



Prague - Project - Portfolio - Planning - Platform
for Renewable Energy Sources
Self-Powered Community Business Knowledge Transfer



SPC Pilot Project Proposal

The “Pilot Project Proposal” is a document with four chapters and it represents a follow-up to the “Case Example,” the “Case Story”, and other documents which are available at www.5pforres.eu. The Proposal describes the way to generate financial sources for a sustainable improvement in quality of life and capital investment into climate change-related projects at a local level. The Pilot Project Proposal study is focused on a sample of a province (see Table 1), contents summary and four chapters.

FULL VERSION ON REQUEST

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Summary

SPC Concept (Chapter 1) uses Public Private Partnership (PPP) and drivers of socio-economic development as key synergy tools for financial independence. SPC Concept uses decentralized electrification based on locally available renewable resources (including biomass from bamboo and coconut tree plantations) and funds to be invested in climate change projects, such as rainwater management, etc.

Synergy effects further help the SPC Concept-based projects an attractive solution and opportunity for government-run development initiatives as well as profitable participation of private sector.

SPC Utility (Chapter 2) is an organizational unit for managing portfolio of socio-economic development projects in a province. The structure of the SPC Utility respects PPP rules through two key internal functions: revolving loan fund and special purpose company departments.

SPC Utility is jointly funded by local private sector and by local government unit (LGU) with a mix of long-term and commercial loans for 30 years (a life span of one generation). An international team of experts serves as a professional base of managerial skills of the SPC Utility, and LGU represents the public interest.

SPC Utility's Board of Directors is composed of representatives of LGU, private investors and institutional lenders. The SPC Utility performs services in procurement, acquisition of micro, small and middle enterprises (MSME), evaluation of project portfolio, and internal and external audits.

The Pilot Project (Chapter 3) is an opportunity to demonstrate benefits of the SPC Concept in specific region. 5PforRes is an initiator and integrator of the Pilot Project (PP) initiative. Preparation and implementation of the PP is a task for of the SPC Utility. Critical tasks and individual steps in PP preparation stages are specified bellow and in detail in Table 2.

Three critical drivers: electricity, water, and materials (e, w & m) are identified and used: decentralized electrification (e) based on locally available renewable energy sources (RES), rainwater management (w), representing investment into prevention of disasters caused by climate change impacts, and biomass management (m) based on local wealth of bamboo and coconut trees are the core of the proposed business model.

Business rules should be applied through management thresholds and control instruments promoting consensus building among PP stakeholders (using tools such as LGU's Master Plan, Citizen's Charter, internal financial control, and internal audit). A brief survey of the costs and yields is presented (in Financial Model, FM).

Financial Model (Chapter 4) was prepared for a wide spectrum of applications and presents a brief analysis of initial assumptions for preparation of the PP. Financial Model (FM) is to be used for in presentation of the SPC Concept, negotiations related to establishing SPC Utility, and for preparation of the PP. Input data collected for the 2013 version of the FM analyzed five sub-models and their combinations:

- Financing of the PP preparation stage,
- Mix of loans for star up (\$45m)
- Double (\$90m) and
- Triple (\$135m) stages, and
- MSME acquisitions.

FM quantifies the costs of the SPC Concept know-how and proposes financial settlement for all five sub-models. The FM helps to answer the following three questions:

1. What is the total profit of the SPC Utility's investment into decentralized electrification and bamboo and coconut tree plantations by the end of 2045?
2. How large portion of \$ can be invested by the SPC Utility into prevention of disasters caused by climate change impacts in a province?
3. What is the overall potential of the three drivers (e, w& m) to generate jobs over the time period ending with 2045?

SPC Concept

The existing architecture of financial services does not satisfy demand in developing countries and does not suit the current needs of infrastructure and population growth. A major gap in the system is the lack of adequate facilities for preparation and implementation of pilot projects in order to identify and develop a prioritized and viable pipeline of project portfolio especially in low-income countries.

The SPC Concept is focused on investment in infrastructure that allows for socio-economic development that is initiated and implemented according to LGU's development plans for 30 years.

SPC Concept includes investment into tree areas of local socio-economic drivers by the formula,

SPC Concept => (QL & CC) => (e) & (w & m) => SPC Utility
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where the Quality of Life (QL) and Climate Change (CC) impacts are the most critical general goals. SPC Concept is driven by:

- Decentralized electrification (e); based on renewable (local) energy sources
- Rain water management (w); based on rain water retention and its utilization, and floods and earth slides prevention
- Biomass management (m); based on bamboo and coconut forests planting and maintenance and on local agriculture and municipal waste management.

Success of local infrastructure projects has impact on results of LGU's elections. Citizen's Charter (a strategy document) and Master Plan (an investment document) must address mandatory tasks concerning the entire time frame of 30 years.

Governors of provinces, Mayors and barangays Chairmen who adopt SPC Concept rules will share their responsibility and coordinate the SPC Concept with other infrastructure investments (e.g. highways, streets, roads and bridges, mass transit, airports, waterworks and water resources, wastewater treatment plants, municipal waste processing, telecommunications and treatment of hazardous waste facilities, etc.) and with socio-economic objectives.

Coexistence of public-private ownership of new technologies for infrastructure building and know-how transfer via internet have the strongest potential to change behavior and a welfare of populations of urban, peri-urban and rural areas of developing countries. The SPC Concept is offering this approach.

Critical tasks

1. To unlock human potential and build the capacity at central and local levels for Public Private-Partnership and to gain trust of donors and lenders in success of the project portfolio.
2. To strengthen regulations (e.g. by Master Planning, Citizen's Charter, etc.) and to motivate stakeholders in SPC Concept-based portfolio of projects and to adhere to them.
3. To integrate the SPC Utility external tasks (e.g. for public administration services and participatory budgeting interventions) through utilization of professional skills and citizens' participation.
4. Financially motivate the SPC Utility owners to apply and maintain transparent and competitive procurement and acquisition processes in all cycles of the project portfolio.
5. To hire, educate, and coach SPC Utility staff and to use internal financial control and internal audits tools to control results of all milestones of the project portfolio.

Financing

SPC Concept utilizes financing and capital from both institutional and private investors. The SPC Utility philosophy and operations are based on collaboration with a wide range of partners sharing the objectives of socio-economic development.

The goal is to build on strategic relationship, add value, and achieve sustainable impacts on financial inclusion and development of MSME by implementation of the SPC Concept drivers.

Development financing institutions (DFIs)

DFIs are government-controlled institutions that invest in sustainable private sector projects with a twofold objective of spurring development in developing countries while themselves remaining financially viable. International Financial Corporation (IFC), a member of the World Bank Group is the largest multilateral DFI (with a consolidated portfolio of \$45b in 2009).

IFC and European DFIs have complementary approaches. Many regional development banks, e.g. the Africa Development Bank (AFDB), the Asia Development Bank (ADB), the Islamic Development Bank (IDB), and the European Investment Bank (EIB), all are participating in PPP projects, primary through loans.

Development financing for MSMEs

Lack of access to financing is particularly critical for small and medium enterprises (SMEs) and micro-businesses. Large banks serve healthy small and medium enterprises and microfinance institutions increasingly serve micro-businesses.

At present, we see two independent initiatives in a banking sector (e.g. boom in microfinance after the Millennium Development Goals). Now we can see (e.g. in Africa) success of micro, small, and medium enterprises in regional development projects. But lack of long-term financing options remains the key issue both for SMEs and/or MSMEs.

Investment Strategy

Both access to financing and access to electricity, implemented step-by-step are addressed in SPC Concept based projects. New technologies, particularly renewable source for decentralized electrification, open opportunities for local communities through higher self-participation on parallel access to electricity and finance and in benefits that synergy effects have on socio-economic development.

Synergy effect allow for development of MSMEs, built on the basis of locally available renewable sources, labor force, and on subsequently growing income of local households and entrepreneurs as their products and services start reaching local and international markets.

DFI and the SPC Concept

DFIs are exploring a number of approaches in ongoing attempts to increase their contribution to improving access to finance.

The SPC Concept proposes standardization for infrastructure investment (for example by applying business rules to management and control of impacts of key drivers on economy and socio-economic environment of a specific territory).

Pilot Project (PP)

Input data for the PP are based on the 5PforRES visits in the Bicol Region, the Sorsogon Province, and the Santa Magdalena Municipality and on publicly available information sources. They are summarized for sample (model) of province presented in table below:

Sample of a Province	Number of Cities	Number of Municipalities	Number of Barangays	Number of Inhabitants	Area (km ²)	Forest Area (km ²)	Density person per km ²	Number of Households	Number of Mayors	Number of Chairmen
	1		500	1,000,000	2,500	1,250	400	200,000	21	500
City	1	-	-	150,000	300	-	500	30,000	1	-
Municipality	-	20	-	42,500	110	-	386	8,500	20	-
Barangay	-	-	500	2000	5	-	-	400	-	500

A province is represented by one city, 20 municipalities, and 500 barangays; in total 1.0 million inhabitants. Province has 200,000 households (5 persons per household on average) and 50,000 other units (micro, mini and small workshops, schools, medical centers).

Activities that are supposed to be done are split by a matrix of inputs and output and preparation and implementation steps (see table below).

Stage:	Inputs	Outputs
<i>PP Know How</i>	SPC Concept	Pilot Project proposal
<i>PP Preparation</i>	Studies results	Prospectus
	Master plan & Citizen's Charter	Loan applications
	PP Business rules	Concessions
<i>PP Implementation</i>	Pilot Project Portfolio proposal	Ex-ante evaluation of the project portfolio
	Tendering and contracting	List of contracts and Business plans
	Project Portfolio Management	Project monitoring and reporting
	Project's financial closing	Ex-post project portfolio evaluation

PP Preparation - inputs:

- *Studies*: a broad spectrum of studies supports the SPC Concept development in international context.
- *LGU Master Plan*: (local public administration services) used their own financial sources and their own human capacity to prepare Master Plan and Citizen Charter in their jurisdiction.
- *PP Business rules*: the SPC Utility uses its own financial sources and human capital for preparation Business Rules for the SPC Concept and applies them in preparation and implementation of the PP.

PP Preparation - outputs:

- *Prospectus*: a key document written for a donor interested in financing preparation stage of the Pilot Project (PP).
- *Loan applications*: documents for banks with annexes (e.g. Feasibility study).
- *Concessions*: Rights assigned to the SPC Utility from the central and local governments for preparation and implementation of the SPC Concept-based PP in a given province.

PP Implementation - inputs:

- *Pilot Project Portfolio proposal*: The project portfolio is strategically selected to advance the SPC Concepts organizational goals. It is a group of projects that are carried out by the SPC Utility. Subsets of projects reflecting the driver's groups (e, w, m) are selected and prioritized in a way that allows for company's effectiveness, efficiency and economy being maximized.

SPC Utility manages the overall risks of the portfolio while ensuring that cash flow and other requirements are satisfied.

Project portfolio selection and the associated activity of managing selected projects throughout their life cycles are important for sustainable development of investment in both in the province and the country.

- *Tendering and contracting:* Tendering is designed to meet the supply chain management needs of the SPC Concept-based projects. It is a competitive environment, standardized to accommodate public procurement requirements.

The most important segment of professional skills is preparation of Terms of Reference (TOR), solicitation of expression of interest by potential suppliers and selection of best suppliers.

Contracting represents a standard process of arriving to a written agreement between two or more parties that is enforceable by the law.

- *Project Portfolio Management (PPM):* This is not a simple task; high professional skills are needed. At least, for the first project groups of the soft loan (at the start-up phase of the SPC Utility) an external professional team should be hired.

PPM is an effective business practice that can enable the province to generate significantly more value from the SPC Concept-based projects. The best practices of organizations are finding that PPM enables them to make better decision and arrive to more cost-effective solutions.

- *Project's financial closing:* The financial closing of the project portfolio occurs when financing agreements of all projects were signed and they met all the conditions contained herein.

The financial closure of the each individual project of the project portfolio occurs when the project is completed and investor's accounts are settled and closed (including liabilities to operating safeguards).

PP Implementation - Outputs:

- *Ex-ante evaluation of the project portfolio:* An evaluation of the feasibility and sustainability of the PP is focused on a document mostly used for presentation and consensus building among SPC Concept-based project's stakeholders.
- *List of contracts and business plans:* Results of successful open tenders and a list of signed contracts between the SPC Utility and project's suppliers is summarized in a database of all relevant data for project portfolio management, financial control and auditing for life cycle of each project and the project portfolio.
- *Project monitoring and reporting (M&R):* The purpose of the M&R is to provide for a systematic gathering of accurate, timely, objective and reliable information on real status of the SPC Concept dissemination and preparation and implementation of a PP in a specific location.
- *Ex-post evaluation and the Citizen's Charter:* Results of standard evaluation techniques publicly presented to voters of LGUs representatives.

Tools for the Public-Private Partnership

Public-Private Partnership (PPP) is based on key analysis of the methods used for preparation and implementation of templates for a study (e.g. Master Plan), a declaration (e.g. Citizen's charter) and a directive (e.g. Business Rules).

Master Plan (MP):

An overall guidance of a long-range plans that balance and harmonize all elements of the SPC Concept for a territory under responsibility of a LGU. MP is used to coordinate preparation of more detailed plans for development of a province's infrastructure.

Preparation of a MP is financed by LGU's financial sources. The SPC Utility comments on MP prepared by a LGU. The final version of an MP represents a consensus between LGU and the SPC Utility.

Citizen's Charter:

This is a declaration of consensus of central and local public administration, the SPC Concept-based project stakeholders, and the SPC Utility owners. It is a subject of public hearing. The goal is to form a social environment for discovering and maintenances of synergy effects in the project portfolio of the PP.

Citizen's Charter helps local inhabitants to get in touch with officials, informs them as what to expect from the services and how to seek a remedy if something goes wrong. The Citizen's Charter does not by itself create new legal rights, but it helps in enforcing existing rights.

Business Rules (BR):

An individual actionable directive that does not require additional interpretation to undertake strategic or tactical decisions and that integrates rules under business jurisdiction of SPC Concept-based project. "Actionable" means that a "person" who understands the directive is equipped to observe a relevant situation in the SPC Concept-based project and can decide directly whether or not the business action was complying with that directive.

BRs are derived from Business Policy (in contrast to BR, Business Policy is not actionable in that sense). BR describes the operations, definitions and constraints of the SPC Utility.

Why citizens in a province should participate?

The SPC Concept is an investment strategy for three generations (children, parents, and grandparents). It is also opportunity to help to have better education, healthcare, better-paying jobs, and even entertainment in a community. It is a way to local pride, public administration leadership opportunities and substantially improved quality of human live.

The PP is a real opportunity to demonstrate feasibility and sustainability of proposed synergy effects in provinces in the Philippines and in other countries and regions of the world (e.g. Asia, Africa, and Latin America).

For sample of a province (see Table above) with 200,000 households the financial model (FM) calculates with (data are from the SPC Concept - Case Example):

- High income category (HIC) represents 100 families,
- Middle income category (MIC) represents 19 000 families, and
- Low incomes category (LIC) represents 80 800 families.

A message for the high-income category (HIC):

When you invest in a gold mine shares or diamond mining operation you get an offer of up to 900% return. You buy your share for \$1 million and you might get \$9 million sometime in a future, if the operation will be sufficiently profitable while you have no influence over the turn of the events.

With investment into SPC Concept-based infrastructure projects you invest into place where you grew up or live. When you buy your \$1 million of securities in capital investment in the SPC Utility you get the opportunity to influence the outcomes, while you ultimate profit is also \$9 million. You have the basic parameters of your investment (time, money, outcomes) under your control and you and members of your family have also other opportunities that investment close-to-your-home offers.

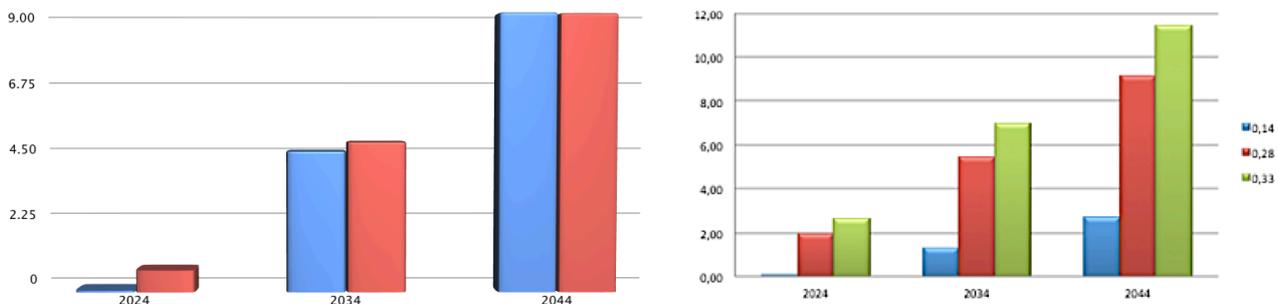
A message for the middle-income category (MIC):

The SPC Concept-based infrastructure projects create new jobs for the middle class in whole spectrum of professions and open up opportunities for financial participation in acquisitions of micro, small and medium enterprises in a place where you live.

A message for the low-income category (LIC):

The SPC Concept-based infrastructure projects create new jobs for workers in administration, services, and manufacturing and open opportunities for entrepreneurship (privately-owned workshops and services) and for participation in acquisitions of by buying security papers of micro, small, and medium business.

Yields from generation and sale of electric power (three rates are compared) and Yields from bamboo and coconut plantations you can see on following graphs - bamboo (blue), coconuts (red):



Citizens in all three categories as well as other investors have a chance to add value to the SPC Utility while making an attractive investment which gives them – by 2045 - \$9 for every 1\$ invested in 2015.

Remarks by the authors of the SPC Concept-based Pilot Project (PP) Proposal to be incorporated into the Prospectus and Feasibility Study for preparation of PP preparation:

- a) Share of the PP investment in the \$100 billion target for financing of the Climate Change project by governments by 2020 represents only 0.03%.
- a) SPC Concept-based PP uses no grants, no subsidies, only contribution of capital to the SPC Utility (via Revolving Loan Fund) that is to be invested and reinvested in project portfolio with the overall profit up to 900%.
- a) The question “Who and how much will contribute to financing of Climate Change-related needs” can be tuned into answer “Generate new jobs and more money through financing of Climate Change-related projects at local levels”.

Recommended Steps

1. An agreement between 5PforRes and an Investor¹ concerning preparation and implementation of the Pilot Project.
2. Investor's prospectus is presented to and advocated before PP donors and stakeholders
3. Pre-feasibility study is used for negotiation concerning establishment of the SPC Utility.
4. Approval of a Feasibility Study and securing financing for the SPC Utility.
5. The SPC Utility starts implementing the PP.

Scope of information

Only summary information on the Pilot Project Proposal are provided on this website. If you are interested in detailed information, please contact us.

We will send you full text of the Pilot Project Proposal study and more information needed for next (recommended) steps of the Pilot Project preparation and implementation.



Thank you

www.5PforRES.eu

Zdenek Chalus, PhD 5PforRES s.r.o. Managing Director

¹ Investor (s) is (are) individual (s) or private or public sector entities interested in participation in preparation and implementation of the PP (e.g. a rich family or a donor).