

3.1.1 Preparation of Documents

INITIAL ANALYSES UNDERLYING THE PREPARATION OF DOCUMENTS

(1) There is a lack of experience of project owners how to prepare the necessary documents for banks in order to get the part of the financing which is not covered by equity, grants from state programmes or similar sources. This leads to rejection or at least higher costs of financing (see chapter 2.2.2, no. 2 - 3). Furthermore, more banks will be able to offer financing if the documents are prepared well, which will lead to additional competition and improve the financing conditions for SMEP (see chapter 2.2.2, no. 4).

MECHANISMS OF THE PREPARATION OF DOCUMENTS

(2) The CH / CD can support project owners in the preparation of documents according to the needs of banks. There has to be at least a documentation of the following aspects²⁴:

- technology: reliability, appropriateness of the solution selected in the local energy system, routine maintenance and larger overhauls to be expected, environmental aspects, conformity with existing and coming environmental and other legal requirements etc.;
- economy: initial costs of planning, fees, licences, equipment etc.; long term costs of staff, routine maintenance, larger overhauls, fuel prices; development of long term costs (e. g. expected price of gas or wood chips within the payback period of the loan), costs of financing, development of demand (considering energy saving potentials of the customers and other aspects influencing the demand), price of the energy to be sold and its development (including the discussion of competing energy options of the customers), in the long run probably income from CO₂ licences etc., finally comprehensive cash flow calculation;
- legal situation: contracts with the suppliers (coverage of technological risks) and the clients (customers' options to terminate the contracts, mechanisms to adjust prices according to the costs, inflation etc.), development of environmental or other legal framework conditions;
- risk discussion: possible results of technological, economical and legal risks, collateral (including its liquidity) or guarantees to cover the risks etc.

This is not supposed to be a complete list and the requirements do depend on the nature of the project. In general, the documentation required for an energy saving measure is less sophisticated than for a production unit (e. g. combined heat and power station) and the requirements for a modernisation of an existing plant differ from those for the erection of a new one.

²⁴ see also footnote 18

(3) The CH / CD will use manuals and other tools allowing for a standardised and efficient preparation of documents.

FINANCING OF CH / CD SERVICES FOR THE PREPARATION OF DOCUMENTS

(4) The CH / CD services help the project owner to reduce the costs of financing and they speed up the implementation of his project. A consulting fee can be charged and will be paid for by the project owners if they are convinced - e. g. by reference cases - that the CH / CD offers "value for money". The CH / CD services for the preparation of documents should be sold on a market oriented basis.

CH / CD QUALIFICATIONS FOR THE PREPARATION OF DOCUMENTS

(5) As follows from the mechanisms described in no. 2, the CH / CD needs the competence of engineers, market researchers, financial analysts and legal experts.

(6) In more complicated cases co-operation with consultants could be necessary (see chapter 3.1.3).

(7) Most of the work offered by the engineers and the financial analysts can be provided on a centralised CH basis for all CD. Market research and legal aspects require local CD expertise.

RISKS

(8) The main risk is that of liability for incorrect statements in the documents prepared by the CH / CD.²⁵

3.1.2 Broker / Tendering

INITIAL ANALYSES UNDERLYING THE BROKER SERVICES

(1) The competition among banks interested in SMEP should be increased, among other things by the option of combined tendering of supply / services and financing. Project owners need support for their procurement procedures (see chapter 2.2.1, no. 10 - 12).

MECHANISMS OF THE BROKER SERVICES

(2) A broker would support project owners first of all by the preparation of documents (see chapter 3.1.1). Furthermore, he might collect projects which are similar regarding technology, market situation and ownership structure. He will then support procurement of supply, services (if relevant) and financing, involving national and international banks and suppliers for the project or the bundle of projects.

(3) There will be no legal bundling of projects, i. e. the project owner will not take responsibility for the payment of others and there will be separate offers and decisions on the bank / supplier for each project.²⁶ The broker will not be a party of the final contracts.

Thus the banks will have to audit each project separately and might offer varying conditions for different projects of the bundle or even have the right to reject financing of some of the projects. However, by asking for the financing of several similar projects, there might be synergies for the banks and suppliers, making it more attractive to offer. There might also be quantity discounts.²⁷

(4) The procurement needs an exact definition of the technological requirements. They could be the result of a detailed planning process, which would be provided by an engineering consultant. Alternatively, a functional call for tenders could be preferred, where just the necessary performance is

²⁵ There is of course always the risk that there are not enough clients asking for the product that is offered (here: the preparation of documents). Reasons can be wrong assessments of the market demands, lack of marketing, missing customer orientation etc. However, this is not regarded as a risk specially related to the options discussed in this report.

²⁶ Additional bundling aspects are discussed in chapter 3.3.2.

²⁷ This can lead to the need for a mechanism of negotiation among the project owners if the best option for an individual project owner differs from the option which is best for the bundle as a whole.

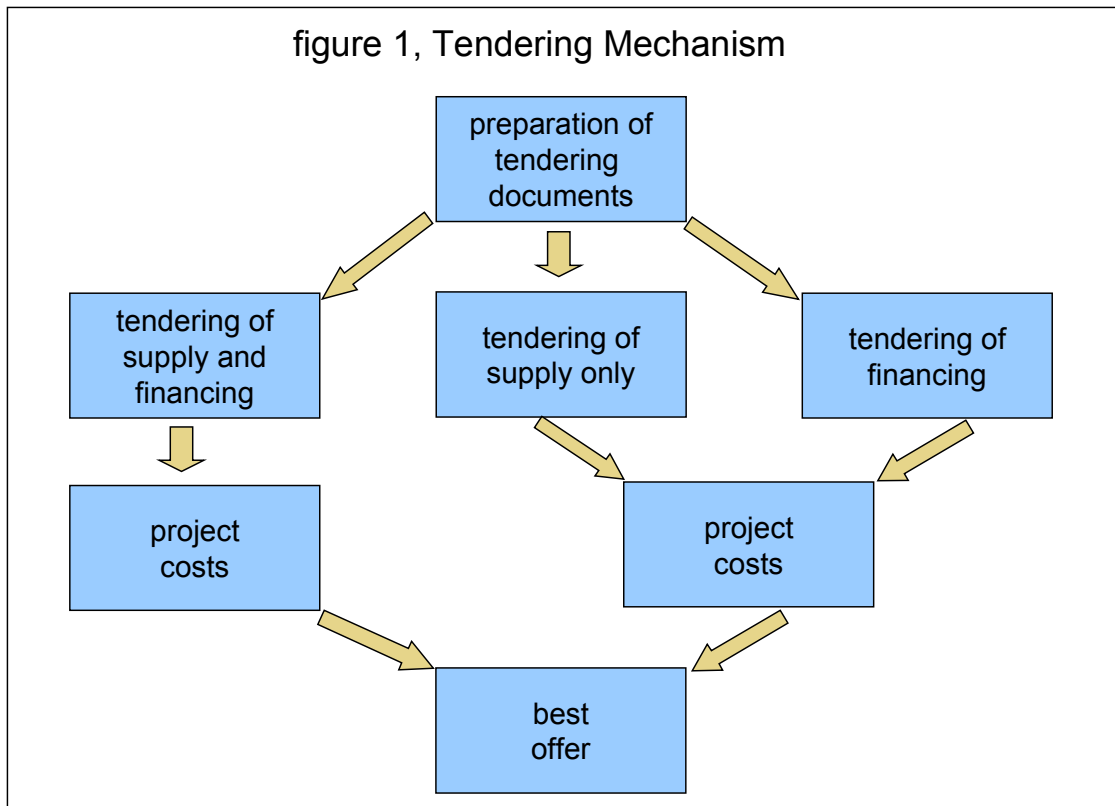
described and it is left to the market to offer the best solution. Such a functional call for tenders could fall within the competence of the broker himself and the planning would then be part of the offers.

(5) For the procurement of the financing aspects, the broker also has to define the conditions of repayment (number of rates, date of payments, payback period, grace period etc.) and should include the draft contract. The definition should be very precise in order to receive comparable offers. However, alternative offers should in general be allowed as they might lead to more favourable results, though they might need a much more sophisticated evaluation.

(6) Besides calling for offers of combined tendering of supply and services, there should be an alternative call for separate offers of supply and financing. Suppliers will be able to ask their house bank or other banks to offer the financing component, but the financing conditions of other banks might be more favourable. Especially in cases where the suppliers are from abroad, the opportunity to offer financing only might help to keep the local banks involved.

In practice is it to be expected that each supplier will offer both supply only and combined supply and services (the latter with the help of his house bank), whereas there might be additional offers for financing.

(7) Unless the evaluation of offers and signing of contracts will happen within a few days - which can be regarded as unlikely - there will be no fixed offer of the financing conditions but they will be linked to an index like EURIBOR.²⁸



²⁸ In principle, the banks have the opportunity to offer a fixed rate for a contract to be signed at a defined date in the future, but using such mechanisms costs money as well. The problem is that banks will be reluctant to make use of such mechanisms not knowing if they will finally get the contract, as they have to pay for such options anyway.

(8) If subsidies (grants, soft loans) from the state or IFI, an income from CO₂ licences or other favourable sources of financing are available, the broker will integrate them into the financing package he is organising for the project owner. He can also introduce the options of equity funds and other measures of structured financing if they are applicable in the individual case.

(9) For municipalities in the accession countries, tendering of financing services might under certain circumstances be enforced by EU regulations anyway. In this case the broker will also offer services which are needed irrespective of SMEP, i. e. there would be a wider “market” for its services.

FINANCING OF CH / CD BROKER SERVICES

(10) Here again the CH / CD broker services help the project owners to reduce the costs of financing (and of supply). A fee can be charged and will be paid for by the project owners if they are convinced - e. g. by reference cases - that the CH / CD broker offers “value for money”. The broker can grant the project owner a respite in payment until the financing of the total project is agreed on. Furthermore, the payment could depend on a successful tendering.²⁹

The CH / CD broker services should be sold on a market oriented basis.

CH / CD QUALIFICATIONS FOR THE BROKER SERVICES

(11) If the documents required by banks are already prepared, the CH / CD broker needs the competence of financial analysts and eventually (in the case of functional calls for tender) engineers to define the conditions of the call for tenders and for the evaluation. Legal experts will be needed as the procurement procedure must follow the relevant legal requirements. Especially public project owners in the accession countries will have to follow EU procurement regulations sooner or later, which are very strict and allow for compensation of bidders who have been discriminated. Many IFI, who might be involved in financing, also have requirements for the procurement of goods and services.

To evaluate the best form of structured finance for each project, banking know how is indispensable.

(12) Depending on how the technological requirements are defined, there might be a co-operation with technical consultants working directly for the project owner.

(13) Again, the services of the engineers and financial analysts can be offered on a centralised CH basis whereas some local CD expertise is needed for the legal aspects. The banking know how can also be offered centralised.

RISKS

(14) Mistakes in the evaluation of offers might lead to claims for compensation of project owners.

As described in no. 11, procurement regulations are or will become very strict. There might be claims for compensation of bidders who think that they were discriminated.

3.1.3 Project Preparation Fund

INITIAL ANALYSES UNDERLYING THE PPF

(1) In the case of projects where technology, market conditions or the legal framework are not standardised, a feasibility study (FS) will be needed. There is a need of financing mechanisms for such FS (see chapter 2.2.2, no. 5 - 6).

MECHANISMS OF THE PPF

(2) A project owner looking for a project preparation can apply at a CH / CD fund administration (FA) for the pre-financing of his FS. The FA will make a quick and standardised pre-feasibility study, looking at the project and the project owner. The costs of this pre-feasibility study, which are just a

²⁹ Similar mechanisms are described in more detail in chapter 3.1.3 (Project Preparation Fund).

small fraction of the FS costs, have to be covered by the project owner, irrespective of the results. This ensures that only serious projects are presented to the FA.

(3) If the result of the pre-feasibility study is positive, i. e. if the project seems to be reliable and the project owner creditworthy, the FA will pay for the FS. There can be different options, like a 100 % payment or a sharing of the FS costs with the project owner.

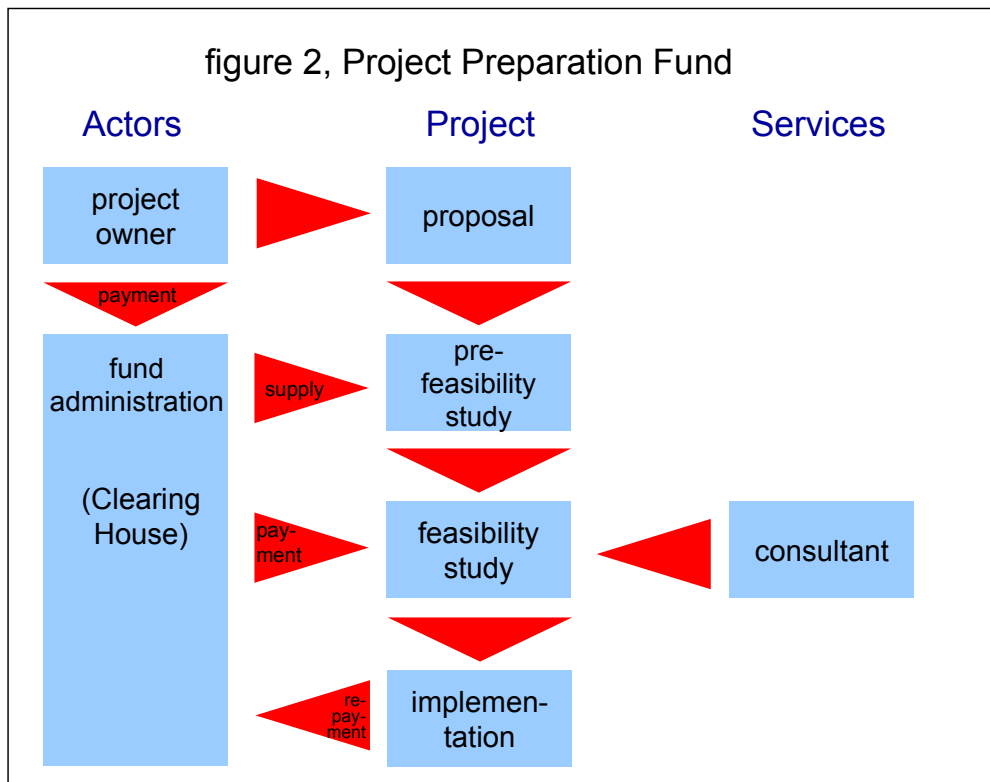
(4) Furthermore, the FA should hire the consultants: As they do this as a part of their daily work, they will have experience with the terms of references, tendering and negotiations with consultants etc. This avoids also that mainly consultants search for projects and persuade project owners to apply for the financing of a FS, no matter if the project owner is really convinced of the project: There is no guaranty that *they* will get the consulting contract.

If there are exceptional reasons for which the project owner should hire the consultant himself, the FA must at least define the terms of reference and must have a right to reject payment if the study does not fulfil the requirements.

In all cases the quality management and the quality monitoring of the consultants' work will be an important task of the FA.

(5) When the FS is completed and has a negative result, i. e. when the pre-feasibility study of the FA was wrong, the costs have to be finally covered by the FA.

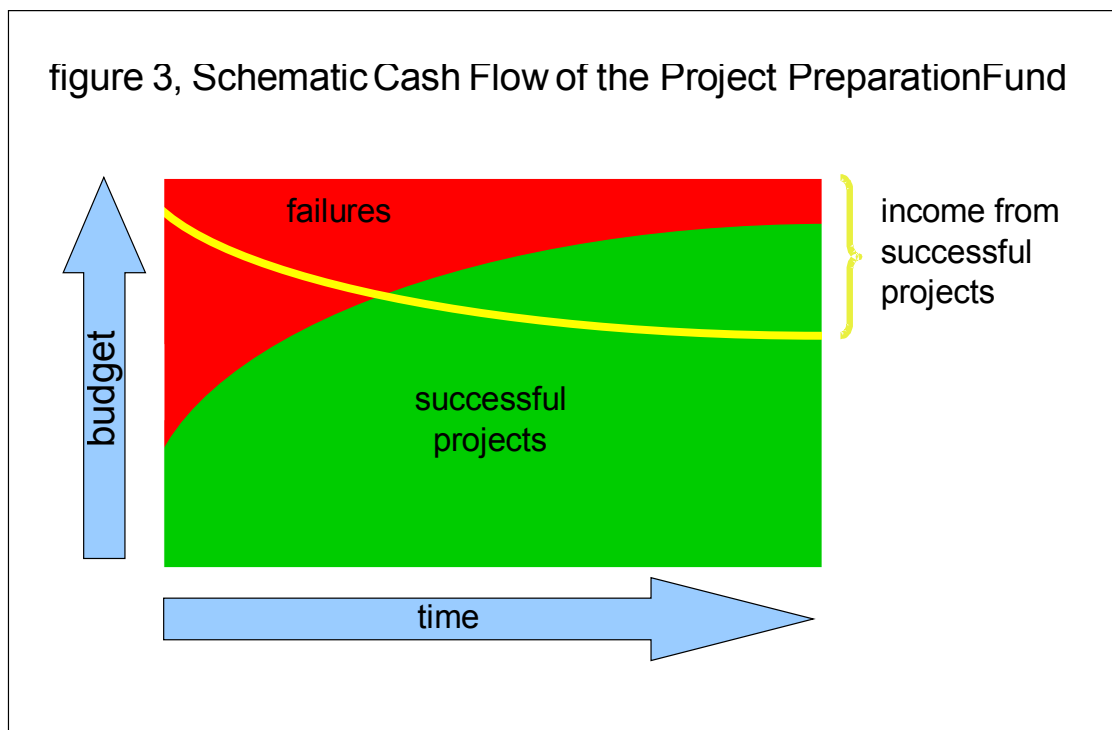
Otherwise, it is very likely that the project will be implemented and that a financing of the total investment is provided. In this case, the project owner has to repay the costs of the FS and an additional margin, covering the expenses of the FA for its own work and the costs of the FS with negative results. As planning and project preparation expenditures are an ordinary part of the project costs, it is common practice that banks accept those costs, which are small compared to the total investment, as soon as they agree on the financing of the project as a whole.



(6) The agreements of the FA and the project owner must contain safeguards that the project owner has to pay for the FS and the margin if he decides later on that the project is implemented not at all or later for reasons he has to account for and which were not known when the pre-feasibility study was made.

FINANCING OF CH / CD PPF SERVICES

(7) The costs of the pre-feasibility study are paid for by the fees of the project owners (see no. 2). The other expenses of the FA, including the costs of the FS for the failures, have to be covered by the margin that will be charged when projects are implemented. In the long run, when the FA has gained some experience, the Project Preparation Fund will be a revolving fund working independently on a market basis (see fig. 3).



(8) However, the Project Preparation Fund (PPF) will need some opening support. On the one hand there is a need for the capital that can be used for the FS. On the other hand in the first one or two years, when the FA is gaining experience, the number of successful FS and thus the repayments might be too low to cover for the expenses of the FA and for the lost investments into unsuccessful FS.

(9) The PPF should work on a profitable, but non-profit bases. This means that he will not get any subsidies but has to cover all his expenses by his own income. If there is a profit on top, this profit will remain in the PPF and enlarge the fund capital (allowing for more FS to be pre-paid) or will be used for other CH / CD purposes supporting SMEP. In the case of a non-profit status, initial funding from the EU or other donors might be possible (see annex II). The local governments, the Nordic countries or Germany might also be interested in the establishment of such an institution.

(10) If the PPF is supposed to have at least a small profit, local banks with special interest in the financing of SMEP might also be willing to be shareholders of a PPF, as they will mainly benefit from the loans that can be given in case of successful FS. However, *if* there are in this case regulations forcing the project owners to finance their project only in co-operation with the banks having shares in the PPF, competition for the final financing of the projects might be significantly reduced, which makes the PPF less attractive.

The initial capital of the PPF can also be financed by commercial loans, which will, compared to the other two options, increase the costs of its services.

(11) Irrespective of the sources for initial financing it is strongly recommended that the FA of the PPF works on a market oriented bases: If the remuneration of the FA depends on the economic success of the PPF, they will have a strong incentive for a successful performance regarding, among other things, the reliability of the pre-feasibility studies .

CH / CD QUALIFICATIONS FOR THE PPF

(12) The CH / CD PPF, i. e. the FA, needs similar qualifications for the pre-feasibility studies as they are needed for the preparation of documents (see chapter 3.1.1, no. 5 - 7). As the pre-feasibility studies are to a certain extent standardised, more services could be provided by a centralised CH instead of local CD.

(13) There will be a regular co-operation with consultants who are working on the FS.

RISKS

(14) The main risk is that the success rate of the FS is too low, so that the PPF will loose its capital. This can primarily be caused by false estimations in the pre-feasibility studies.

There must also be regulations avoiding the risk that a project owner withdraws from the project for reasons irrespective of the FS result and then refuses to pay for the FS (he might even try to implement the project later or in a modified way, using the findings of the FS).

It might be helpful to couple the PPF to the broker services: In the case of a positive FS result the broker will automatically seek for financing, and if that financing is secured the PPF services have to be paid for by the project owner.

3.1.4 Guarantee Agency

INITIAL ANALYSES UNDERLYING THE GA

(1) The risk cost calculation of banks regarding SMEP is often unfavourable due to a lack of experience with the projects (see chapter 2.2.2, no. 4) and the insufficient preparation of documents (see chapter 2.2.2, no. 3). What is more, competition among banks regarding the financing of SMEP may be low (see chapter 2.2.1, no. 10 - 12).

MECHANISMS OF THE GA

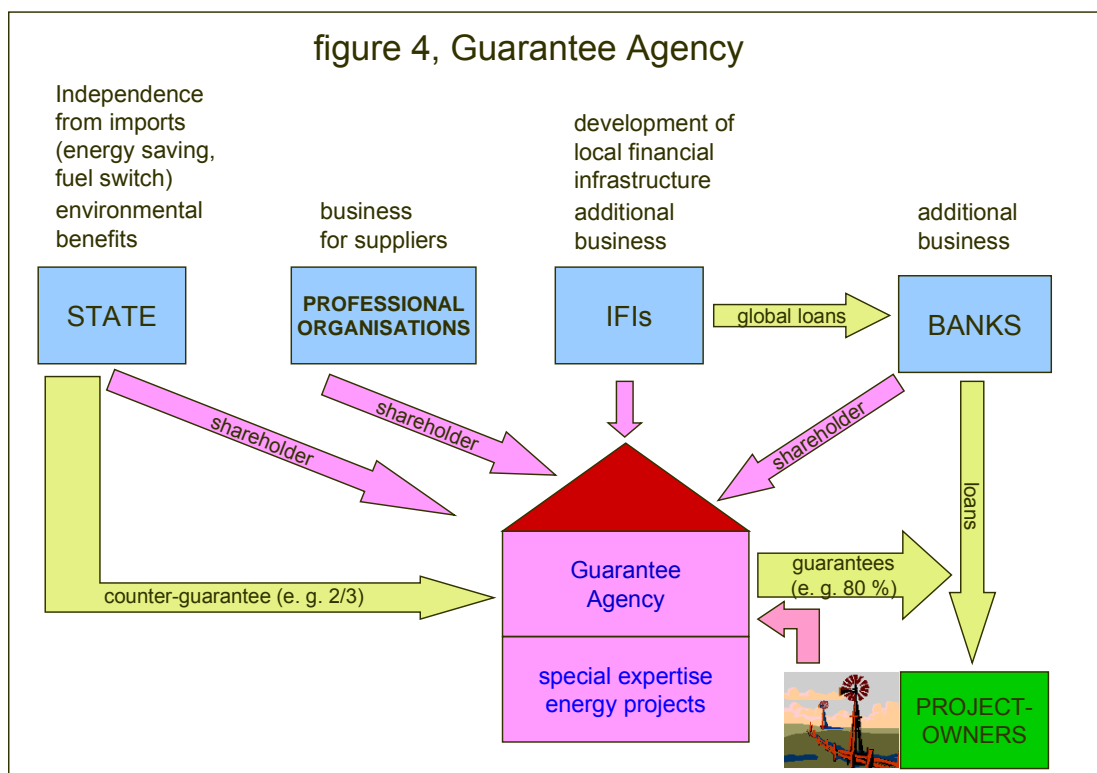
(2) The central idea of a Guarantee Agency (GA) is to replace the unfavourable risk cost calculation of "ordinary" banks by a more realistic calculation of a GA specialised on SMEP. The GA will issue a guarantee that it is going to repay e. g. 80 % of the loans (interest and discharge) if there are payment defaults of the project owner.³⁰

The GA will also charge a risk premium, but due to its experience (knowledge of technologies, local energy markets, legal framework etc.) this can be lower than the banks' calculations.

³⁰ There should be no 100 % guarantee as it would totally eliminate the responsibility of the banks. It could also be considered that "the first loss", i. e. 20 % of the total potential accrued interest and discharge, has to be covered by the bank before the GA starts to pay.

(3) Furthermore, the project owners could apply to the GA before approaching banks for financing. The GA would audit the project and - if the result is positive - issue a statement that they are ready to give a guarantee for the financing. The GA should also provide the results of its audit to the project owner and allow him to present it to banks.

When the project owner approaches his bank, the bank will already know that it can count on a guarantee and that it can to a certain extent rely on the audit of the GA, which takes the major risk. As a certain amount (e. g. 20 %) of risk will remain with the bank, it will of course also check the projects, but it can follow the audit of an institution which has in principle (regarding the structure of the audits) the same approach as itself.



(4) Both the guarantee and the audit of the GA will also raise the interest of banks to finance SMEP and thus increase competition.

(5) Furthermore, a bank giving a significant amount of loans with the coverage of the GA could be in a position to get a cheaper refinancing for this business due to the guarantee, as the rating of the GA should be better than that of most of the banks. This might also lead to decreasing interest rates.

The new international and EU supervisory regulations for banks coming into effect at the beginning of the year 2004 will lead to similar results. They will initiate a wide application of internal rating procedures. The use of tier 1 capital and thus the price of the loan (i. e. the interest rate) could be reduced in case of loans with a low risk profile as it is caused by a guarantee.

(6) Mechanisms similar to those of the GA do exist in several countries, though they have different target groups.³¹ In nearly all cases there is a counter guarantee of the state covering parts (e. g. 2/3) of the payments of the GA.

(7) As state budgets are very limited, it might be unlikely to raise new funds for this mechanism. However, in all BSR countries there is some state support for energy efficiency projects, as there is a public interest in the environmental benefits and in growing independence from imported energy by energy saving measures. Nowadays, this support is often provided in the form of grants, which is of course the most convenient way for those project owners who get them. As public budgets are limited, the demand is much higher than the money available, so there are usually more projects that do not receive any assistance at all than projects supported.

The same amount of money that is today used as a grant could be taken to cover counter-guarantees of a GA. As the money will only be needed in the rare cases of project failures, it can be used to stimulate a much higher amount of investments. Table 4 shows that, under assumptions which can be regarded as realistic, the number of projects that can be implemented by the help of a counter-guarantee is more than 13 times as high than by a direct grant.

table 4: schematic comparison of the effects of counter guarantees and direct grants

| | | |
|----|--|-------------|
| 2 | assumptions | |
| 3 | state support used as a grant for projects today [€] | 100 |
| 4 | guarantee of GA for banks [%] | 80 |
| 5 | state counter guarantee for GA [%] | 66 |
| 6 | projects with payment defaults [%] | 20 |
| 7 | average loss in case of payment defaults [%] ³² | 70 |
| 8 | result | |
| 9 | state money used for counter-guarantees [€] (= 3) | 100 |
| 10 | guarantees of GA that can be issued based on counter-guarantees [€] (= 9 / 5) | 152 |
| 11 | investments that can be covered with counter-guarantees [€] (= 10 / 4 / 6 / 7) ³³ | 1357 |

So there is not necessarily a need for additional money, but the question is how the state money that is spent anyway can be used in the most efficient way!

(8) One of the main barriers to overcome for government administrations when establishing a GA might be the change of philosophy connected with a shift from grants to guarantees: In the case of grants the state is a direct donor; the people administering the grants are in the pleasant position to hand out “state presents”. The support of guarantees is a market oriented mechanism where the remaining relation to the project owners is an implicit one. However, this change in philosophy will be required anyway sooner or later for all EU accession countries.

(9) In the case of Poland, it has been argued that interest rates are so high that many SMEP need a grant in order to be profitable and to be implemented at all: The seamy side of the higher number of projects that benefit from a guarantee is of course that the average amount of money provided for each project is reduced. It goes beyond the limits of this report to assess how many SMEP in Poland definitely need a grant and which percentage of the grants provided at the moment could be used for counter-guarantees. However, it has to be taken into account that - besides Russia, where for the time

³¹ e. g. export credit insurances in most countries, “Bürgschaftsbanken” (Guarantee Banks) in the German states (“Länder”) on behalf of small and medium sized enterprises etc.

³² Payments defaults usually occur some time after the initiation of the project, so that in the beginning interest and discharge have been paid for by the project owner.

³³ It is not assumed that the banks have to cover the first loss, i. e. the calculation of the benefits from the counter-guarantee is a conservative one

being commercial financing for SMEP is a very limited option anyway - Poland is the only country where the interest rates are very high and that there is a strong tendency that they will decrease significantly in the coming years (see chapter 2.2.1, no. 7). As the establishment of a GA will take some time, the problem might vanish more or less until a GA starts its work.

(10) If a GA established for SMEP works successfully, its services might in the long run be extended to other areas like small and medium sized enterprises. This will be in line with the recognition that enlargement, employment and environment ("triple E") are strongly interdependent. However, it is recommended to start with limited tasks as this will increase the chance of implementation and other issues are not subject of the Baltic CHAIN project.

FINANCING OF THE CH / CD SERVICES AND SHAREHOLDERSHIP OF A GA

(11) A minor issue is that the GA could charge a fee (or a conditional fee) covering its expenses for its statement that it is ready to issue a guarantee and for the provision of its audits' results (see no. 3). This would avoid that project owners contact the GA, utilise this service but finally decide not to use a guarantee so that the service cannot be paid by the margin.

(12) The main services of the GA, the payments related to guarantees and the expenses of the GA administration, must be covered by the aval (risk premium and margin) that has to be paid for the guarantee. This aval must be calculated on a professional bases, with the special SMEP expertise of the GA.

(13) Of central importance is the trustworthiness - or the rating - of the GA. The banks must be able to rely on the GA, i. e. on the payment in the case of insolvency of the project owner. The most relevant factors are the counter-guarantee of the state, as described above, and the equity, ownership structure and management of the GA.

(14) Regarding the ownership structure, it would be suitable to involve all institutions that benefit from the existence of the GA:

- Banks benefit from the higher amount of commercial loans that can be issued with the help of the GA. Nearly all the local banks contacted expressed their interest to become shareholders of a GA with shares around 1 to 3 % each.³⁴ It should be considered to limit the GA services to banks which are shareholders. In order to avoid unfair competition and - in the long run - a violation of EU regulations, shareholdership must be open for all local and probably foreign banks.
- IFI benefit in some cases from the intensified use of global loans which they issue for the refinancing of local banks for SMEP. Besides, it is usually in line with their mandate to support the financial infrastructure in transition countries, which is a key effect of the GA. The Nordic NEFCO, the German KfW and DEG, to whom the option was presented, were all very interested in the establishment of a GA and can in principle - if the conditions which have to be negotiated in detail do fit their requirements - imagine to take a share in a GA.
- In the target countries the state, besides providing the counter-guarantees, should be a shareholder. Eventually Nordic countries or Germany are interested in the environmental support induced by a GA as well and will be ready to engage themselves directly or through state institutions.
- Professional organisations representing the suppliers and consultants of typical SMEP projects might also be interested to support the establishment of a GA, as the guarantees lead to additional business.

³⁴ As larger banks will most likely use the services more than smaller ones, the shares of banks could be linked to the size of their balance sheet. If additional banks join the GA later on, the GA equity will increase or other institutions, e. g. the IFI, will reduce their shares.

- Associations of the project owners, e. g. chambers of commerce for private project owners and municipal associations, would also be important shareholders.

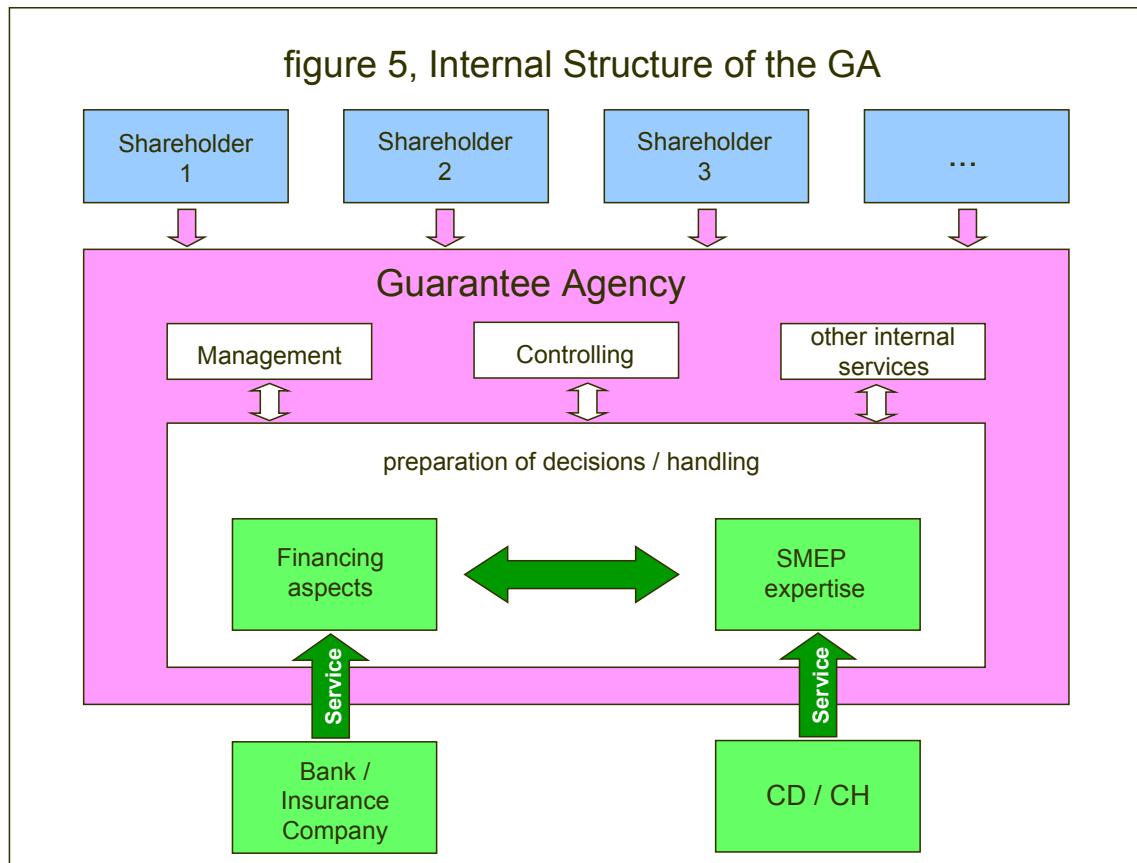
(15) It is important to stress that the shareholders can decide on the structure of the GA and the general regulations, appoint the management etc. However, the daily handling of the business and the decisions of the GA management must be on a professional bases and absolutely independent from any political influence. As the state provides counter-guarantees, it is legitimate to give him a right to reject projects. This could be implemented in the form of a guarantee committee which has to confirm the positive guarantee decisions of the GA management, where the state representatives have a right to exercise a veto. Influence in the other direction, where a shareholder urges to issue a guarantee for a SMEP the GA management had to reject due to a lack of creditworthiness, must be absolutely avoided.

(16) The CH / CD providing expertise for the GA will be paid for by an agreed price per service or by an agreed part of the GA margin. The latter makes very much sense if integrated services are offered by the CD (see chapter 3.2), as the CD will then be the major "acquisition agent" of the GA.

CH / CD QUALIFICATIONS FOR THE SUPPORT OF THE GA

(17) The GA needs on the one hand special expertise on SMEP as described e. g. in chapter 3.1.1 and 3.1.2, which can be provided by the CH / CD.

On the other hand, the handling of the guarantees requires the typical know how of banks and insurances. Existing banks or insurance companies, especially if they are not competitors regarding the financing of SMEP projects, might provide those services (see fig. 5).



RISKS

(18) If the state tries to influence the management's decisions, other shareholders will tend to withdraw from the GA (such has happened in the past in one of the relevant countries).

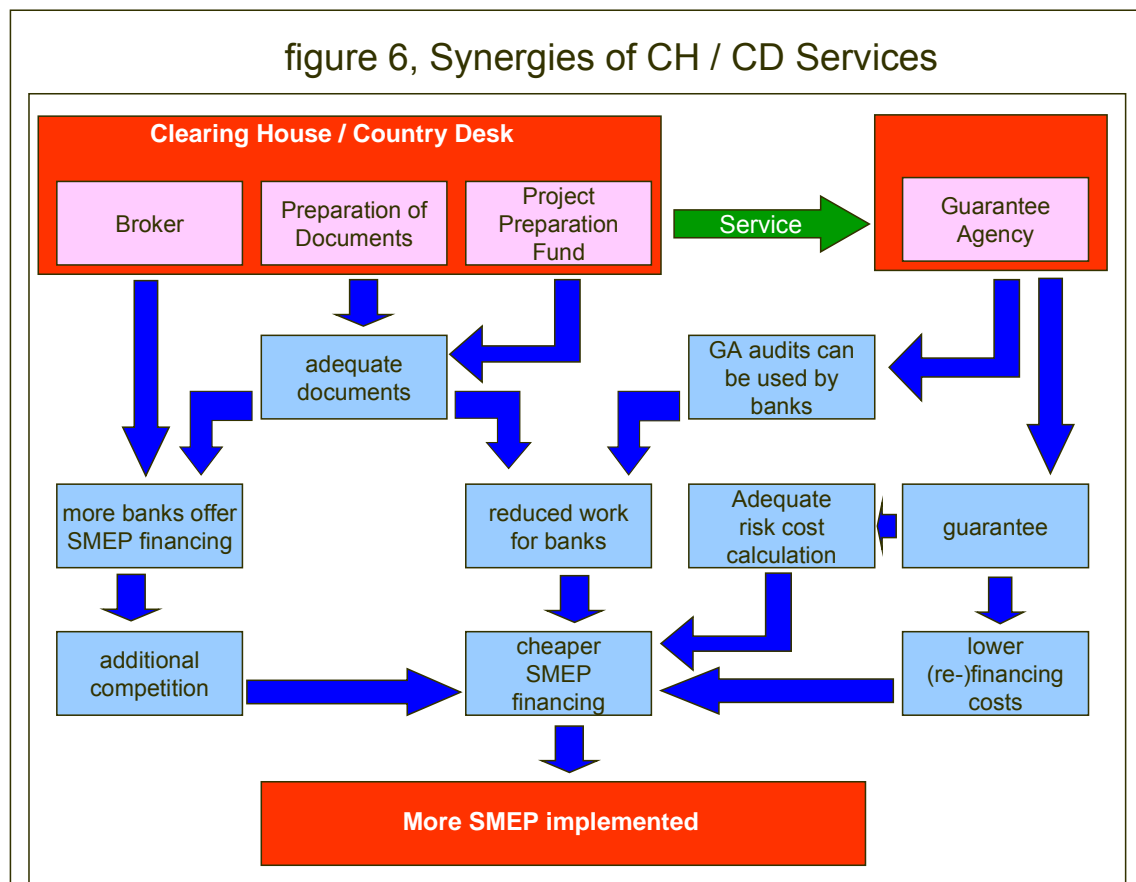
In the case of a high number of false audits there could be unexpected losses, leading to a loss of the GA capital.

If the GA is a multilateral institution (see chapter 3.2), there should be agreements the division of the GA business among the countries involved. A wide country divergence of the GA business might endanger its acceptance in the countries with a lower involvement.

3.2 Implementation of a Comprehensive Solution

(1) There are a lot of synergies between the options "Preparation of Documents", "Broker / Tendering" and "Project Preparation Fund". They all require similar competence and help to solve the same problems of SMEP financing (see fig. 6). To support the implementation of SMEP, the services can be offered hand in hand:

- A project owner will approach a CD as he is seeking support for the financing of his project.
- The CD will look at his SMEP proposal and can decide if the project owner's information is sufficient for the preparation of the documents needed by banks - so that the CD can offer this service - or if a more sophisticated FS is needed - so that they would inform about the services of the PPF.
- If the documents are prepared - in the case of more complicated SMEP in the form of a FS - the CD / CH can act as a broker to organise financing.



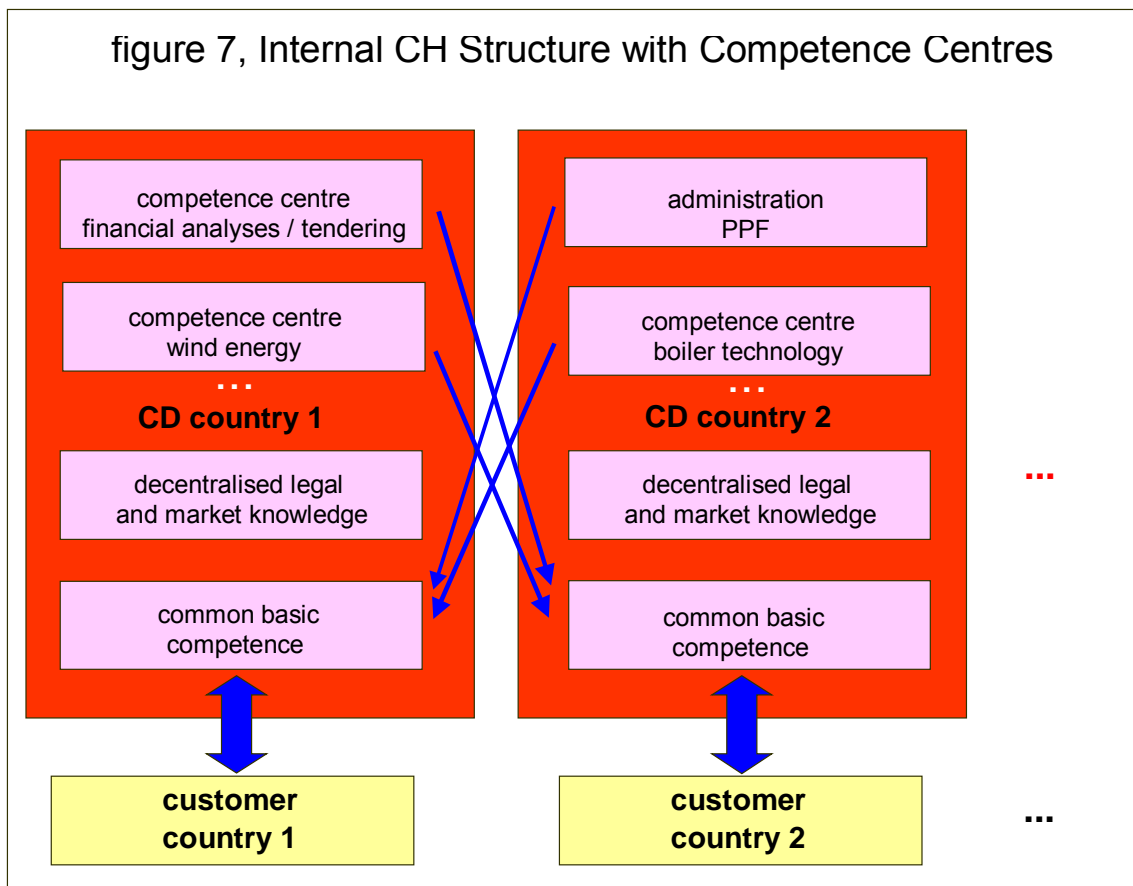
(2) The preparation of documents and the broker services can be offered as soon as staff with the necessary competence is available in the CD / CH. The establishment of the PPF might take some more time as financing (establishing the initial fund capital) has to be ensured. The other two services should then be offered first, but the structure of the CH / CD should from the beginning be oriented towards the integrated services, including the PPF.

(3) The GA offers complementary services and the guarantees can be integrated into the arrangement of a structured financing by the broker. The CD / CH providing the services mentioned above will significantly contribute to the decision making of the GA, i. e. will be an important part of the GA work.

(4) It has been discussed so far in chapter 3.1 that some services have to be provided on a **local level (CD)**, whereas others can be offered in a centralised way (CH). As the institutions involved in the Baltic CHAIN project so far, which are right now taking the first steps to establish CD, do not have all the competence required to provide the necessary services, it seems to be **unavoidable to cooperate**.

In this context, *centralised* services do not necessarily mean that there are five local CD and *one central CH*, located in which country ever. Services can also be centralised in the form of **competence centres**, where each CD, besides the basic know how they all have in common, specialises on tasks that it provides for all the others (see fig. 7).

figure 7, Internal CH Structure with Competence Centres



(5) Such competence centres could e. g. be formed for

- boiler technology and CHP,
- transmission line technology and district heating,
- renewable energy sources (wind energy etc.),
- energy efficiency measures for buildings,
- energy efficiency measures in industry,
- financial analyses,
- broker functions (national and international tendering, structured financing including loans, equity, grants, carbon offsets etc. as appropriate),
- the PPF administration

and other issues.

This requires, of course, a **co-ordinated establishment of all CD**.

(6) For all the options described above it was shown that the services can be sold on the market as the CD / CH will offer “value for money”. In the case of the PPF it has been argued explicitly that the fund administration should have an economic incentive for a successful fund performance.

Structures inside the public administration usually have difficulties to act on the market. Even if the personnel in the administration has the necessary customer approach, the structures of the public sector (budget, decision making, salary classification etc.) often prevent a flexible response to market demands. Furthermore, in the few cases where there is an overlapping of CH / CD functions with what consultant companies can in principle offer,³⁵ services offered by the administration or a subsidised entity can always raise claims against competition distortion.

For those reasons, it is recommended that the **CH / CD services should be provided in an independent enterprise, working on a profitable, but non-profit basis**, which can of course be owned by the state, municipalities, chambers of commerce or similar institutions. “Profitable, but non-profit” means that the CH / CD will not rely on subventions but will earn all its expenses. If there is a profit on top, it will remain in the CD / CH and help to widen its services for SMEP.

(7) The best stimulation for the use of synergies would be a common enterprise for all CD in the Baltic states, Poland and Russia. If the barriers to overcome (discussions on shareholdership and decision making, different legal frameworks, strong mental approach of national independence etc.) are too high, there should at least be binding co-operation agreements between the local CD with a precise definition of the tasks and the fees for the exchange of services.

A compromise could be five independent enterprises with very limited working functions who are owners of one common multilateral enterprise providing most of the services.

(8) The GA should have the ownership described in chapter 3.1.4. As the GA needs sufficient equity, the ownership must be wide. In the case of the GA it could also be discussed if several national or a multilateral institution(s) have to be founded. Most of the banks clearly preferred a multilateral structure (at least in the form of one GA for all the Baltic States) as they themselves are also acting in all of the countries. The IFI who are ready to participate even declared that a multilateral structure is necessary, as they are not ready to support any national solutions. However, they all feared that the governments will not be flexible enough to agree on an efficient multilateral structure.

Again, a compromise could be independent national GA that are co-operating in a common umbrella organisation.

³⁵ Usually the CH / CD will act as a market opener, creating new and additional opportunities for consultants and other private enterprises (e. g. by the financing of FS by the PPF or by the rising number of projects leading to new business for engineers and suppliers).

(9) If the key barrier against a common GA is the reluctance of governments to issue counter-guarantees for SMEP in other countries, this could be solved: The counter-guarantees of the state can be issued for national projects of the respective state only, leading to a contingent of guarantees the GA can issue for SMEP in each country according to the governments' budget decisions ("floating guarantee budget").

(10) In the long run it might be considered that the shareholders of the GA become also shareholders of the CD enterprise(s) providing the other services: There are synergies between all the services and the equity capital needed for the other services is, compared to the one of the GA, rather low, so the CD enterprise(s) could be integrated in the GA. However, as the GA is the most sophisticated solution, it will take the longest time to establish it so that the other services should start independently.

3.3 Other Options discussed

3.3.1 Project Databank

INITIAL ANALYSES AND MECHANISMS

(1) A databank might not only be offered for project owners, informing them about environmental aspects, technology, financing opportunities etc., but also for banks informing about projects to be financed in the near future.

(2) Most of the local banks showed interest in such a databank, as it gives them the opportunity to look for future clients. It must be ensured that the databank is regularly updated and that the quality of the data is controlled by the CD / CH.

CONSIDERATION

(3) It has to be discussed how relevant such a databank is if more and more SMEP tender for financing with the help of the broker: If there will be procurement anyway, it will only make limited sense for banks to approach project owners at an earlier stage.

(4) However, a databank might be put up anyway by the information dissemination work of Baltic CHAIN. It could also be a spin-off of the priority options described in chapter 3.1.

Information on projects, which can be of relevance for other project owners as well, could be prepared in a way that is of interest for banks. The databank should then contain as much information as possible as described in chapter 3.1.1.

3.3.2 Trustee

INITIAL ANALYSES AND MECHANISMS

(1) It was characteristic for the broker (see chapter 3.1.2) that he might present bundles of SMEP, but that there is *no legal* bundling. The idea of a trustee is to widen the broker function in this respect so that he is the only one making a contract with the bank. In return, he contracts with all the project owners in the bundle. However, his payment would still depend on the payment of the project owners.

(2) This stronger form of bundling would ease the handling for the banks: There is just one contract (with the trustee), one loan application etc.

CONSIDERATION

(3) As the payment of the trustee still depends on the payment, i. e. the creditworthiness, of all project owners in a bundle, the banks must still audit each project and project owner, so the main work load remains.

- (4) The handling of different loans should be even easier for the banks than for the trustee as it is a bank's routine business.
- (5) Negative aspects of the trustee would be that he prevents the direct contact between the bank and the project owner, so that cross selling - which may also be a reason to offer favourable loan conditions - is avoided.
- (6) Furthermore, if the bank is obliged to finance the whole bundle, the conditions will be average, depending on the average risk, i. e. the projects / project owners who are very creditworthy will suffer from those in the bundle who are not. In extreme cases, the bank might even reject to finance the bundle. The result will be that only "bad" projects will be in such bundles whereas "good" project owners will seek for individual financing, which might in the long run ruin the image of the trustee and the interest of banks to finance his bundles.
- (7) Those arguments could also be used when a bundling towards international investors - if they are existing (see chapter 1) - is considered.
- (8) A final argument against a trustee from most of the *local* banks was that the typical investment of SMEP - several 100,000 € - is exactly the right size considering their risk portfolio. The bundling of e. g. ten projects, resulting in a total investment between 5 and 10 million €, would even be counterproductive. However, as more and more local banks are owned by international banks, the local banks could involve their mother companies if projects (or the number of projects) are so large that the limit of the local lending capacity is reached.
- (9) Besides a legal bundling, the "virtual" bundling in the form of standardised solutions, a higher number of projects etc. will lead to more experience and routine of the actors (banks, consultants etc.). This is supported by the preparation of documents (see chapter 3.1.1) and the broker services (see chapter 3.1.2).

3.3.3 Equity Fund

INITIAL ANALYSES AND MECHANISMS

- (1) Banks do usually require an equity between 20 and 40 %. A lack in equity leads to a higher risk for the banks, so banks might deny financing or will at least charge a higher risk premium. This could be avoided by a fund providing equity for SMEP.

CONSIDERATION

- (2) The discussion with local banks showed that in most cases a lack of equity is not regarded as a relevant problem.
- (3) Equity investors do take higher risks, so they expect a higher return on investment (ROI). Venture capital funds - providing equity for enterprises of the "new economy" - expect an ROI of at least 20 %. Though the SMEP are profitable, they will in general not have such an ROI.

It can be argued that a higher amount of equity makes the financing of loans cheaper, so that - in a mixed calculation - a higher payment for equity capital is still profitable. However, as equity of the SMEP seems not to be a central issue, there is reason to doubt that the establishment of a fund of its own (concentrating on SMEP in the BSR) is worth the efforts. It has to be taken into account that those efforts - management, documentation for investors etc. - are relatively high in the case of an equity fund.

- (4) It is recommended that the broker, when there is an equity problem in individual cases, should consider the use of existing equity instruments³⁶ (see chapter 3.1.2, no. 8).

³⁶ see e. g. Joel Swisher: Seminar Background Paper "Financial Options for Climate-Friendly Energy Technology Projects", CTI / Industry Joint Seminar in Eastern Europe, Warsaw, 11-12 May 2000

3.3.4 Bank supplementing the House Banks

INITIAL ANALYSES AND MECHANISMS

(1) The banking sector in the BSR does not have the full competence for project and corporate financing regarding SMEP (see chapter 2.2.2, no. 4). Financing might be enhanced by a specialised bank that accompanies the local banks.

(2) The idea is that a non-profit public investment bank could share the loans for SMEP, e. g. by giving 50 % of the loan. The interest rate would be calculated on a market basis, but the investment bank would take junior securities, i. e. it would take a higher risk than the commercial bank giving the first half of the loan.

Project owners will not be in a position to apply directly to the investment bank, but will approach the commercial bank (usually their house bank). The house bank can apply for co-financing of the investment bank. The house bank will audit the creditworthiness of the project owner (she is very familiar with his financial situation), whereas the investment bank, specialised on SMEP, might audit the project. There is an exchange of the audit results.

CONSIDERATION

(3) The establishment of such an investment bank needs very high efforts, which are not justified for SMEP only. However, if there is an existing state owned investment bank focussing on more environmental programmes, SME and other areas of public interest in some of the countries, it could also fulfil this task.

(4) The GA has similar effects and is easier to be established, so it should have priority. In those BSR countries where public investment banks exist or will be established, a merger with the GA or a co-operation regarding the services should be considered.

3.3.5 Investment Bank financing Energy Projects

INITIAL ANALYSES AND MECHANISMS

(1) The banking sector in the BSR does not have the full competence for project and corporate financing regarding SMEP (see chapter 2.2.2, no. 4). Thus the *full* financing of SMEP might be provided by a specialised public investment bank.

CONSIDERATION

(2) See chapter 3.3.4. An additional argument against a full service bank is that it would not be complementary to the local banking market but a new competitor.

4. Steps for the Implementation

(1) The steps described in the following sections mainly name the external actors who can be involved to implement the services and structures. Before these steps can be taken, there must be a decision of the Baltic CHAIN project's Steering Committee, which of the options should be followed. If only selected options will be prioritised, a loss of synergies has to be taken into account.

(2) The implementation, though there might be some initial external support based on a continuation of the Baltic CHAIN project with the support of the new INTERREG III B programme of the EU, must be pushed ahead by the local Baltic CHAIN partners: The Estonian Energy Research Institute, the Latvian Development Agency, the Lithuanian Energy Efficiency Centre, the Polish National Energy Conservation Agency and the Russian Scientific Research Centre for Ecological Safety. Those institutions will also be the core of the local CD.

(3) Considering this, there must be a clear commitment of those institutions that they really support the ideas presented in this report. It is strongly advised that the Steering Committee should have consultations with the local partners on this question.

(4) In those consultations it has to be considered that the CD / CH services to enhance financing of SMEP require tasks and circumstances which are not yet familiar for all local partners:

- Competence in market research, financial analyses, banking business and several legal questions is required.
- The local partners, who are in some cases still part of the public administration, should provide the future services in a private enterprise (though there will probably be public ownership) acting under market conditions, selling its services and thus depending on the acceptance of their clients that they offer "value for money".

(5) In some cases the existing structures correspond more or less to the requirements, so that e. g. there is no necessity to build up new local enterprises in a private structure. However, it cannot be taken for granted that all the local partners will accept the future requirements, though they might probably be regarded as a chance. If the provision of the services is not regarded as an interesting opportunity, it has to be considered if other institutions in the country could be interested in a co-operation or if it is acceptable to start with the services in three or four countries only.

4.1 Service related Aspects

4.1.1 Preparation of Documents

(1) The preparation of documents is a service that can be established without much external negotiation. As most of the local partners do not have all the competence required, a co-ordination among the different CD, i. e. the agreement on competence centres and on a fair exchange of services, is necessary. According to the agreements, selected additional staff with new competence would be added to some of the CD.

If there is initial external financing for the CD work, the questions of fees for the transfer of services might not be so relevant at the beginning; the external financing should then be divided according to the work load.

(2) As the CD services have to be sold on the market, an adequate communication with the future customers is unavoidable. The information network established by the Baltic CHAIN project should be an essential part of the communication strategy, though additional local marketing will be necessary.

(3) If the services begin inside existing structures of the public administration, the future outsourcing must be kept in mind, e. g. by accustoming the clients to the fees they have to pay for the services. The necessary steps for outsourcing should be taken as soon as possible.

(4) If a common CD / CH enterprise of several countries will be established, the necessary steps have to be negotiated commonly.

4.1.2 Broker

(1) The statements of chapter 4.1.1 (preparation of documents) apply to the broker as well.

4.1.3 Project Preparation Fund

(1) One of the major tasks for establishing the PPF is to raise the initial fund capital. It would be most favourable for the PPF if this would be capital provided by public sources without repayment and without interest. An interest free loan with a long maturity would be the second best alternative.

The existing environmental funds in the BSR should be considered as well as international sources (see annex II).

(2) Commercial financing of the capital or a private (bank's) ownership of the PPF has been suggested by the Polish BOS bank ("environmental bank"). However, commercial financing would significantly increase the costs of the PPF services and a private (bank's) ownership could cut the synergies with the other services and question the non-profit status of the PPF.

(3) The necessary services and infrastructure could be provided along with the preparation of documents and the Broker services (see chapters 4.1.1 and 0).

(4) The Nordic Project Fund (NOPEF), who has similar structures as the PPF but is limited to project preparation of exporting Scandinavian companies, has offered to support the training of a PPF, to provide information on suitable material, regulations, procedures etc.

(5) As soon as the sources for initial financing are identified and the co-operation of the CD providing the services is agreed on, the detailed business plans of a PPF can be designed.

4.1.4 Guarantee Agency

(1) To establish the GA, several tasks have to be fulfilled, among them

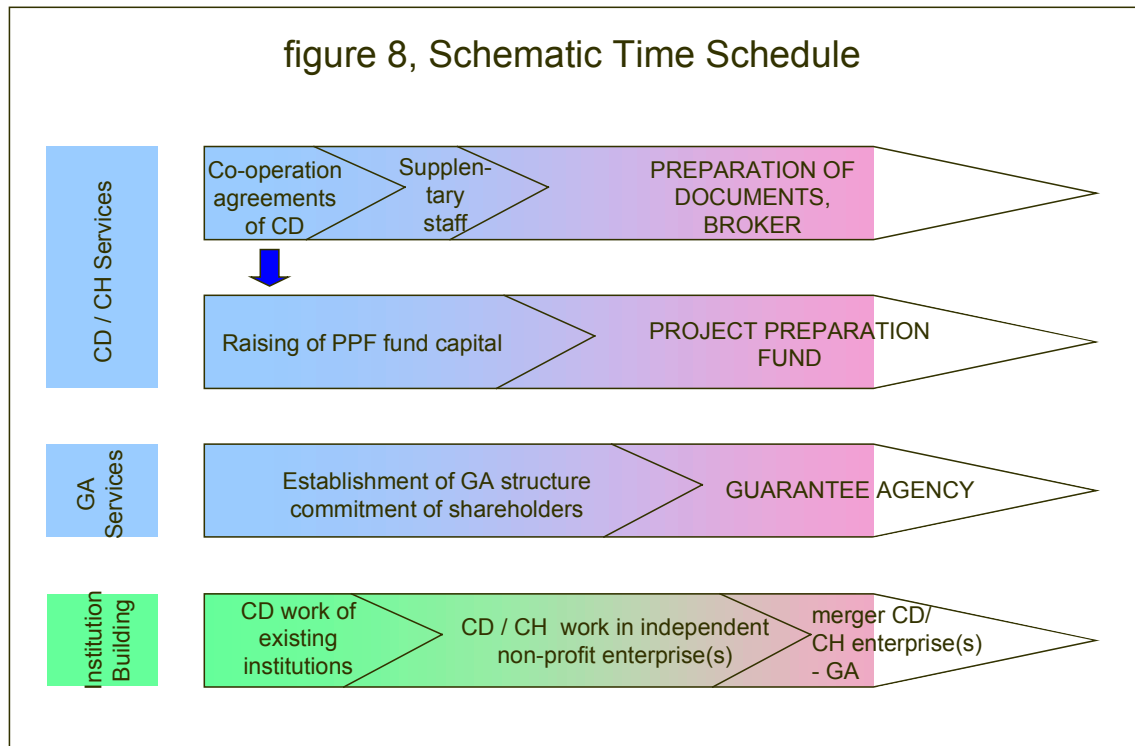
- the collection of shareholders and equity and
- the negotiation with banks or insurance companies providing the services for the GA (see fig. 5).

(2) The services regarding the SMEP expertise can be provided by the CD / CH, which will be build up according to chapter 4.1.1 to 4.1.3.

(3) For the services requiring the know how of banks and/or insurance companies, professionals with the necessary experience are needed. However, they should not be competitors for the banks, so that a general acceptance of the GA is ensured.

(4) The detailed structure of the GA, the co-operation with the CD/CH and the bank or insurance partner(s), the question if there should be several national or one multilateral GA have to be discussed with the shareholders (state, banks, IFI, associations) and the designated co-operation partners. Based on the decisions to be taken, the business plan of a GA can be drawn.

(5) Training for a GA could be imagined by existing similar institutions, e. g. the Bürgschaftsbanken of the German Länder.



4.2 Country related Aspects

4.2.1 Estonia

(1) The attitude of the Estonian state towards grants, guarantees and subsidies is very reluctant. However, there are some state programmes for different target groups, which are right now bundled in fewer institutions.

(2) The realisation of these programmes is carried out through some credit giving foundations. There is a new credit and export guarantee foundation KredEx, which is the result of joining Ettevõtluse ja Elamumajanduse Laenu Tagamise Sihtasutus (foundation for guaranteeing loans for enterprise and housing), Ettevõtluse Krediteerimise Sihtasutus (enterprise credit foundation), Ekspordi Krediteerimise ja Garanteerimise Sihtasutus (foundation for crediting and guaranteeing export) and Sihtasutus Eesti Eluase (Estonian Housing Foundation). The joining of these foundations into KredEx will completely take place at the end of February, 2001.

KredEx is going to offer guarantees for enterprise and housing loans and export transactions. In addition, for the support of technology and energy projects, the Technology Agency within Ettevõtluse Arendamise Sihtasutus (enterprise development foundation) has been established, giving both grants and loans. Additionally there is Sihtasutus Põllumajanduse ja Maaelu Krediteerimise Fond (foundation for crediting agricultural and rural area projects) and Maaelu Laenu Tagamise Sihtasutus (foundation for guaranteeing rural area loans).

(3) The formation of the new structure could also be used to promote the establishment of the CH / CD services, with KredEx or the technology agency as possible partners (e. g. as competence centres for a GA or PPF administration). An argument in favour of the proposed services for SMEP from the government's point of view could be that an institution outside the government administration will work without any subsidies after the establishing phase. Some initial support for this institution

could be regarded as a compromise between the attitude that the state, considering its very liberal economic policy, wants to refrain from any involvement in the economy and the desire to support the solution of environmental issues and a stronger independence from imported energy.

(4) Depending on the local discussion on the future structure of government programmes, which is in detail not a subject of this report, there could be further moves towards a common investment institution outside the government authorities (but state owned) dealing with all kinds of state programmes, including at least the GA and maybe even more CD services.

(5) As far as a GA is considered, it was again mentioned that the state is very reluctant to provide any guarantees. The Ministry of Finance is regarded as the part of the government having the most relevant influence.

It was indicated that the highest chance to convince the Ministry of Finance might be a common initiative of the Estonian banks.³⁷ Such an initiative should be accompanied by sound arguments pointing out

- the benefits regarding environment and independence from energy imports and
- that the GA is an instrument not contradicting, but complementing market mechanisms, which will not provide the benefits on their own.

(6) Similar developments in other BSR countries and international support on the condition of joint initiatives might also be helpful. This is specially the case if there is a relation towards EU environmental demands.

4.2.2 Latvia

(1) Similar mechanisms like a GA do exist in the Latvian export credit agency. Interlocutors from banks and government authorities mentioned vaguely that the experience with this agency was not very encouraging. It was stressed that the GA must be absolutely independent from state influence in the decision making in order to make sure that there is confidence from the banks and readiness to take shares.

(2) As a result, by some banks the formation of a new national or multilateral institution or the provision of services by an existing international neutral institution like the NIB was favoured.

(3) In the discussion of institution building, services and initial financing of institutions, the Municipal Development Fund (MDF) is an important partner. In order to spread the benefits of the (limited) recourse, the MDF might use at least parts of its money as a counter guarantee instead of giving grants.

4.2.3 Lithuania

(1) In Lithuania there exists an export credit insurance (Lietuvos Eksporto ir Importo Draudimas, LEID), also offering guarantees for small and medium sized enterprises (SME). In the past, the SME mechanism was a 100 % guarantee where the beneficiary is the SME and not the bank, which is a very unusual procedure as there is no responsibility of the banks left. This has been changed in November 2000 to an 80 % limit and towards new regulations regarding the beneficiary.

It was reported that the services were not widely used in practice and that in the past the export credit insurance produced huge losses.

³⁷ The largest Estonian bank, Hansabank, has recently proposed the establishment of certain guarantee mechanisms, so there might be another joint initiative of Baltic CHAIN and all Estonian banks.

(2) LEID is owned by the state (99.93 %), represented by the Ministry of Economics, the Confederation of Lithuanian Industrialists (0.035 %) and the Confederation's Association of Trade Intermediaries (0.035 %). LEID shares about 40 % of the Lithuanian credit insurance market, the other stake (about 60 %) belonging at present to the private Lietuvos Draudimo Kreditu Draudimas (LDKD), of which recently the state-related German export credit insurance company Hermes has indirectly bought 49 % and is expected to buy another 2 % later on.

(3) There are plans to separate the LEID export credit insurance and SME services. So it could be considered that the GA services might be provided by the future SME institution, which declared its interest. It has to be discussed with the local banks if this institution would be widely accepted. If LEID is ruled out for what reasons ever, LDKD could be regarded as a possible partner as well.

(4) In Lithuania it was stressed more than elsewhere that there must be no direct state influence on the decision of the GA.

(5) Government authorities declared that there have been a lot of state guarantees for bad loans in the past, so that the general policy is not in favour of new guarantee instruments. However, it was stressed at the same time that an instrument using money that is nowadays spent in the form of grants could be supported.

(6) If the GA falls under the jurisdiction of the Lithuanian banks' supervisory board, there might be some discussion on the amount of guarantees that can be issued in relation to the equity of the GA. Whereas in other countries guarantees of about 30 times the equity or more can be issued, the supervisory board in Lithuania had, as a result of the banks' crises in 1995, the policy to limit the guarantees to the equity, which would be very restrictive and hinder the GA effectiveness.

It has to be considered if this would be another argument in favour of a multilateral solution.

4.2.4 Poland

(1) In Poland the existing Thermomodernisation Fund is a mechanism very similar to the GA. The Fund is handled by the state owned BGK - Bank Gospodarstwa Krajowego (National Economy Bank).

Some of the major differences are as follows:

- The Fund is limited to thermomodernisation, i. e. just a very small range of SMEP, though e. g. boiler stations with a capacity of up to 11.6 MW_{th} can be covered as well.
- The Fund works on a subsidised basis, as there is no *aval* (risk premium and charge for services) that has to be paid by the customers and as the final 25 % discharge is granted under certain circumstances.
- The guarantees cover up to 50 % of the loan only.
- The state provides equity for the BGK only, but no counter-guarantees.³⁸

(2) As the procedures of the Fund and the GA are very similar (and as there is already co-operation of the BGK and the Polish National Energy Conservation Agency, the local Baltic CHAIN partner and core of the Polish CD), it would be suitable that the BGK will be the institution providing the bank and insurance related services for the GA. Also most of the commercial banks in Poland recommended that the BGK should fulfil the services, as the BGK has the necessary competence and - as a state owned bank administering public programmes - is not a competitor.

(3) If multilateral competence centres are established and if the provision of GA services is one of them, it could also be discussed if the BGK - in co-operation with the Polish CD - is ready to provide this service for the other CD as well.

³⁸ The BGK can provide guarantees of four times its equity.

(4) In Poland there is a system of several environmental funds, namely the National Fund for Environmental Protection and Water Management (NFOSiGW), the EcoFund (Ekofundusz) and Voivodship (District) Environmental Protection Funds. The guidelines of those funds do not directly cover a support for institutions like a GA or the PPF. This is not surprising as the establishment of a GA and PPF in Poland would be a more or less unique institution building and the funds' regulations concentrate on every day projects. So there should be negotiations if those funds could be shareholders of a GA or if they could provide an initial support (e. g. the capital) for a PPF.

(5) For the time being, there is no legal framework for counter-guarantees from the state, though there are already exceptions³⁹ being discussed.

4.2.5 Russia

(1) A central aim of the services proposed in this report is to ease commercial financing of SMEP. As described in chapter 2.2.1, commercial financing for SMEP is in most cases not available in Russia yet, though the situation is supposed to improve significantly in the coming years.

(2) Therefore it is suggested to establish a CD in Russia based on other tasks the Baltic CHAIN project is caring for and which are not part of this report (e. g. information dissemination) but to choose a structure which can incorporate the services recommended with regard to the financial sector later on.

(3) As several of the services might also be used for IFI financing or as a preparation for state grants, it could be considered if there is already today a sufficient market demand to provide the services of if the demand will be there sooner than commercial financing with payback periods of four to eight years.

(4) As far as multilateral competence centres are concerned, Russia should be a partner considered right now.

4.3 Concluding Remarks

(1) Whereas the work regarding the preparation of documents and the Broker can start more or less immediately and without much external support, the establishment of a PPF and a GA will need some initial funding and institution building. In some of the BSR countries even a change of legal regulations might be necessary for the GA.

In contrast, the GA will probably have the highest benefits.

(2) It was generally expressed that the least flexible shareholders and participants of a GA will be the states, especially when it comes to multilateral solutions.

(3) In this context it might be a support for the GA (and PPF) supporting SMEP if there are high level multilateral initiatives including the Nordic countries and Germany in favour of the ideas. If there is a general BSR move towards a PPF and a GA involving all countries and maybe with a partly support from the Nordic countries and Germany, it gets very unlikely that individual countries will deny their participation.

(4) Both the PPF and the GA were presented to the BASREC (Baltic Sea Region Energy Cooperation) ad hoc Group on Energy Efficiency of senior government officials on 13 November 2000 in Warsaw. Similar initiatives including meetings of the relevant ministers in the BSR (including the Nordic Council of Ministers and Germany) would be very helpful for the implementation. The Nordic and German participants of the Baltic CHAIN project are part of or do have close access to the relevant ministries and should use their influence.

³⁹ for local guarantee institutions which are independent from the central state

(5) With a positive decision of the Baltic CHAIN participants to implement the services described in this report, the real work will only just begin. Negotiations among the relevant partners, discussions on regulations, decision making and initial financing of the future services, on national and multilateral solutions and on the co-operation of the BSR countries must go into the necessary details.

However, regarding environmental protection, energy saving and the reduction of CO₂ emissions, it is worth to start the efforts.

5. Abbreviations

| | |
|-----------------|---|
| BASREC | Baltic Sea Region Energy Co-operation |
| BOT | Build - Operate - Transfer |
| BSR | Baltic Sea Region (here: Estonia, Latvia, Lithuania, Poland, Russia ⁴⁰) |
| CD | Country Desk/s |
| CH | Clearing House |
| CHAIN | Clearing House and Information Network for Energy Projects |
| CHP | Combined Heat and Power |
| CO ₂ | Carbon Dioxide |
| DEG | Deutsche Investitions- und Entwicklungsgesellschaft mbH |
| EBRD | European Bank for Reconstruction and Development |
| EIB | European Investment Bank |
| ESCO | Energy Service Company / Companies |
| EU | European Union |
| EURIBOR | Euro Interbank Offered Rate |
| FA | Fund Administration |
| FS | Feasibility Study / Studies |
| GA | Guarantee Agency |
| IFI | International Financing Institution/s (public institutions like EBRD, EIB, NIB, KfW etc.) |
| JI | Joint Implementation |
| KfW | Kreditanstalt für Wiederaufbau |
| MDF | Municipal Development Fund (Latvia) |
| NEFCO | Nordic Environment Finance Corporation |
| NIB | Nordic Investment Bank |
| NOPEF | Nordic Project Fund |
| PPF | Project Preparation Fund |
| ROI | Return on Investment |
| SME | Small and Medium Sized Enterprise/s |
| SMEP | Small and Medium Sized Energy Project/s |

⁴⁰ Kaliningrad area, St. Petersburg and Leningrad Oblast

6. Annexes

- Annex I: Financing of Municipalities in the BSR
- Annex II: EU Funds for the Initial Financing of the Priority Options