
THE PATIENT CAPITAL INITIATIVE



A PROPOSAL FOR A GLOBAL RENEWABLE ENERGY FUND OF FUNDS

SUMMARY BROCHURE

BASED ON
THE RESULTS OF A FEASIBILITY STUDY
FUNDED BY
THE EUROPEAN COMMISSION

IN THE CONTEXT OF THE
JOHANNESBURG RENEWABLE ENERGY COALITION

NOVEMBER 2004

(UPDATED FROM JUNE 2004)

Patient Capital Defined

The objective of the Patient Capital Initiative is to provide equity-linked capital to the local entrepreneur and project developer on a basis that is affordable, where there was either no such capital available before, or available only on unaffordable terms or with damaging delay.

If it were established, Patient Capital would provide a type of equity that blends public and private sector investment requirements. A patient capital fund (hereafter called the Global Renewable Energy Fund of Funds or GREFF) would provide equity funding in the expectation of a return, but on a less demanding basis than pure commercial private equity capital” as the returns are either lower or expected over a more deferred time frame than commercial investors would require or accept.

Investment Highlights

Following the outcome of the Patient Capital Initiative's feasibility study, it is proposed to create a Global Renewable Energy Fund of Funds ("GREFF"). The GREFF would address the equity funding gap for renewable energy businesses and projects that has been identified, in particular in developing markets and economies in transition. The GREFF would differ from usual grant funding in that it would:

- Mobilise both public and private sector funding in a unique equity investment vehicle,
- Comprise market (rather than technology driven) investment standards,
- Have a strong prospect for a return of funds, enabling recycling or reinvestment,
- Support multiple sustainable development policy objectives, and
- Significantly leverage public funds with private co-investment.

The GREFF "Fund of Funds" structure is fundamentally a "strategic capital formation exercise" at the top, with investment executed on the ground by local expert investment managers. The Fund of Funds:

- Collects and directs funds from disparate donors and institutions,
- Reduces multiple transaction costs and administrative friction,
- Co-invests in subfunds and on the ground, multiplying GREFF funds by a factor of 4x,
- Avoids undue reliance on government actions or counter-guarantees, and
- Enables competitive selection of regional and local specialists based on their local geographical expertise, track record, co-investment resources, value for money, and support of policy goals.

GREFF's funding of local businesses and projects would ensure the effective follow-up of past and future investment in the policy arena and in specific technical assistance and project development work, bridge the "time chasm" between investment preparation and funding, thereby enhancing market developments and the effective delivery of sustainable energy services.

The provisional timetable for GREFF is to have a first closing of €75 million targeted as soon as 2006:

- Expressions of interest from "Early Bird" investors in 2005,
- Selection of a fund manager for the Fund of Funds in 2005,
- Commitment of €75 million for investments, including €10 million for technical assistance and operational costs in 2005-06,
- Competitive tendering for regional/local fund managers with co-investment consortia in 2005-2007,
- First funds on the ground from of 2006 onwards

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Patient Capital Initiative

Summary for Supporters and Potential Core Investors

Background and Purpose

The Plan of Implementation adopted by the Heads of State during the 2002 World Summit on Sustainable Development (WSSD) states that there is a need to "...with a sense of urgency, substantially increase the global share of renewable energy sources with the objective of increasing its contribution to total energy supply". Therefore, the EU together with a number of like-minded countries, launched the "declaration on the way forward on Renewable Energies". The group of countries, since known as the Johannesburg Renewable Energy Coalition ("JREC"), has grown to include 88 members as of June 2004.¹

The European Commission hosted the First High-Level JREC Meeting in Brussels on June 4th 2003. The JREC Members committed inter alia to identify and bridge financing gaps to promote renewable energy services in developing countries and economies in transition.² One of the major obstacles that were identified was the lack of equity finance and delivery mechanisms for equity finance. Key obstacles to equity finance in general and in particular for renewable energy investments include:

- Limited domestic equity capital formation in developing countries and economies in transition;
- High-costs of international equity capital;
- Substantial decrease of energy-related FDI and donor financing over the last years; and
- High transaction costs of renewable energy project and corporate financing (above acceptable levels) due to the smaller scale of renewable investments;
- Limited renewable energy expertise among mainstream international and local financial institutions and investors.

These obstacles aside, investments targeted to support sustainable development do not meet the internal rate of return ("IRR") hurdles often required by commercial equity fund investors.

To address and overcome these difficulties, and to contribute to increasing the share of renewable energy, in particular in developing countries and economies in transition, the European Commission launched the Patient Capital Initiative ("PCI"). The key distinguishing objective of the PCI is to create public-private risk-sharing vehicles on the ground, offering funding at a return requirement matching returns of businesses funded.

Core Co-Sponsors are expected to be Governments, International Financial Institutions, foundations and corporations who seek to support the following policy objectives:

- Bringing sustainable development benefits in particular to developing countries and economies in transition, including reducing energy and/or fuel poverty, including in areas without grid connection;
- Bridging the finance gap and leveraging funds by catalysing private sector co-investment;
- Engaging regional and local specialists in the investment decisions;
- Imposing increased commercial discipline on investments;
- Realise the potential of many technical assistance programmes in renewable energy through the resolution of the finance obstacle;

¹ For additional information on the JREC, visit <http://forum.europa.eu.int/Public/irc/env/ctf/home>.

² Other initiatives engaged in similar exercises such as the EU Energy Initiative (www.euei.org), the Renewable Energy and Energy Efficiency Partnership (www.reecp.org), the Mediterranean Renewable Energy Partnership (www.mederp.org), the Global Village Energy Partnership (www.gvep.org), etc. This study has benefited from information exchanges and peer reviews within this group to ensure consistency and to synergies.

- Creating a self-sustaining public-private vehicle, providing investment and technical assistance in a “one stop shop”, and
- Obtaining a return on investment for reinvestment by 2014.

The PCI is a public sector investment initiative designed to create a sustainable public-private equity-financing scheme, hereafter also called the Global Renewable Energy Fund of Funds or GREFF. At this stage, the GREFF seeks “Core Sponsors” to make (i) an expression of interest and support followed by (ii) a firm investment commitment.³

Renewable Energy in Developing Countries and Economies in Transition

The development agenda merits of renewable energy in developing countries (the “Sector”) have been well established in several forums referenced in the feasibility report. The agenda serves developing countries and economies in transition across a broad spectrum, as most of these countries are blessed with a large renewable energy resource base. The key development benefits of renewable energy include:

- Positive effects of local energy production on local business growth and employment;
- Delivery of energy and electric power to rural areas where grid connection is uneconomic;
- Creation of non-electric energy supplies for local business and transport;
- Substitution of indigenous renewable sources for expensive imported fossil fuels improves a country’s balance of payments, supporting economic stability; and
- Substitution of renewable energy for fossil fuels creates local, national and global environment benefits.

As conceived, the GREFF is skewed towards addressing the broad range of development objectives, as opposed to climate or energy objectives alone, as evidenced by its global focus, rather than singling out large energy intensive or coal consuming countries.

Growth Requires Substantial Investment Capital

The equity requirements for renewable energy in developing countries and economies in transition merit a public sector initiative. To set an order of magnitude, we estimate from the World Energy Investment Outlook 2003 (IEA) that \$137 billion is required for renewable generation investment in developing and emerging markets for the period 2006-2010.

The associated private equity requirement is estimated at over € billion, as described in detail on the following table.⁴

³ The PCI / GREFF proposal already received strong support from JREC members at the World Conference for Renewable Energy, held in Bonn (June 2004). Expressions of interest were already made by the governments of Belgium (Walloon Region), Italy, the European Investment Bank, and some private foundations and companies.

⁴ As noted in the feasibility report, deriving private equity requirements from total funding requirements entails eliminating public sector projects as well as the debt and grant and utility element of private sector projects. As the period 2001-2005 showed a material lag in investment in the energy sector, the feasibility analysis assumed some investment would shift to the second half of the decade.

Summary of Regional Demand for Equity Capital for Renewable Energy Investment

| Region | Investment needs in Billions of US\$ | 2001-2010 | 2006-2010 Estimated at 60% of 01-10 | Equity Needs in 2006-2010 \$ Billion |
|----------------------------|--------------------------------------|-----------|---|--|
| Latin America | Generating capacity | 86 | 52 | 8 |
| | <i>of which renewables</i> | 63 | 38 | 4.0 |
| Middle East | Generating capacity | 24 | 14 | 3 |
| | <i>of which renewables</i> | 9 | 5 | 0.8 |
| Africa | Generating capacity | 40 | 24 | 4 |
| | <i>of which renewables</i> | 12 | 7 | 0.5 |
| Asia | Generating capacity | 351 | 211 | 30 |
| | <i>of which renewables</i> | 122 | 73 | 3.5 |
| Economies in Transition | Generating capacity | 35 | 22 | 3 |
| | <i>of which renewables</i> | 21 | 13 | 0.9 |
| TOTAL | Generating capacity | 536 | 321 | 48 |
| | <i>of which renewables</i> | 227 | 137 | 9.7 |

Renewables are part of a core energy and development investment agenda, not merely a stand-alone environmental objective. Whilst investment demand is global, roughly 70% of South American electric generation investment and 40% of Asian investment is projected to lie in the renewables sector.⁵

A limited “deal by deal” analysis illustrates a potentially substantial deal flow in the Brazil, the Caribbean, Turkey, Philippines, and Thailand as well as in selected countries in Africa with strong local resource bases.

Both projections and experience show that small hydro and biomass projects and companies comprise a large part of investment prospects, with wind also offering significant potential, while photovoltaics possibly remain too costly for all but middle-income contexts.

Much of the investment opportunity exists in countries facing economic growth and related increased energy demand of their economies.

The Rationale for “Patient Capital”

Sector projects and businesses have extreme difficulty raising commercial equity finance, with debt finance in turn often unwilling to fund until sufficient equity is in place. Given the shortage of private capital in developing markets, the challenge is to crack finance gridlock.

Debt and grant funding are the dominant focus of public funding provided in emerging markets. While equity is offered by relatively few institutions, even then the amounts offered are for major investments and are not suitable for small businesses or projects of less than €-10 million total capital.

As important as the shortage of capital is the low return profile of investments the sector itself. One of the observed problems of investment in the sector is a realised return of roughly 5-15% IRR on the equity portfolio, which is not sufficient to compensate for the risks (many of which are unrelated to the renewable energy sector) perceived by mainstream private equity investors.

These portfolio returns have not necessarily been caused by a high portfolio default rate, but rather reflect the relatively low level of returns on individual investments. This “tight distribution of returns around a low mean” suggests a systemic problem with returns rather than poor deal selection. This, systemic return profile justifies the need for patient capital to help match capital costs with returns.

⁵ Source, IEA 2003 (WEIO)

Patient Capital – equity funding with return requirements that are delayed in time or lower in profitability than normal commercial thresholds – is an innovative financial product for developing markets aimed at realising externality benefits and thereby significantly accelerating growth of viable enterprises in the sector. A base assumption is therefore that financial return is not the key motivating factor driving donor interest.

The GREFF Investment Scope

Where: The geographic scope of the GREFF is seen to grow in stages to eventually have quasi-global scope. Several regions are in review, including North and Sub-Saharan Africa, Latin America, economies in transition within and near an expanded European Union and Asia. There is also a special interest in Small Island States.

What is to be Funded: The GREFF will focus on the energy services needed rather than targeting a specific renewable energy technology. To avoid inefficient allocation of resources, the investment scope includes a broad mix of renewables enterprises, service businesses and project investment opportunities (e.g.: wind, geothermal, solar, biomass and small hydro projects, consumer and SME finance vehicles, and manufacturing and assembly businesses).

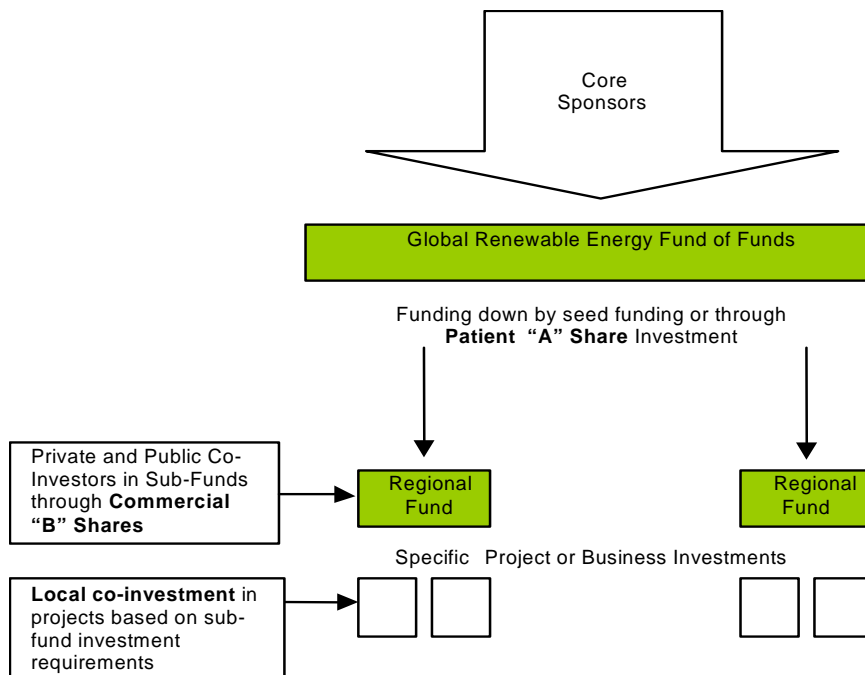
What Deal Sizes are Targeted: A key value-added objective of the GREFF is to target deals of a size currently below the radar screen of usual commercial investors and IFIs. There is a focus on SMEs and medium to small sized project investments. Each investment made by the proposed GREFF is expected to be under €5 million, making it relevant to both development and energy/environmental agendas. These investments would include equity investments in microfinance, consumer loan finance companies and other SME-oriented vehicles requesting an equity cushion.

What are the expected Time Frames: The GREFF (including both a Master Fund and the subfunds) is expected to be launched and funded in the 2005-2006 period, permitting investments on the ground by the end of 2006, and making funds available for the 2006-2010 time frame.

How Much Funding Is Anticipated: The GREFF is expected to have a first financial close on the order of €75 million. Of the €75 million €10 million is viewed to fund the structure’s start-up and operations costs and for providing technical assistance related to investment assessments on the ground.

The GREFF Structure

A fund of funds structure is considered essential to channel funding effectively, to maximize leverage, and to mitigate risks. The proposed structure is shown in the following diagram:



The Fund of Funds structure would therefore have three tiers of operation:

- i. Top Tier – a Fund of Funds: Like-minded public and private investors (e.g. those affiliated with the JREC process) who seek to play a global role will pool their “patient capital” in a new Fund of Funds with a “light” operational structure and managed by a professional fund management team.
- ii. Middle Tier of Sub-Funds: The Fund of Funds will invest in existing or new sub-funds focussed on renewable energy, specialised by region and managed by professional fund management teams. These sub-funds would attract substantial co-investment from largely commercial investors – both public and private.
- iii. Bottom Tier of Investments: Each specialist sub-fund will then invest equity (and quasi-equity) finance with appropriate investment return objectives for individual companies and projects, again with complementary funding from locally available equity and banking sources. Sub-funds invest in companies and projects consistent with their investment mandate. .

The base case target is to achieve at least 50% co-investment gearing at each level, multiplying the initial €65 million into GREFF funding of enterprises and projects with a value of at least €250 million.

Innovative Financial Structure – Subordination of GREFF Returns

GREFF’s key innovation on the typical fund of funds structure is the differentiation of share classes according to the relatively “patient” or “commercial” objectives of investors participating in the middle (“sub-fund”) tier of funds. ⁶ The GREFF proposition is that different classes of shares in the sub-funds be established in a manner that permits different application of dividends, subordination of returns and governance rights, along the following lines:

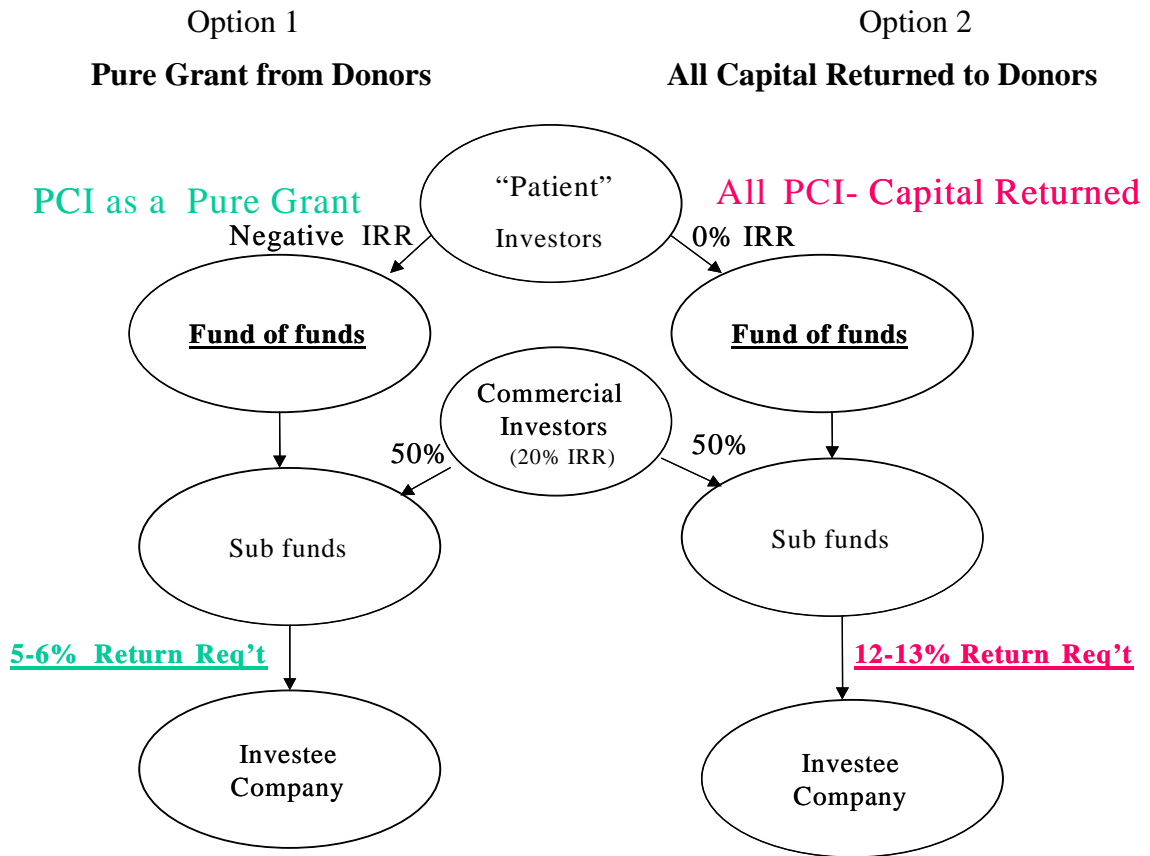
- Capital be divided between “A” and “B” shareholder, with “A” shares being the more “patient” and “B” shares the more “commercial”, whether at the top or middle level of the fund of funds structure,
- “A” shareholders would invest on a “first in – last out” basis so that they are subordinated in their receipt of dividends to B shareholders, subject to certain thresholds or other agreed parameters, and
- “A” shareholders would have certain governance rights, board appointments and veto rights separate from B shareholders.

In this manner, the A shareholders could manage issues of dividend recycling, governance, the definition of the terms of their “patience” with respect to IRRs or return sharing with B shareholders, and the usual voting and ownership issues entailed.

Defining the “IRR Buy-down” and Co-Investment Leverage Benefits

As the GREFF will invest in subfunds of varied investment agendas, risks and financial potential, commercial results and “IRR buydown effects” will vary accordingly.

⁶ This share class differentiation is common in corporate finance when one group of equity investors seeks to have priority rights – or be “subordinated” – with respect to the returns (but not necessarily the control rights) relative to another group of equity investors, but is innovative in the fund of funds structure.

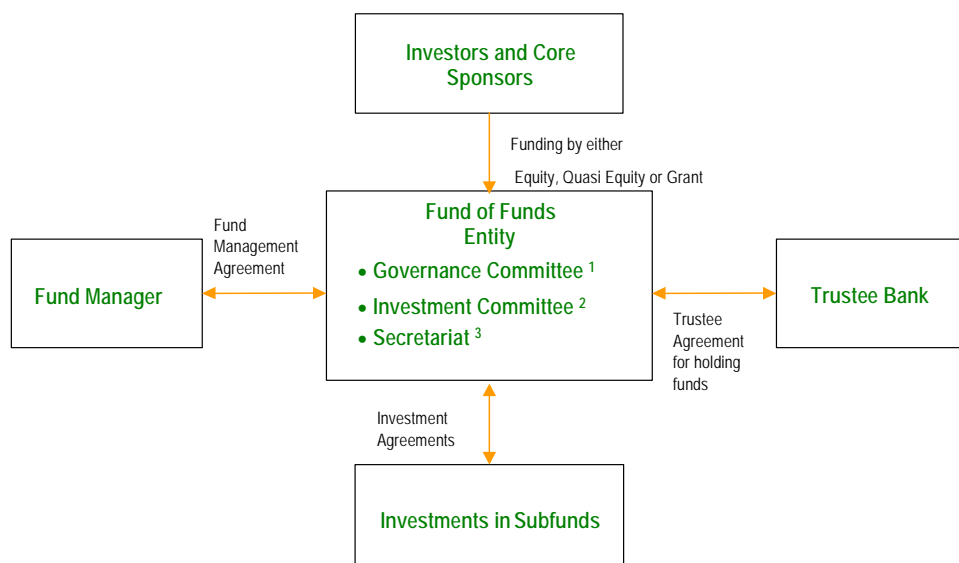


As a base case, the GREFF would make 50% of the funding commitments to each subfund. Given that different subfund investment agendas may offer different co-investment from the private sector and different base case returns, GREFF’s innovative “A-B” share structure permits different funding structures, subordination provisions, and investment return allocations to apply to different subfunds.

It is proposed that GREFF will be set-up as a stand-alone limited company entity with a particular “public purpose” clause in its charter. The entity’s articles of agreement and operating rules will be decided by consensus of the founder core sponsors.

The GREFF Management and Governance Structure

The operating structure of the Fund of Funds structure is designed to support good governance as well as efficient operation. The envisaged overall governance structure is shown in the figure and further summarized below.



1. Policy remit: Sets policy criteria and oversees fund activities (may include an audit subcommittee)
2. Investment Remit: Approves investments based on policy and economic criteria
3. Communicates official Fund instructions and reports to outside parties and investors

Core sponsors will help to set the policy objective of GREFF, and may play a role on advisory or supervisory committees. The GREFF will be managed by a professional Fund Manager who will be selected by the core-sponsors on a competitive basis. The contracted fund managers would be accountable (i) to the Governance Committee or a smaller supervisory board on which core sponsors will be represented, (ii) under normal fund management contract terms, including reporting requirements and investment restrictions, treasury controls, and conflict of interest constraints.

Investments proposed by the Fund Manager, will be approved by an Investment Committee that will largely professional rather than political. A Governance Committee would provide investor representation, approving key policy matters and overseeing audits, policy compliance and transparency. A Trustee Bank would hold funds in trust so that funds cannot be used without proper procedures.

The fund management team will guide GREFF to set up a series of sub-funds (or invest in existing targeted funds) specialising in particular regions or technologies based on guidance from the Core Investors of the Fund of Funds. The regional sub-funds will, wherever possible, be managed by local partners or by a consortium of local parties and sector specialists to obtain appropriate specialisation and localisation of skills. Many of the individual sub-funds may start small in scale, and the cost of managing them could be unaffordable without some technical assistance.

The only contractual relationship for investors would be with the fund entity, which in turn would have a contractual relation with the fund manager and trustee bank, permitting simplicity of arrangements for government bodies providing grants or other funding to the Fund of Funds. Indicative draft term sheets for GREFF and the sub-funds are found in final report of the Feasibility Study.

The entity would also operate with robust systems of audit and control, and there will be complete transparency – full information about all transactions made freely available. Where

there is any need for interim commercial confidentiality, full details will still be provided to a Governance Committee.⁷

Business Case Analysis

Portfolio theory, rather than analysis of investments that may (or may not) exist by the time the GREFF is in place, is the effective tool for evaluating returns on a fund of funds. A base case and sensitivity analysis financial model has been developed and assessed.

First Closing of Fund of Funds – Base Case Assumption

| all funds in millions of €s | | | |
|------------------------------|-------------|---------------------------------------|-------------|
| Uses of funds | | Sources of funds | |
| Subfunds (Group A) | 35.0 | Patient Capital From Investors | 65.0 |
| Subfunds (Group B)) | 30.0 | Technical Supports and Reserves | 10.0 |
| Operating/Technical expenses | 10.0 | | |
| Total Uses of Funds | 75.0 | Total Funding at First Closing | 75.0 |

The global funding requirements for the Fund of Funds include, in the first stage, a €10 million technical assistance component, with this technical assistance being allocated to costs of operations and start-up as well as special investment development on the ground. For instance, some of the start-up costs would include the Fund of Funds manager's efforts to obtain a first closing target of €65 million of investment funds for the programme, as well as pre-solicitation subfund development work in areas where the development of competitive sub-fund consortia must be assisted.

While the base case described above is reassuring, there can be no guarantee of its three key assumptions:

- The size of the top tier Fund of Funds, as well as the size of investment in subfunds,
- The number of subfunds created in the first round, and
- The investment return on those subfunds.

We present four illustrative scenarios, with Case 1 being our €65 million investment “Base Case,” Case 2 being a larger fund with three, rather than two, subfund investments, and Cases 3 and 4 being downside cases with €60 and €40 million of investment capital available.

Sensitivity Analysis 1 - Altering Subfund Size, Number and Performance

| Varied Sizes for Top Tier Funding | Subfund Case Size and Strength | SubFund FoF € IRR | Default in SF | Rate | Avg. deal Size (€m) | PCI Recovery | Net PCI Recovery | "B" Share IRR |
|-----------------------------------|--------------------------------|-------------------|---------------|------|---------------------|--------------|------------------|---------------|
| 1 } €65 million | Top Tier Summary: | | | | | | | |
| | A - €70m – strong case | 15% | €35m | 1 | €4.9m | 91% | } 81% | 18% |
| B - €60m – weak case | 8% | 30 | 1 | 4.1 | 72% | 10% | | |
| 2 } €70 million | Top Tier Summary: | | | | | | | |
| | C - €60m Strong | 14% | 30 | 1 | 4.0 | 78% | } 65% | 18% |
| | D - €40m Medium | 8% | 20 | 1 | 2.7 | 66% | | 11% |
| E - €40m Weak | 5% | 20 | 1 | 2.6 | 51% | 10% | | |
| 3 } €60 million | Top Tier Summary: | | | | | | | |
| | F - €40m Medium | 8% | 20 | 1 | 2.7 | 66% | } 50% | 11% |
| | G - €40m Weak | 5% | 20 | 1 | 2.6 | 51% | | 10% |
| H - €40m Weaker | 1% | 20 | 2 | 2.6 | 33% | 6% | | |
| 4 } €40 million | Top Tier Summary: | | | | | | | |
| | D - €40m Medium | 8% | 20 | 1 | 2.7 | 66% | } 50% | 11% |
| H - €40m Weaker | 1% | 20 | 2 | 2.6 | 33% | 6% | | |

⁷ Systems of oversight and audit that are robust yet cost-effective will need to be agreed with investors and enforced by the Governance Committee.

Usually, net returns to commercial investors after investment costs and management fees are below gross portfolio returns. But in the GREFF case, these net returns are balanced back up to reach commercial thresholds by the role of patient capital. The beneficiary of this ultimately includes the investee project or SME company, who would consequently have access to capital that was previously either unavailable or unaffordable.

The scenarios show that even at a smaller (€40 million) level of funding and a weaker investment return profile, the structure is self-sufficient at the top tier, although the top tier recovers only roughly 50% of funds. Commercial investors at the sub-fund level may wish to avoid running the related risks of small investment fund size and low returns provided in Case 4 (the combination of subfunds D and H).

Taking the sensitivity analysis to a third step, we evaluated what the impacts for each of the subfunds that are considered above in the event we did not stick to a 50/50 funding from patient and commercial capital, but instead solved the analysis for each given portfolio set so as to obtain a 15% IRR for the commercial investors.

Sensitivity Analysis 2 - Control Fund Inputs to obtain 15% IRR to B shares

| Scenario Analysed | Total Fund Size (€m) | Portfolio return | Patient Capital in Subfund (€m) | PCI Recovery | Returns to B shares | Capital Ratio | |
|-------------------|----------------------|------------------|---------------------------------|--------------|---------------------|---------------|------------|
| | | | | | | Patient | Commercial |
| 1A - Strong Fund | 70.0 | 15% | 30.1 | 106% | 15% | 43% | 57% |
| 1B - Weak Fund | 60.0 | 8% | 34.2 | 87% | 15% | 57% | 43% |
| 2C - Strong Fund | 60.0 | 14% | 25.9 | 90% | 15% | 43% | 57% |
| 2D - Medium Fund | 40.0 | 8% | 23.2 | 66% | 15% | 58% | 42% |
| 2E - Weak Fund | 40.0 | 5% | 24.8 | 62% | 15% | 62% | 38% |
| 3F - Medium Fund | 40.0 | 8% | 23.2 | 66% | 15% | 58% | 42% |
| 3G - Weak Fund | 40.0 | 5% | 24.8 | 62% | 15% | 62% | 38% |
| 3H - Weaker Fund | 40.0 | 1% | 27.6 | 50% | 15% | 69% | 31% |

Clearly, the ratio of patient to commercial capital usually falls in the range of 43% to 62% patient capital required, save for the most weak fund scenarios. From this we may infer that, even with a €40 million subfund with a 5% portfolio return, a 62% patient capital investment in the fund would induce commercial investors to participate, aiming for a 15% IRR, with the patient capital investors receiving roughly 62% of its funds back for recycling.

Improving the subfund return portfolio assumptions or reducing the commercial funding subordination advantage would, of course, improve GREFF's recovery of funds. It is therefore the choice of sub-fund investment objectives and the associated amount and terms of commercial leverage - obtained through the subfund solicitation process - which will drive actual GREFF's business case and return profile.

The outcomes of this sensitivity analysis are encouraging for the "feasibility" of the fund structure, at least in as far as meeting the tests of a "self-sufficient patient capital fund structure that provides commercial returns to commercial investors" is concerned.

Feasibility Conclusions in Support of the PCI

We confirm several key positive and necessary elements in support of the overall feasibility of GREFF as a means of catalysing private sector co-investment and obtaining commercial discipline and financial returns on the ground. These conclusions are stated in the following order (check against list from exec summary):

- Investment in renewable energy businesses and services in developing countries and economies in transition requires a mix of investment instruments (including self-liquidating quasi-equity) and patient capital;
- Demand for equity funding in developing markets and economies in transition for such businesses and projects is very large - estimated at the level of €9 billion;
- A Fund of Funds structure, hereafter called the Global Renewable Energy Funds of Funds (GREFF) and described, below would channel multiple sources of public funding for a more efficient delivery of both technical assistance and investment and for more effectively reaching investment and policy objectives;
- Donor grant funding has the opportunity to mobilise capital at a 4:1 ratio while creating sustainable business capacities on the ground, going beyond paying for demonstration or development projects on a pure grant basis;
- The envisioned €75 million scale of GREFF is ambitious yet required to implement a self-sufficient investment support vehicle. With estimated demand over 100 times the scale of the initiative, the execution of investments by GREFF appears feasible;
- Business case analysis shows the Fund of Funds structure could be self-sufficient provided there was external support to the launch the structure, (i) realising returns for reinvestment as early as 2014, (ii) paying costs of investment and fund management from reserves and internal cash flows, and (iii) delivering commercial investors market-based returns on investment;
- There exist, at the local level, investment skills and specialists able to execute the investment strategy, in the role of identifying, advancing and executing deals on a commercial basis and delivering funding to the deal flow;⁸ and
- While donor funding in support the GREFF is the key feasibility challenge, whether numerous or substantive commitments have been made as of late 2004 or not, does not prejudge the feasibility of the GREFF fund structure.⁹

Merits of the Fund of Funds Structure for Public Sector Investors

The Fund of Funds structure has particular merits as a capital formation and delivery tool for prospective investors and organisations seeking to target development and energy related investment on the ground.

- For small and/or global investors, the fund of funds is an efficient “pooling mechanism” that directs capital with shared investment and administrative costs that otherwise erode funds targeted to be delivered to the objective;
- For all investors, the fund of funds would pool technical assistance, a carbon purchase facility and investment funds into a “one stop shop” for direction to active investment sub-funds on the ground;
- Like-minded governments and private sector parties can create a “public-private partnership”, providing for both government policy-led funding and private co-investment and market-based investment skills and standards:
 - Policy-driven institutions can set investment policy at the fund of funds level, and participate in governance without creative of inefficient bureaucracy,
 - Investment implementation is delegated to (both new and existing) expert investment managers, selected on a competitive basis, who bring co-investment local and sector knowledge, and investment execution skills.

⁸ We see “pipeline development” as less critical to this process than “subfund development” for which we reference the idea of “pre-solicitation catalyst events.”

⁹ Fund-raising often takes a full year from the presentation of the initial proposition to mobilise core investors, particularly before the documented fund structure and management organisation is created. As a caveat, a second process of arranging sub-fund financing will also be required, entailing a second and more complex mix of commercial parties and negotiations, and the second “execution risk” element to the venture.

- Unlike traditional grant funding, part of the funding is anticipated to come back to the Fund of Funds, permitting recycling of public monies for technical assistance or reinvestment;
- Large amounts of funds can be directed at a very large number of small investments, investing €500,000 to €5 million per deal which most investors (particularly distant ones) would find too cumbersome to execute; and
- All management and execution costs would be paid from the initial capitalisation and technical assistance funding at the top tier and the sub-funds levels, avoiding future budget commitments and making the system “self-sustaining.”

Policy Analysis Considerations

While prospective key investors have previewed the GREFF, it will be essential that Donor investors grasp the innovative benefits of the GREFF in the form of (i) catalysing commercial co-investment that otherwise would go lacking, (ii) obtaining commercial discipline “on the ground,” (iii) creating a pool of capital that can be recycled in the years ahead, (iv) reducing the search and execution costs of multiple donors acting alone and, (v) ultimately, delivering material developmental and environmental benefits.

We assert that a rational donor policy analysis would then pit these considerations against the effectiveness of existing bi-lateral development and environmental grant funding used now apply to obtain targeted outcomes. Based on this analysis, we would expect that public sector donors would find the GREFF to offer (i) excellent “value for money” compared to traditional grant or technical assistance funding, (ii) an attractive option for supporting innovation and for broadening the range of policy support instruments, and (iii) enhanced opportunities for co-operation among previously separated sources of both public and private sector funding.

Merits to the Investors & Business Developers on the Ground

The inclusion of “patient capital” effectively improves the commercial investors’ risk-return prospects. Moreover, the fund of funds structure leads to bundling of investments, and therefore to reduced transaction costs and enhanced risk management, particularly for investors used to making large commitments of over €10 million per transaction.

“Patient capital” absorbs the risk of delayed or reduced returns which threaten to drag down an investment IRR through the mechanism (described later as the “subordination clause”) for reallocating risks and returns are described in Sections 4 and 8.

Commercial investors who are able to co-invest in tandem with the PCI’s “patient capital” would benefit by a reduction of the risk of realising a low 0-10% IRR return from their investments.

As a result, one would expect that a broader range of commercial investors would be willing to invest, the pool of capital for renewables would increase, and donors would obtain a “multiplier effect” for their own capital commitments.

What Is Targeted Going Forward?

The “PCI” –managed through the European Commission, has several efforts in train following the finalization of the Feasibility Study.

Next steps would be the selection of the fund manager, fund-raising and formal documentation and closure of GREFF. Within this general outline, the European Commission is likely to create an advisory board of prospective funders with whom to advance the process informally and to give support to policy as well as implementation decisions on fund manager selection and other launch events.

It is expected that the European Commission will hold events for major stakeholders in 2005 that will focus the attention of prospective investors on the timetable for the Fund of Funds.

Financial closure itself would be a major event and accomplishment, to be accompanied by formal commitment of funds, creation of the Fund of Funds legal entity itself, and an assignment of the fund management contract from the European Commission Sponsor to the Fund of Funds legal entity. Upon the first closure of GREFF, planned for 2005-2006, GREFF would make its first investments in eligible sub-funds.

A detailed launch plan follows below.

PCI MASTER FUND and SUBFUNDS - DRAFT LAUNCH PLAN

| | 2004 | | | | 2005 | | | | 2006 | | | | 2007 | | |
|---|------|----|----|----|------|----|----|----|------|----|-------|----|------|-------|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | |
| PHASE ONE : Feasibility | | | | | | | | | | | | | | | |
| Feasibility Study | | | | x | | | | | | | | | | | |
| Stakeholder Meetings and Side Events | | x | | | | | | | | | | | | | |
| Expression of Interest for Co-investment ("early birds") | | x | | | | | | | | | | | | | |
| Evaluation and Preparation for Phase 2 | | | | | | | | | | | | | | | |
| PHASE TWO: Management | | | | | | | | | | | | | | | |
| Selection of Advisory Board | | | | | x | | | | | | | | | | |
| Request for Proposals and Selection of F.O.F Manager | | | | | | x | | | | | | | | | |
| Official Launch Event | | | | | | | x | | | | | | | | |
| Stakeholder and Fundraising Meetings | | | | | | | | x | | | | | | | |
| Support of Subfund Pipeline - Fund Manager Holds Catalyst "Pre-Solicitation Events" | | | | | | | | | | | | | | | |
| Finalisation of F.O.F Structure among Core Investors | | | | | | | | | | x | ----- | x | | | |
| PHASE THREE: Funding | | | | | | | | | | | | | | | |
| Negotiation/Agreement of F.O.F Heads of Terms | | | | | | | | x | | | | | | | |
| Signing of MOUs for Funding | | | | | | | | | | | | | | | |
| Signing of Funding Commitments for F.O.F. | | | | | | | | | | | | | | | |
| Creation of Required Vehicles; Finalisation of FOF Documentation | | | | | | | | | | | | | | | |
| First Closing of F.O.F. (range of dates envisioned) | | | | | | | | | | | | | x | ----- | x |
| PHASE FOUR: Investing | | | | | | | | | | | | | | | |
| Issuance of Subfund Solicitation Document by Master Fund Manager | | | | | | | | | | | | x | | | |
| Designate Selected Subfunds for F.O.F Support | | | | | | | | | | | | | x | | |
| "Soft Circle" Subfund Co-investment Commitments | | | | | | | | | | | | | | | |
| First Subfund Investments | | | | | | | | | | | | | | | |
| Additional F.O.F. Fundraising | | | | | | | | | | | | | | | |
| Second and Final F.O.F. Closing | | | | | | | | | | | | | | | |

Annex: Frequently Asked Questions

What is the Link between the GREFF and other Initiatives?

The GREFF will support various WSSD initiatives in providing equity funding hence complimenting capacity building, feasibility planning, policy development and technical assistance. The GREFF will reduce the time lag between investment preparation and investment funding through which much of these technical assistance risks being lost. Examples of WSSD related initiatives that might benefit and/or contribute from/to the GREFF include the EU Energy Initiative (EU EI), the REEEP, MEDREP, GVEP, etc. (See also footnote on page 3).

Why another donor-led energy fund?

The GREFF is an innovative public private partnership (“PPP”) designed to cover a generally recognised, but as yet unaddressed, gap in the delivery of equity financing of renewable energy in the developing world and complement (and strengthen the impact of) existing initiatives and programmes.

The PCI’s proposed “unique selling proposition” would be to (i) buy down to cost of equity capital IRR, as opposed to buying down specific risks, (ii) provide equity, not debt, and (iii) focus on businesses and projects one step up from UNEP-AREED, E+Co and similar models, that need patient capital in order to bring them to the fully commercial stage.

A fund-based vehicle facilitates agreement between various public and private investors/sponsors which often have different terms and conditions and therefore offers the potential to reduce transaction cost and increase risk management options.

Will the feasibility study take into account lessons learned from other funds?

Yes; In fact there were two key exercises. First, we took on board lessons from past and existing funds in i) assessing the feasibility of a PCI; and ii) structuring the PCI, and making sure that potential problems were adequately addressed. Second, we assessed and categorised the specialist funds in order to understand who may be looking for funding.

What will be the Legal Structure of GREFF?

It is expected that a corporate structure will be created to distance sponsors/investors from any liability. A special purpose private corporate vehicle with a public purpose would be a suitable corporate structure for GREFF (such as possibly a UK Limited Company with a public purpose). GREFF may have its funds held in trust and would draw on these funds based on pre-agreed procedures undertaken by the fund manager.

How does a Government “Buy” Shares?

As some governments may not wish to “purchase” shares, the contractual nature of a Government or Foundation’s involvement in GREFF or in particular subfunds could be modified for some such that their interest be (be they Shares, certificates or otherwise) are awarded as the instrument granting control and information rights as part of documentation of a grant by which governments contribute to the Fund of Funds or various sub-funds. These rights would include control and oversight elements and may include economic rights as well, and not be obstructed by provisions for investors who bought shares.

What is the Possibility of Obtaining Moneys for Recycling Investment?

Due to the combined burden of a low financial return investment case and the costs of start-up and fund management, the business prospect for the Fund of Funds requires a strong donor commitment, both in technical assistance and grant funding.

Moreover, at the top tier of the Fund of Funds structure, GREFF is the furthest away from cash flows from investments, and will be the most challenged in offering commercial returns to its own investors. Real commercial returns are less risky to obtain at the sub-fund level.

Therefore, GREFF will not seek the 20-30% IRR target common with private equity. Instead, the return objectives will be set at a level low enough to “buy-down” the investment hurdles of the sub-funds noted above, yet high enough to interest investors other than grant-providing government interests in the commercial side of the investment vehicle.

The base case financial analysis provides that, with “Patient Capital” making up the top tier of the fund structure, the top tier is expected to receive returns sufficient to recycle roughly half of its initial investment into future technical assistance support or additional investment over 8-12 years time.

Base Case Full Life Cycle Sources and Uses of Funds¹⁰
All Funds in Millions of €

| Uses of funds | | Sources of funds | |
|--|--------------------|--|---------------------|
| Investments | 61.2 | Funds under mgmt | 75.0 |
| Operating/Technical expenses | 11.9 | Investment returns | 50.7 |
| Total gross expenses | <u>73.1</u> | Total gross proceeds | <u>125.7</u> |
| Net retained cashflow for recycling | 52.5 | 86% return of initial subfund investments (before opex and TA) | |

As “patience” means taking a subordinated “first in-last out” role to commercial capital, our feasibility analysis shows that commercial investors could obtain an indicative range of 10-18% IRR (net of costs and fees) and that both the fund of funds and the subfunds could be self-sufficient entities. “Patient investors” in the top fund would in the base case recover just over 50% of investment capital, which could in turn be made available for recycling or other “reuse”.

Even if the return and operating cost assumptions were to be challenged, there is sufficient margin for error that, for the sake of the top tier, we can draw the conclusion the PCI fund is likely to be both self-sustaining and can be poised to trigger future funding from its own funds and other investors in the 2010-2015 time frame.

What about the Role of Technical Assistance?

GREFF would be a “one stop shop” for both technical assistance and investment funding. An important benefit of GREFF is the combination of technical assistance and investment funds, so as to bridge the ‘chasm’ between the conclusion of feasibility planning and assessment and the actual investment of funds – a chasm that often takes so long to bridge that projects lose momentum or local support. This “one-stop-shop” arrangement takes advantage of the pooling of many sources of public funds, and is delivered through the fund of funds structure on a framework “call-off” basis. As the sub-funds are designed to be commercially self-supporting, the only contract support required would be for (i) local project assessment and support, and (ii) operation and launch costs of the Fund of Funds.

¹⁰ This Base Case has a starting funding level of €75 million, with two subfunds yielding 8% and 15% portfolio gross IRR, plus all start up and operating costs covered at the fund of funds and subfund levels over a ten year investment horizon.

What about Carbon and Green Certificates?

Fund managers will be encouraged to seek investments that deliver carbon credits (e.g. through JI/CDM) or green certificates. However, by keeping such features optional, a broad range of renewable energy market players can qualify for investment (e.g. equipment manufacturers, ESCOs etc). A special “carbon purchase” facility can also be contemplated to be funded by investors seeking a means to access carbon credits rather than financial returns.

What about investments in energy efficiency, micro finance schemes etc?

There will be a focus on renewable energy, but providing for funding of ESCOs who engage in energy efficiency business and projects. Similarly, whilst the GREFF will not aim to finance consumers directly, its investment scope allows for investments in dedicated intermediaries that carry micro-finance schemes.