



Annual report 2013

VIETNAM CLEANER PRODUCTION CENTRE

VNCPC was established in partnerships of HUST, UNIDO and SECO (Switzerland)

In collaboration with



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FOREWORD

Year 2013 was an important milestone which marked the past 15 years of establishment and development of Vietnam Cleaner Production Centre (VNCPC) moving from promoting cleaner production to encouraging resource efficiency toward sustainable consumption and production pattern in Vietnam. Operating under autonomy and self-responsibility since 2009, VNCPC is gradually asserting its maturity as a member of the Science-Technology enterprise system of Hanoi University of Science and Technology. Being recognised as an official member of the UNIDO – UNEP’s global network on “Resource Efficient and Cleaner Production” (RECP), VNCPC has been continuously contributing to Green Growth in Vietnam as well as the region and the world.

In 2013, VNCPC closely collaborated with international and domestic partners to implement several projects including Establishing a sustainable pangasius supply chain in Vietnam; GetGreen Vietnam; Sustainable Product Innovation; Green Credit Trust Fund; Interactive cleaner production – sustainable product innovation training and consultancy e-platform; Overview of development experience; Industrial Waste Minimisation for Low Carbon Production; Testing phase for Business Environmental Performance Initiative; and Joint Program on Green Production and Trade to increase income and employment opportunities for the rural poor. These projects have been bringing out significant environmental, social and economic impacts, and contributing to the efforts on global climate change responsiveness. Furthermore, projects’ results and lessons learnt have been shared with stakeholders at the 6th National Roundtable on Sustainable Consumption and Production for the implementation of Green Growth goals in Vietnam.

On this occasion and the behalf of VNCPC, I would like to express my deepest gratitude to the European Union, State Secretariat for Economic Affairs of Switzerland, United Nations Industrial Development Organization and the World Bank for putting their trust in us in conducting the above projects; to Delft University of Technology (the Netherland), Asian Institute of Technology in Vietnam, Vietnam Environment Administration (under MONRE), Department of Science and Technology (under MOIT), other organisations, local areas, businesses, international and local experts for their cooperation and assistance so that VNCPC could complete its tasks in 2013.

We hope to continuously receive support and cooperation from you in coming years for further contributions to the prosperity and sustainable development of the country.

Hanoi, April 2014

Associate Prof. Dr. Tran Van Nhan
Director
Vietnam Cleaner Production Center Company Limited



VNCPC OVERVIEW

Vietnam Cleaner Production Centre (VNCPC) was established under the project framework US/VIE/96/063 signed by the United Nation Industrial Development Organization (UNIDO) and the Ministry of Education and Training on April 22nd, 1998 under the financial support of the State Secretariat for Economic Affairs Switzerland (SECO). VNCPC plays a focal role in Vietnam within the UNIDO-UNEP's National Cleaner Production Centres network.

Matured after 10 years under the establishment and development under the administration of UNIDO and direct support from Hanoi University of Science and Technology, in 2009, VNCPC was transformed into an organisation with legal entity providing scientific and technological services under the name "Vietnam Cleaner Production Centre Company Limited". The company is a Not-For-Profit business member operating within Bach Khoa Hanoi Technology Investments & Development One Member Company Limited (BK-Holdings).

VNCPC is now an official member of the UNIDO-UNEP global network on "Resource Efficient and Cleaner Production" (RECP), which makes on-going effort to sustainable consumption and production society both in Vietnam and the region.

1. Vision

With the desire to build a sustainable future, VNCPC thrives to become the leading organization in Vietnam and the region to provide both scientific and technological services on Resource Efficient and Cleaner Production, as well as Climate Change Adaptation.

2. Mission

In line with principle "Partnerships for Sustainable Development" as a nonprofit organization, VNCPC brings added values to clients through advanced scientific and technological services to contribute to the promotion of sustainable production and consumption.

VNCPC has created a friendly working environment with the best conditions for the team to develop their professional competencies and interpersonal skills.

3. Core values

- Dedicated – Innovated – Responsible for sustainable production and consumption;
- Respect – Share – Eager to learn – Partnerships for mutual development.



PROJECT UNDER IMPLEMENTATION

1

ESTABLISHING A SUSTAINABLE PANGASIOUS SUPPLY CHAIN IN VIETNAM (SUPA)

GENERAL INFORMATION

- **Donors:** European Union (EU) through Switch-Asia
- **Leading partner:** VNCPC
- **Project's implementing partners:** WWF Austria, WWF Vietnam, Vietnam Association of Seafood Exporters and Producers (VASEP)
- **Project objectives:**
 - Overall objectives: By 2020 pangasius farming, processing and exporting sector in Vietnam will become environmentally, economically and socially sustainable.
 - Specific objectives: By end of the project at least 70% of the targeted mid- to large-scaled Pangasius farming and processing SMEs, and 30% of feed producers and small independent production SMEs are actively engaged in RECP. At least 50% of targeted processing SMEs provide sustainable products compliant with ASC standards to the EU and other markets.
- **Participants/beneficiaries:**
 - Seed production and pangasius farming enterprises;
 - Pangasius processing enterprises;
 - Feed production enterprises;
 - Managing agencies of agriculture, environment, financial, industry and trade, fisheries associations.
- **Duration:** 4 years (April 2013 – March 2017)
- **Website:** www.vncpc.org/supa/
www.supa.vasep.com.vn

ACTIVITIES IN 2013

1. Kick-off workshop and launching ceremony

Participants of the kick-off workshop (Can Tho, July 29th – 30th, 2013) discussed and agreed on the implementation plan to achieve project's objectives. Enterprises' representatives, researchers from Faculty of Fisheries and Faculty of Environment (from CTU), representatives from Vietnam Pangasius Association, Vietnam Fisheries Society, government offices in the Mekong Delta region were invited for advising project implementation.



Project's partners answering questions from interested delegates



Information exchange with enterprises

The launching ceremony was organized on August 2nd 2013 in Ho Chi Minh City with participation from General Fisheries leaders (MARD), Department of Import and Export (MOIT), EU Sponsors, associations such as VASEP, Pangasius Association, Fisheries Association, representatives from over 100 enterprises in the production and processing of pangasius industry, along with news agencies and press, who had great contributions so that the project can bring about maximum benefits for enterprises.

2. Establishing Training Center and Model Farm

The Office with Training center and 3-ha Model Farm were created for the purpose of research, experiment and technology transfer to sustainable pangasius farming in order to decrease production costs, increase economic benefits, and reduce environmental pollution.

The Office is located on the campus of the CTU under the Faculty of Fisheries. At the moment, there are 4 staffs working full time.



The Project Office opening ceremony

3. Training for project staff

Being implemented by 4 partners in different technical components, the project has organised internal training with the aim of disseminating information and enhancing project staffs' capabilities.

No.	Location/ Time	Sector	Content	Participants			Man.day
				Experts	LAR	ER	
1.	Hanoi April/ June 2013	Pangasius	RE-CP ASC, Global GAP	10			10
2.	Can Tho 6-8/11/2013	Pangasius	RE-CP ASC, Global GAP	28			28

4. Survey and RECP assessment in pangasius farming areas

RECP on-site assessments on pangasius farm to provide enterprises, individual household farms and nurseries with quick consultations on new technologies for reducing production costs and environmental impacts. Based on that, potential enterprises and households are selected to receive further consultations towards sustainable certifications such as ASC, Global GAP, RECP, etc. There were 60 farms belonging to various enterprises and households which were surveyed and received quick assessments reports so that changes can be made.

5. Publish reports on Pangasius industry

Documents relating to the production and processing of pangasius such as reports, leaflets, etc. have been compiled, printed and distributed to interested enterprises, including:

- Sustainable Pangasius market potential in Europe;
- Study on Pangasius supply chain situation and perspectives in Vietnam.



Performing on-site assessments



Collecting and transport pangasius



Working with enterprises' staff in charge of farm



Feeding pangasius

UPCOMING ACTIVITIES

In 2014, the project will be perform the following activities:

- Continue with quick RECP assessment on farms, nurseries, feed producing and fish processing facilities;
- Detailed RECP assessment on processing enterprises ;
- Accomplish and put the model farm into operation;
- Conduct research and experiments in the model farm;
- Support enterprises to participate in "Seafood Expo Global & Seafood Processing Global" in Brussels, May 2014 and "Vietnam Fisheries International Exhibition - VietFish" in Ho Chi Minh City, August 2014;
- Provide consultations, trainings on sustainable certifications such as ASC, Global GAP to interested enterprises;
- Train enterprises on RECP and sustainable farming techniques.



2

PROJECT UNDER IMPLEMENTATION

GETGREEN VIET NAM (GGVN)

GENERAL INFORMATION

- **Donor:** European Union (EU) through Switch-Asia
- **Implementing partners:** TUD, VNCPC and AIT-VN
- **Project objectives:**
 - To contribute to increasing sustainable consumption behaviors of Vietnamese consumers;
 - To increase capacity of consumer organizations and government in convincing and supporting consumers in making the choice for more sustainable consumption behavior.
- **Participants/beneficiaries:** Middle-income consumers in Hanoi, Hochiminh City, Da Nang and Can Tho interested in sustainable consumption issues.
- **Duration:** April 2012 – March 2015
- **Website:** www.getgreen.vn

ACTIVITIES IN 2013

1. Preparation (2012 – 4/2013)

A state-of-the-art study report including information on worldwide sustainable consumer behavior, lessons learnt and existing methodologies, preparatory analysis of the current status in Vietnam, including existing policy instruments available, has been written to serve as a basis for the project implementation. Besides, an internet-based survey has been conducted to get a deeper insight into Vietnamese consumers' awareness and behavior. GetGreen Vietnam has also analyzed cultural factors that can affect the acceptance of sustainable products and behaviors.



2. Concept development and testing (4/2013 – 8/2013)

An overall framework has been prepared as basis for the development of "Programmes of more sustainable consumption opportunities" for the test groups. 10 test groups were set up and put into operation with regular activities in Hanoi and Hochiminh City. Two events called "Sustainability Festival" in Hanoi and HCMC were organized to support networking between group members and share experiences on GetGreen living style. The events attracted nearly 200 participants from test groups, partners and press. The results from test group activities have been integrated in methodologies and guidebooks.



3. Full approach preparation and capacity building (8/2013 – 1/2014)

The project has focused on methodology and supporting document development, in which Materials and Guides, including GetGreen Guidebooklets for participants, Journal and Life Saver Pocket Cards for trainers have been prepared for the full approach deployment in April 2014. Data used in the concept development phase was also gathered and further developed to build up the sustainable consumption data sources for trainers to use.



4. Outreach and sustainability

GetGreen Vietnam has produced several promotional items such as shopping bag, which encourages consumers reducing the use of plastic bags, and “dichung.vn” T-shirt, which encourages consumers sharing vehicles to reduce gas consumption and emissions, in collaboration with dichung.vn.

In June 2013, GetGreen Vietnam project staff participated and presented project progress in SWITCH-Asia Networking Meeting (Kathmandu, Nepal); Technical Workshop on Sustainable Consumption Policies for Asia (held by UNEP, the Nepalese Government and the APRSCP); and the 6th National Roundtable on SCP.

The “Sustainability Festival” was reported by nearly 20 paper- and e-news.

In September, as a joint effort between GetGreen Vietnam and SPIN projects, the workshop “Co-Creation for Consumers and Entrepreneurs” was delivered within the Green Biz 2013, which was organized by European Chamber of Commerce in Vietnam.



2. Full approach Deployment

GetGreen Vietnam will organize 50 GetGreen groups in 2 batches (5 months each) in Hanoi, Hochiminh City, Da Nang and Can Tho. Each group will have 6 meetings where they can apply the behavior change theory and moving toward sustainable consumption manner. 1000 Change Agents from these 50 groups are expected to achieve sustainable improvements in their direct living and/or working environment, as well as to inspire others people living green.

3. Outreach and sustainability

Project website will be regularly updated. 64 short films on various GetGreen tips will be available for both training activities and public communication.

After each step, networking events like Sustainability Festival for GetGreen change agents will be organized in 4 cities. The project will also participate in SWITCH-Asia Networking Events and other networking activities.

UPCOMING ACTIVITIES

1. “Change Agent” training

CSO representatives and participants of consumers groups interested in taking a leading role in the promotion of sustainable consumption will join the training-of-trainer courses in Hanoi and Hochiminh City. Out of 40 participants, 25 will be selected for the implementation phase.



PROJECT UNDER IMPLEMENTATION

3

SUSTAINABLE PRODUCT INNOVATION (SPIN)

GENERAL INFORMATION

- **Donors:** European Union (EU) through Switch-Asia
- **Implementing partners:** TUD, VNCPC and AIT-VN
- **Project objectives:** To contribute to the improvement of the innovative capacity of industrial sectors and the increase of environmental friendliness and social responsibility of products in Vietnam, Laos and Cambodia. This goal is accomplished through implementing SPIN. It is also a key factor for the process of building SCP society.
- **Participants/beneficiaries:** SMEs, households, consulting organizations/individuals working on the fields of design and production in Vietnam, Lao and Cambodia.
- **Duration:** April 2010 – March 2014
- **Website:** http://vncpc.org/project/doi-moi-san-pham-ben-vung_spin/
<http://scp.vn/index.php/vi/spinvn>

ACTIVITIES IN 2013

1. Training and workshops

Cooperating with AITVN in the project’s framework, VNCPC has conducted training on Design for Sustainability (D4S) methodology in Vietnam, Laos and Cambodia:

No	Location	Sector	Content	Trainer	Participant			Man. day
					Experts	LAR	ER	
1	Hanoi, 17-18/6/2013	Furniture	Product innovation skill	TUD, VNCPC	0	0	26	52
2	Phnompenh, 20-21/6/2013	Furniture, handicraft, food processing	Product innovation skill	TUD, VNCPC			23	46
3	HCM City, 11-12/3/2013	Furniture, handicraft	Capacity building for sustainable design, marketing and branding	VNCPC, chuyên gia CBI			25	50
4	Hanoi, 14-15/3/2013	Furniture, handicraft	Capacity building for sustainable design, marketing and branding	VNCPC, chuyên gia CBI			25	50
5	Phnompenh, 9-11/9/2013	Furniture, handicraft, food processing	Capacity building for sustainable design, marketing and branding	TUD			30	90
6	Vientiane, 23-25/10/2013	Furniture, handicraft, food processing	Capacity building for sustainable design, marketing and branding	TUD			18	54
7	HCM, 12/2013	Fast food and food processing sectors	Capacity building for sustainable design, marketing and branding	TUD, VNCPC			18	



Training on marketing and branding for enterprises and consultants (Vientiane)



Workshop on Innovation for Sustainable Development of the enterprises in Fast Moving Consumer Goods sector (Hanoi)

2. Implementation of SPIN in enterprise

VNCPC focused mainly on in-plant activities including the fulfillment of SPIN assessments for entire 3rd cycle (Do-It-Yourself) and remaining 30 enterprises of 2nd cycle within 3 sectors of furniture, handicraft and food processing. The enterprise's activeness played a decisive role in the success or failure of product innovation because local and international experts' support in the last cycle limits at strategic consultation and technology introduction only. In addition, the project continued to provide in-depth assistance to enterprises having innovative initiatives and key companies, as well as connected with other projects for long-term impacts after the project finished.

By the end of 2013, the project supported 170 Vietnamese companies in total through: i) technology introduction and transfer; ii) product innovation; iii) strategic consultation; iv) training on how to use CP and D4S Do-It-Yourself toolkit in SMEs. About 1,000 products were developed by participating companies. Many product lines/sets brought about first commercial contracts for producers.

Green Street showroom - a display area for the sustainable products and technologies - was launched in August 2013 at No. 45 Bat Su Street (Hanoi) aiming at providing participating companies with the opportunities to connect with potential consumers and markets. There are currently about 200 products of 50 participating companies shown in the Showroom.

In addition, the project also provided enterprises with intensive support to help them find long-term positive approach:

- Co-research and develop clean technologies in agriculture-food and renewable energy sectors through I-Nature Initiatives and heat-consuming companies, with the technical support from TUD's experts.
- Connect enterprises in different sectors with potential customers through the Co-creation and Product Incubation Area.
- Coordinate with the CBI (Netherlands) to train, advise and develop new products in 30 craft businesses for European market. The products will be available at the Ambiente Exhibition in Frankfurt, Germany in April 2014.



Bamboo lamp shape of Duc Phong Company (Nghệ An province)



Set of ceramics of Dong Gia Company (Hochiminh City)



Opening ceremony of Green Street Showroom (Hanoi)

3. Workshops and final events of the project

"Production Innovation - Key to Sustainable Future" workshop, which held by VNCPC to summarise activities, experiences and success stories from 4 years of project implementation, drew attention of 150 representatives from organizers, development organizations, embassies, universities, businesses and collaborating organisations of the project and press agencies. Participants highly appreciated the efforts and achievements by partners involved in the project, especially VNCPC and AITVN, and expressed the expectation that project's partners continue to promote SPIN as well as sustainable consumption in Vietnam in coming future.



SPIN project's dissemination workshop



Workshop on "Research and curriculum development on SPIN"

TUD and VNCPC co-organized a workshop on "Research and Curriculum Development on Sustainable Product Innovation in Vietnam" with participation from 10 professors, PhD students from TUD, and 20 lecturers in designing field from HUST and AITVN. The workshop provided an opportunity of experience share on SPIN research and teaching in the Netherlands for HUST lecturers to put sustainable factors in their curriculum, as well as helping AITVN develop training courses on sustainable product innovation for Vietnamese industry.

4. Cooperation with other projects

- Collaborated with Dassault Group to transfer Solid Works Sustainability software to the SPIN design team. Meanwhile, pilot products designed by this software are displayed at the Green Street showroom.
- Together with CBI, conducted training courses on product innovation and identified strategic products for 30 crafts enterprises. Among those, 14 companies in Hanoi and HCMC were supported in production design and innovation, and introduction of their sustainable products to the European market. 10 new product lines developed in the project will be exhibited at Ambiente Expo.
- Supported GGVN project in some activities like providing consumer testing groups with expertise information, providing them with sustainable products as examples, taking visitors to Green Production addresses.
- Together with Caritasc and Batik International, provided H'mong people in Lung Tam and Can Ty communes, Dao people in Nam Dam commune (Quan Ba district, Ha Giang province) with training courses on new product developing skills, designing and innovating Hemp products. A new collection of handbags and wallets with traditional H'mong patterns was introduced in the Green Street showroom and received positive feedback from customers. This was assisted by a SPIN project's volunteer for being introduced in Belgium.
- Cooperated with Oxfam in the transfer of food-agricultural technology for product innovation and quality improvement of black pork produced by H'mong people in Lao Cai province and Raklay people in Ninh Thuan province.
- Received and support two Canadian volunteers from Waterloo University to fulfill the assessment of 60 project's best products against UNIDO's sustainable criteria, as well as facilitate the access to potential customers through activities of co-creation and product introduction in the Green Street showroom.

UPCOMING ACTIVITIES

SPIN project will officially come to an end in March 31st, 2014. In the last three months, the project will focus on completing the following tasks:

- **Reporting:** To complete assessment reports for more than 300 participating companies and reports on product lines developed in each company.
- **Book writing:** Fulfill two project's final documents consisting of (1) a design book about stories of successful in-company product innovation in Vietnam, Laos and Cambodia, and (2) the "SPIN book" chaired by TUD with content inputs from VNCPC and other project partners.
- **Communication and product promotion activities:** VNCPC will organize meetings with organizations and project partners in Green Street showroom to introduce and replicate project's results.
- **Co-creation:** SPIN will combine with GGVN to implement co-creation activities for 2-4 SPIN project's participating companies and GGVN's consumer clubs in redesigning food, furniture and handicraft products.



4

PROJECT UNDER IMPLEMENTATION

GREEN CREDIT TRUST FUND (GCTF)

GENERAL INFORMATION

- **Donor:** SECO
- **Coodinating agency:** VNCPC
- **Implementing partners:** Techcombank, ACB, VIB
- **Overall objective:** Promoting medium- and long-term investments in cleaner production technology within SMEs in Vietnam in order to contribute to environmental impact minimization.
- **Participants/Beneficiaries:** Vietnam's SMEs operating in the field of industrial production and several natural resource-consuming service sectors.
- **Duration:** 2007-2017
- **Website:** <http://vncpc.org/project/quy-uy-thac-tin-dung-xanh/>
www.gctf.vn

ACTIVITIES IN 2013

1. Company investment projects:

Five following projects were finished and received GCTF full support.

No.	Company	Sector	Location	Technology change	Grant level
1.	Công ty CP XNK Bắc Giang	Printing & Tissue Paper	Bắc Giang	Dissolved Air Flotation	25%
2.	Công ty CP XNK Bắc Giang	Printing & Tissue Paper	Bắc Giang	Boiler	25%
3.	Công ty TNHH Giấy Bắc Hà	Kraft paper	Bắc Giang	Boiler	25%
4.	Công ty CP Giấy Hoàng Hà Hải Phòng	Kraft paper	Hải Phòng	Boiler	25%
5.	Công ty CP Giấy Hoàng Hà Hải Phòng	Kraft paper	Hải Phòng	Multi-layer sedimentation and filtration tower system	25%

Besides, there are some other projects on the way and expected to be accomplished in 2014.

TT	Company	Sector	Location	Technology change	Estimated grant level
1.	Công ty TNHH Dệt May Hưng Thịnh	Textile	Thái Bình	Boiler, pressured scouring, pressured winch, closed drying	25%
2.	Công ty CPTM Nguyễn Đức Thắng	Brick	Ninh Bình	Non-fired brick	25%
3.	Công ty CP Giấy Lam Sơn	Kraft paper	Thanh Hóa	Boiler	25%

4.	Công ty CP Đầu tư HT Vina	Packaging	Hà Nội	Boiler	25%
5.	Công ty CP NTT	Brick	Nghệ An	Non-fired brick	25%
6.	Công ty TNHH Minh Thành	Brick	Hà Nội	Non-fired brick	25%
7.	Công ty TNHH Kiên Cường	Brick	Hà Giang	Non-fired brick	25%
8.	Hợp tác xã Việt Tiến	Brick	Hưng Yên	Non-fired brick	25%
9.	Công ty TNHH MTV Tân Kim Bắc	Brick	Tuyên Quang	Vertical Sharp Brick Kiln	25%



Existing coal-fired boiler



Newly-installed biomass fluidized-bed boiler



On-site measurement

2. Dissemination activities:

There were 2 exhibition booths joined in Viet Build 2013 (15-18/8/2013) in Ho Chi Minh City and Japan-Techno 2013 (16-18/12/2013) in Hanoi to introduce GCTF and some emerging technologies which are potentially appropriate for GCTF support. Through such exhibitions, GCTF approached further to target groups, which vary from technology suppliers, manufacturing enterprises, consumers, consultancies and governmental officers, to create necessary connection.

Information on GCTF was propagandized in workshops organized in Hai Phong, Can Tho, Ha Noi, Thach That, Dong Hoi, Quy Nhon, etc. and through mass media such as websites, fan page, online magazines.



UPCOMING ACTIVITIES:

- Continue supporting companies that have registered projects, to fulfill their investment projects.
- Propagate GCTF continuously through online and social marketing, workshops, exhibitions and in connection with other projects implemented by VNCPC in order to develop more clean technology investment projects.



PROJECT UNDER IMPLEMENTATION

5

INTERACTIVE CLEANER PRODUCTION – SUSTAINABLE PRODUCT INNOVATION TRAINING AND CONSULTANCY E-PLATFORM (SPIN-E)

GENERAL INFORMATION

- **Donor:** Vietnam Blended Learning Program, sponsored by the Australian Government's Aid Programme (AusAID) and administrated by the World Bank (WB) ;
- **Implementing agencies:** VNCPC, with technical support of TUD;
- **Overall objectives:** To enhance skills and knowledge of small - and medium-scaled enterprises (SMEs) and consultants in the fields of Cleaner Production and Sustainable Product Innovation;
- **Participants/beneficiaries:** Vietnamese SMEs, consultants/experts in sustainable production and SPIN;
- **Duration:** April 2013 - January 2014
- **Website:** <http://spin-e.vn/>

ACTIVITIES IN 2013

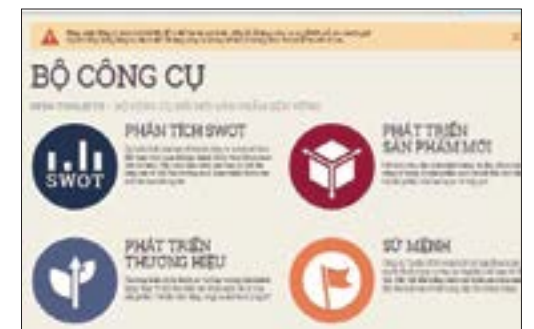
1. Establish an ICT-based interactive platform for promoting CP and SPIN

The ICT-based interactive platform namely SPIN-e has been successfully setup and operated at <http://spin-e.vn/>, which is available in both English and Vietnamese and consists of 3 main parts: E-toolkit, E-library and E-channel.

E-toolkit, which consists of 9 most important tools in CP and SPIN: Product Assessment, SWOT, Mission, Branding, New Product Development, Redesign, Cleaner Production, Energy Efficiency and Maintenance Audit, have been developed online and interactive with users. Especially, CP tool is established for 6 specific sectors. These tools serve both training and consultancy purposes so that enterprises can step-by-step apply tools in their companies. By do-it-yourself implementation, one-line exchange and consultation with consultants for review and analysis, SPIN-e saves time for both companies and consultants, while raising the sense of innovation of companies.

The E-library includes various types of documents e.g. reports, handbooks, guidelines, case studies, TV reports. The number of items exceeds 100 and continues increased through time. Moreover, related documents are also attached in each tool for easier use as a suggested in-depth knowledge and skills.

The E-channel serves as a communication tool among project team, companies and consultants. Besides FAQs, this E-channel offers a list of VNCPC experts for further discussion and a Question - Answer Box for direct contact with project team.



2. Introduce SPIN-e to SMEs

SPIN-e has been introduced to 100 Vietnamese SMEs, mostly in handicraft, furniture, food processing and textile sectors through various means, such as workshops, consulting meetings:

- SPIN - Get Green joint workshop during Green Biz event;
- Conference “Product Innovation – Key to Sustainable Future”;
- Forum “Innovation for Sustainable Development in Fast-moving Consumer Goods sector”.



SPIN-e introduction events

3. Enhance the consultants' competency in implementing and managing an ICT-based system

A training-of-trainer course within the SPIN-e project framework was organized in order to improve the competency and skill on CP and SPIN implementation for SMEs and consultants.

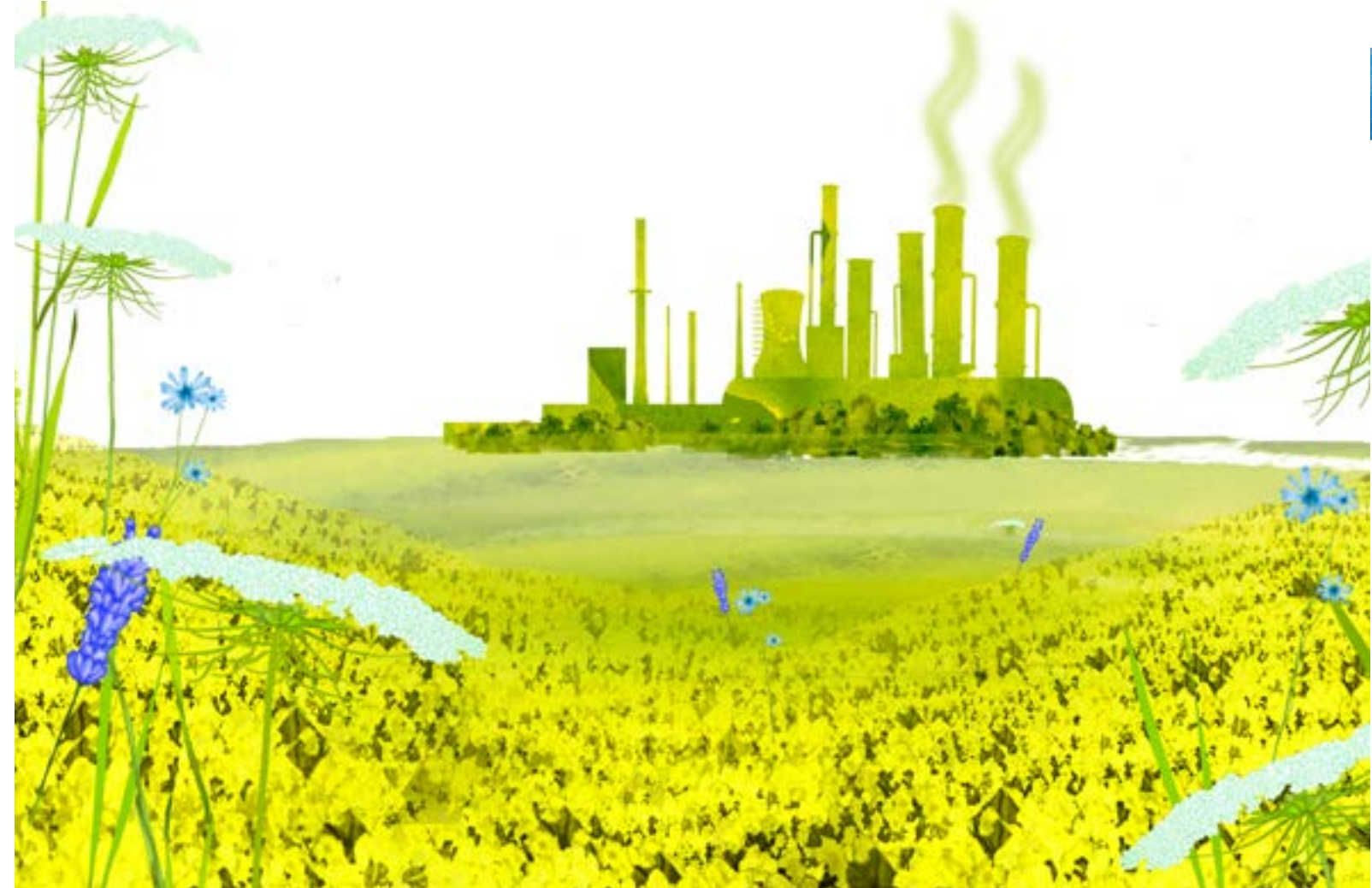


TOT in Hanoi, 2-3/10/2013

Nr.	Location /Time	Sector	Content	Participants			Man*day
				Expert	LAR	ER	
1	Hanoi, 2-3/10/2013		SPIN-e use	15			30

UPCOMING ACTIVITIES

Two more trainings for consultants will be organized in Hanoi and Hochiminh City in early 2014.



6

PROJECT UNDER IMPLEMENTATION

OVERVIEW OF DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT EXPERIENCES OF ECO-INDUSTRIAL PARKS IN VIETNAM

GENERAL INFORMATION

- **Donor:** UNIDO
- **Implementing Agency:** VNCPC

- **Overall objectives:**

Overview of national policies on development planning, implementation and management of eco-industrial parks (EIP) in Vietnam and practices at 2 model EIPs: (1) IP Thang Long (Hanoi), (2) IP Vietnam – Singapore (Binh Duong), in order to contribute to the overall global experiences summarized by UNIDO.

- **Participants/Beneficiaries:** State authorities, EIPs developers, EIPs management boards and UNIDO

- **Duration:** 04 months (August – November 2013)

ACTIVITIES IN 2013

1. National Policies Review

These policy review provided not only the overview of current policy development in the field of environmental protection, RECP strategies and technologies but also information on the national institutional framework, policies, legal framework, evaluation and monitoring mechanism on environmental management in industrial clusters and parks in Vietnam. VNCPC completed the review with a series of discussions about the motivations, factors to success, and provided some recommendations for future efforts to promote eco-industries in Vietnam.

2. Case studies

VNCPC has reported case studies on eco-industrial parks in Vietnam, which includes:

- **Thang Long Industrial Park (TLIP):**

From the development of eco-industrial park perspective, TLIP is considered to be one of best examples on the integration of environmental aspects into the IP's construction and management. In addition to collective efforts in environmental management, individual enterprise plays a vital role in making TLIP's image an eco-industrial park. Not only are businesses able to meet the requirements for environmental activities, they are also attempting to maximize their contribution to society, such as: actively participating in the energy and material efficiency, waste reduction programs and corporate social responsibility enhancement.



Interviewing Mr. Pham Van Loc – First Deputy Director of TLIP



Concentrate wastewater treatment system using membrane and microbial technology at TLIP



Transporting sorted wastes from factory to collection point by Canon Inc.

- **Viet Nam – Singapore Industrial park (VSIP):** Since the establishment in 1996, VSIP has become a symbol of the cooperation between Vietnam and Singapore, and considered as one of the most successful IP in Vietnam from sustainable development perspective. In addition to significant economic contribution, the IP management team also pays a lot of attentions on environmental protection (achieved ISO 14001 certification, Green Technology Award from Vietnam Association for Conservation of Nature and Environment) and social responsibility (OHSAS 18001 certification, creating the VSIP Charity Fund, establishing the Vietnam Singapore Technical Institute (VSTS) to enhance the technical expertise for the Vietnamese workforce in the area, etc.).



Repository of segregated solid wastes in Yakult company

UPCOMING ACTIVITIES

With funding from SECO, UNIDO has taken responsibility for implementing a global assessment on EIP implementation, planning, deployment and management practices in countries with emerging and developing economies, including: Cambodia, China, Colombia, Costa Rica, Egypt, El Salvador, India, Indonesia, Morocco, Peru, South Africa, Tunisia, Ukraine and Vietnam. VNCPC will continuous its cooperation with UNIDO in this activity.



7

PROJECT UNDER IMPLEMENTATION

INDUSTRIAL WASTE MINIMIZATION FOR LOW CARBON PRODUCTION

GENERAL INFORMATION

- **Donor:** SECO
- **Implementing Partners:** UNIDO, Sofies, VNCPC/NCPCs
- **Overall Objectives:** to achieve step-reductions of industrial waste and by-products generation, including organic materials, as well as to foster their valorization. This serves the triple purpose of (1) improving the local environment (less waste and waste water), (2) mitigation of greenhouse gas (GHG) emissions (reduced energy consumption and reduced methane generation from waste) and (3) economic benefits (resource productivity and possibly better product quality). The first phase of the project focuses on Rice and Coffee sectors and is implemented in Vietnam, Cambodia, Peru and Colombia.
- **Participants/Beneficiaries:** Producers and sectoral organizations in Rice and Coffee sectors.
- **Duration:** 2013 -2016

ACTIVITIES IN 2013

Within the project framework, VNCPCP conducted the following activities:

- Institutional Context Analysis: Reviewing information in rice and coffee sectors, reviewing existing documents of RECP assessments, elaboration of documents (report template, data collection form, benchmark calculation form), meeting with stakeholders.
- Company pre-selection: Selecting of participating enterprises in the rice and coffee sectors, in association with Vietnam Food/Coffee Corporations, by collecting and processing information from questionnaires sent to these companies.
- RECP quick assessment: In each sector, 10 enterprises were selected for quick RECP assessment. More data were collected to identify RECP opportunities, as well as assess the commitment of management board.
- Full RECP assessment: Based on the result of the quick assessments, 4 enterprises out of 10 (for each sector) were selected to implement full RECP assessment.
- RECP training: VNCPC delivered RECP training for the rice and coffee enterprises in order to provide best environmental practices and benefits that can help them to apply RECP solutions themselves.
- Expert Group Meetings: VNCPC organized the meeting in October 2013 to develop and assess zero (or low) waste solutions in the sectors. Thereby, low carbon pilot projects in the two sectors in Vietnam and Cambodia will be identified and favoured for the next phases.



Training for Rice sector



Training for Coffee sector



Expert Group Meeting in Hanoi

1. Training

The training introduced RECP concepts, techniques and implementation methods to enterprises technical experts. This will help them to understand and perform their own RECP audits and assessment on their daily production activities and improve any environmental issues that may occur during production and other relating processes.

No.	Location	Sector	Content	Participants			Man.days
				Experts	LAR	ER	
1	Can Tho	Rice	RECP			15 (4 companies)	45
2	Ban Me Thuot	Coffee	RECP			14 (4 companies)	42

2. In-plant RECP assessment

Full RECP assessment at 8 companies (4 companies per sector) achieved following results:

- Total RECP solutions: 125;
- Benefits of implemented RECP solutions:
 - Economic benefit: annual saving 533,452,500VND (equivalent to 25,400USD) due to cut down electricity consumption of 355,365 kWh/year;
 - Environmental benefit: reduce emission of 213 ton CO₂/year.
- Estimated benefits of the implementing RECP solutions:
 - Economic benefit: annual saving 77,800,000 VND (= 3,700 USD) due to cut down electricity consumption of 15,200 kWh and coal consumption of 11 tons/year;
 - Environmental benefit: reduce emission of 30 ton CO₂/year.



Coffee drying before RECP



Coffee drying after RECP

UPCOMING ACTIVITIES

4 pilot feasible low carbon projects, which was identified in Rice sector, will be implemented in 2014. There will be 2 enterprises applying husk briquette, one changing from paddy drying by coal to husk, and one recovering silica from husk ask.

Appropriate coffee enterprises will be identified to implement the pilot low carbon project "coffee shell gasification for utilizing heat".



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PROJECT UNDER IMPLEMENTATION

BUSINESS ENVIRONMENTAL PERFORMANCE INITIATIVE (BEPI)

GENERAL INFORMATION

- **Donor:** Foreign Trade Association (FTA)
- **Implementing partners:** VNCPC, SGS, several consultancies and appraising companies
- **Overall objectives:** FTA initiates BEPI in order to assist supplying companies of its member brands to improve environmental performance. BEPI will provide: (1) technical support tangible environmental performance improvement of production and related processes; (2) Capacity building to improve environmental performance related skills and competences.
- **Participants/Beneficiaries:** Suppliers of FTA's member brands.
- **Duration:** pilot phase takes place from April 2013 to March 2014.

ACTIVITIES IN 2013

VNCPC provided selected companies with technical support in two batches within the pilot phase:

- 1st batch (April - July 2013): BEPI assessment and RECP training for Fontina Vietnam Company Ltd. (ceramics packaging) and Viet-Turk Company Ltd. (garment);
- 2nd batch (August 2013 - February 2014): BEPI assessment and RECP training for Continental Packaging JSC (plastic products) and Highland Dragon Company Ltd. (seafood processing).

Results:

	Fontina	Viet-Turk	Continental	Highland Dragon
Packaging materials	Reduced by 30% in estimation			
Wastes	Segregated for on-site recycling and selling out			
Water	Reduced by 48%	Reduced by 23%	Reduced by 4-5% only by fixing leakage, resulting in a 1,825 m ³ /year	Reduced by 40% domestic water and 20-30% processing water (cleaning purpose)
Energy		Reduced electricity consumption by 13% in estimation	Reduced electricity consumption by 25% in estimation	Reduced electricity consumption by 4-5% in estimation Reduced FO consumption by 8-9% in estimation
OHS			Reduced working temperature by 3-4°C	



Previous packaging



Improved packaging

UPCOMING ACTIVITIES

BEPI will be officially launched for involving supplying companies in Vietnam in May 2014.



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PROJECT UNDER IMPLEMENTATION

JOINT PROGRAM ON GREEN PRODUCTION AND TRADE TO INCREASE INCOME AND EMPLOYMENT OPPORTUNITIES FOR THE RURAL POOR (1UN)

GENERAL INFORMATION

- **Donor:** Milleninum Development Goals Fund (MDGF);
- **Implementing agencies:** ITC, FAO, UNIDO, UNCTAD và ILO;
- **Objectives:** The program aims to increase income and employment opportunities for craft raw materials growers/collectors and grassroots participating in handicraft production within 5 chains: dó paper, sericulture, rattan/bamboo, lacquer, and seagrass;
- **Participants/Beneficiaries:** poor households within 5 targeting chains in northern provinces of Vietnam (Nghệ An, Thanh Hóa, Hòa Bình, Phú Thọ);
- **Duration:** 2010- 2012 (36 months) and extended until June 2013;
- **Website:** <http://vncpc.org/project/san-xuat-va-thuong-mai-xanh-1un/>

ACTIVITIES IN 2013

1. Dissemination workshop on CP and D4S

There were about 60 participants from partnered international organizations, Embassy of Spain, WWF, UNESCO, associations like VietTrade and VietCraft, beneficiary enterprises and other from same sectors, etc. gathered in the final workshop for sharing project's results and lessons learnt on CP and D4S implementation. A display area was set up in parallel with the workshop to demonstrate 50 products produced by participating producers with consultancy of VNCPC and project experts. Workshop's participants appreciated projects outputs. Several enterprises expressed their expectation on further technical support in future.



2. Hand-over of equipment supported to beneficiaries

UNIDO and VNCPC provided both technical support and equipment/technology transfer, in which proper machines were recommended and handed over to participating households/enterprises.

Sector	Equipment
Seagrass	Cutting machine, splitting machine, dyeing system, core removing machine
Sericulture	Modified traditional reeling machine, twisting machine, mini industrial boiler, double weaving frame, industrial sewing machine, natural colorant dyeing machine, biogas tank
Dó paper	Stainless steel scouring vessel, stainless steel paper making tank, stainless steel pressing machine
Lacquer	Lacquer electronic balance, lacquer stirring machine, bamboo splitting machine, sanding machine, small-scaled grinding machine for material recycling
Rattan/Bamboo	Handy sawing machine, splitting machine, outer layer splitting machine, toothpick cutting machine, square-shaped stick machine, round-shaped stick machine.



Seagrass splitting machine



Natural colorant dyeing machine



Stainless steel dó paper making machine



Electronic balance to measure lacquer content



Outer layer splitting machine for bamboo



Toothpick cutting machine

These machines have been put into operation in households/enterprises and appreciated in terms of technical, economic and environmental improvement.

CONFERENCES AND EXHIBITIONS

VietBuild 2013

VNCPC participated in the VietBuild 2013 at Saigon Exhibition and Convention Center on August 15th - 18th. The fair is a gathering for approximately 800 both domestic and international enterprises working in the field of manufacturing, commercialising and construction service with over 2200 booths. It is here that VNCPC had the opportunity to work with many manufacturers, technology suppliers along with expert consultants to promote their image and services as well as sharing experiences.



Japan-Techno 2013

VNCPC displayed and shared a few sample equipment and brochures introducing technology and information on the financial support from GCTF to the Japan - Techno 2013 exhibition (16 -18 December, 2013). VNCPC participate the exhibition as a technological solution consultant and a financial bridge between technology suppliers and enterprises in need.



6th National Roundtable on Sustainable Consumption and Production

Since 2002, the National Roundtable on Sustainable Consumption and Production has been firmly held every 2 years. In 2013, VNCPC continue to coordinate with the Ministry of Natural Resources and Environment, Ministry of Industry and Trade to organized the 6th Conference (27- 28/9) in Da Nang. The conference was a success with participation from 120 representatives from industry and environment bodies of State management, universities, enterprises, consultants from across the country.



With the cross-cutting theme "Green industry support green growth", parallel workshops at the conference discussed the following main topics:

- Tools and solutions to sustainable production and consumption;
- Resource Efficiency and Cleaner Production for the greening of production;
- Resource Efficiency and Cleaner Production for green living and promote sustainable consumption;
- Policies to support sustainable production and consumption.

LOOKING TO THE FUTURE

To encourage achievements and experiences accumulated throughout the establishment and development over the past 15 years, VNCPC will concentrate on contributing to the Green Growth strategies implementation in the country through the followings:

- Promote Resource Efficiency and Cleaner Production in industries on an industrial scale and industrial clusters or zones;
- Establish and develop projects on sustainable production and consumption along the value chain;
- Provide services to develop businesses' capability in increasing energy and water efficiency, responding to climate change and protecting the environment;
- Widespread knowledge about ecological innovation and establishing "Sustainable Production and Consumption" patterns;
- Support businesses in technological innovation towards environmentally friendly production and low carbon emission;
- Continue network connection and collaboration to expand RECP Vietnam.

ABBREVIATIONS

AIT-VN	Asian Institute of Technology in Vietnam
BEPI	Business Environmental Performance Initiative
CBI	Center for the Promotion of Imports from Developing Countries (under Ministry of Foreign Affairs of the Netherlands)
CP	Cleaner Production
CSO	Civil Society Organization
CTU	Can Tho Technique University
D4S	Design for Sustainability
ER	Enterprise representative
EU	European Union
GCTF	Green Credit Trust Fund
GGVN	GetGreen Việt Nam
LAR	Local authority representative
MARD	Ministry of Agricultural and Rural Development
MOIT	Ministry of Industry and Commerce
NCPCs	National Cleaner Production Centres
RECP	Resource Efficiency and Cleaner Production
SCP	Sustainable Consumption and Production
SECO	Swiss Secretariate for Economic Affairs
SMEs	Small and Medium-scaled Enterprises
SPIN	Sustainable Product Innovation
SPIN-e	Sustainable Product Innovation E-platform
SUPA	"Establishing a Sustainable Pangasius Supply in Vietnam" project
TOT	Training-of-trainer
TUD	Delft University of Technology (the Netherlands)
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
VNCPC	Viet Nam Cleaner Production Centre
WB	World Bank



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Partnerships for Sustainable Development