



Empowered lives.
Resilient nations.

14 January 2020

INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

for individual consultants and individual consultants assigned by consulting firms/institutions

Country:	Viet Nam
Description of the assignment:	03 <u>International Consultants</u> to provide technical assistance for implementation of green chemistry interventions at selected demonstration industrial facilities in the electroplating and paints & solvents sectors.
Period of assignment/services (if applicable):	February 2020 – November 2020
Duty Station:	Home-based with travel to Hanoi and the selected industrial facilities.
Tender reference:	T200102

1. Submissions should be sent by **email** to: luu.thi.trang@undp.org no later than:

23.59 hrs., 28 January 2020 (Hanoi time)

With subject line:

T200102A – 01 Environmental Expert (IC1)

T200102B – 01 Electroplating Expert (IC2)

T200102C– 01 Paints & Solvents Expert (IC3)

Submission received after that date or submission not in conformity with the requirements specified this document will not be considered.

Note:

- Any individual employed by a company or institution who would like to submit an offer in response to this Procurement Notice must do so in their individual capacity, even if they expect their employers to sign a contract with UNDP.
- Maximum size per email is **30 MB**.

- Any request for clarification must be sent in writing, or by standard electronic communication to the address or e-mail indicated above. Procurement Unit – UNDP Viet Nam will respond in writing or by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all consultants.
- After submitting proposal, bidder should send notification by email (without attachment) to: procurement.vn@undp.org informing that the bidder has submitted proposal. UNDP will not be responsible for the missing of proposal if the bidder does not send notification email to above address.
- Female consultants are encouraged to bid for this required service. Preference will be given to equally technically qualified female consultants.

2. Please find attached the relevant documents:

- [Term of References](#).....
(Annex I)
- [Individual Contract & General Conditions](#).....
(Annex II)
- [Reimbursable Loan Agreement](#) (for a consultant assigned by a firm).....
(Annex III)
- [Letter to UNDP Confirming Interest and Availability](#).....
(Annex IV)
- [Financial Proposal](#).....
(Annex V)

3. Interested individual consultants must submit the following documents/information (in English, PDF Format) to demonstrate their qualifications:

a. Technical component:

- Signed Curriculum vitae
- Signed Letter to UNDP Confirming Interest and Availability
- At least two sample reports must be provided.

b. Financial proposal (with your signature):

- The financial proposal shall specify a total lump sum amount in **VND for national consultant and US dollar for International Consultant** including consultancy fees and all associated costs i.e. airfares, travel cost, meal, accommodation, tax, insurance etc. – see format of financial offer in Annex V.
- Please note that the cost of preparing a proposal and of negotiating a contract, including any related travel, is not reimbursable as a direct cost of the assignment.
- If quoted in other currency, prices shall be converted to the above currency at UN Exchange Rate at the submission deadline.

4. Evaluation

The technical component will be evaluated using the following criteria:

4.1. Environmental Expert (IC1)

Experience/Qualifications	Max. Points
Postgraduate or higher education degree in chemistry, environment, engineering, or related fields.	125
At least 10 years of practical working experience in environmental management, chemical and waste management in industrial processes, and management of hazardous and toxic chemicals, including POPs/PTS.	200
At least 10 years of experience in following environmental areas: energy saving in industrial processes, management of POPs/PTS, management of hazardous chemicals and hazardous waste, environmental monitoring of industrial processes (including the development of monitoring plans), sampling of waste and environmental indicators, and handling of waste and hazardous substances	200
Good understanding and experience in POPs/PTS baseline assessment and calculation	150
Good understanding and knowledge of MEAs (especially the Stockholm Convention on POPs, the Minamata Convention on Mercury, and the Basel Convention).	125
Working experience in developing countries, especially in Viet Nam, is an advantage.	100
Good written English (with submission of at least two sample reports).	100
Total	1,000

4.2. Electroplating Expert

Experience/Qualifications	Max. Points
Postgraduate or higher education degree in chemistry, engineering, or related fields.	150
At least 15 years of practical working experience in chemical and in industrial processes, with at least 08 years working in the electroplating sector.	350
Proven knowledge of the use of chemicals in industrial processes in the electroplating sector.	200
Understanding and knowledge of MEAs (especially the Stockholm Convention on POPs, the Minamata Convention on Mercury, and the Basel Convention).	100
Working experience in developing countries, especially in Viet Nam.	100

Fluent in written English with submission of at least two sample reports).	100
Total	1,000

4.3. Paints & Solvents Expert

Experience/Qualifications	Max. Points
Postgraduate or higher education degree in chemistry, engineering, or related fields.	150
At least 15 years of practical working experience in chemical and in industrial processes, with at least 08 years working in the paints & solvents sector	350
Proven knowledge of the use of chemicals in industrial processes in the paints & solvents sector.	200
Understanding and knowledge of MEAs (especially the Stockholm Convention on POPs, the Minamata Convention on Mercury, and the Basel Convention).	100
Working experience in developing countries, especially in Viet Nam	100
Fluent in written English with submission of at least two sample reports).	100
Total	1,000

A two-stage procedure is utilized in evaluating the submissions, with evaluation of the technical components being completed prior to any price proposals being opened and compared.

The price proposal will be opened only for submissions that passed the minimum technical score of 70% of the obtainable score of 1000 points in the evaluation of the technical component. The technical component is evaluated on the basis of its responsiveness to the Term of Reference (TOR). Maximum 1000 points will be given to the lowest offer and the other financial proposals will receive the points inversely proportional to their financial offers. i.e. $S_f = 1000 \times F_m / F$, in which S_f is the financial score, F_m is the lowest price and F the price of the submission under consideration.

The weight of technical points is 70% and financial points is 30%.

Submission obtaining the highest weighted points (technical points + financial points) will be selected subject to positive reference checks on the consultant's past performance.

Interview with the candidates may be held if deemed necessary.

5. Contract

“Lump-sum” Individual Contract will be applied for freelance consultant (Annex II)

“Lump-sum” RLA will be applied for consultant assigned by firm/institution/organization (Annex III)

Documents required before contract signing:

- International consultant whose work involves travel is required to complete the courses on BSAFE which is the new online security awareness training and submit certificate to UNDP before contract issuance.
- Note: In order to access the courses, please go to the following link: <https://training.dss.un.org>
The training course takes around 3-4 hours to complete.
- Full medical examination and Statement of Fitness to work for consultants from and above 65 years of age and involve travel. (This is not a requirement for RLA contracts).
- Release letter in case the selected consultant is government official.

6. Payment

UNDP shall effect payments to the consultant (by bank transfer to the consultant’s bank account provided in the vendor form upon acceptance by UNDP of the deliverables specified the TOR.

Payments are based upon outputs, i.e. upon delivery of the products specified in the TOR.

If two currencies exist, UNDP exchange rate will be applied at the day UNDP instructs the bank to effect the payment.

7. Your proposals are received on the basis that you fully understand and accept these terms and conditions.



Empowered lives.
Resilient nations.

TERMS OF REFERENCE

- Position:** 03 International Consultants (IC) to provide technical assistance for implementation of green chemistry interventions at selected demonstration industrial facilities in the electroplating and paints & solvents sectors
- Project:** Application of green chemistry in Viet Nam to support Green Growth and reduction in the use and release of POPs/harmful chemicals
- Type of appointment:** Individual contract
- Location:** Home-based with travel to Hanoi and the selected industrial plants
- Duration:** February 2020 to November 2020 with different number of working days

BACKGROUND

In Viet Nam, while the chemical and manufacturing sectors play a very important role in the development of the national economy and in the industrialization and modernization of the country, certain chemicals, which are potentially hazardous/toxic, their production processes, and products containing such chemicals are becoming of increasing concern because of their impact on human health, the local and global environment, and ecosystems.

Because of various legacy issues, surveys in Viet Nam (1999 – 2010) indicated higher levels of chemicals of concern in soil, water, and human milk than those measured in most other countries.

This situation is further aggravated by chemical pollution and release, industry-related accidents, and spills caused by the national chemicals and manufacturing industry, which is predominantly using old technologies, outdated production processes, and/or end-of-pipe solutions. This is a cause of great concern and puts a significant burden on the Government of Viet Nam and local authorities, as these impacts are further jeopardizing the health of the country's population as well as its ecosystems.

The low concern and awareness of the environmental risk associated with obsolete industrial processes and the consumption, release, or storage of hazardous chemicals in any stage of industrial manufacturing has often resulted in serious environmental accidents.

APPLICATION OF GREEN CHEMISTRY IN VIET NAM

Green Chemistry is defined as “the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances.” The Green Chemistry approach has been standardized in 12 general principles:

1. Prevent waste;
2. Maximize atom economy;
3. Design less hazardous chemical syntheses;
4. Design safer chemicals and products;
5. Use safer solvents and reaction conditions;
6. Increase energy efficiency;
7. Use renewable feedstocks;

8. Avoid chemical derivatives;
9. Use catalysts, not stoichiometric reagents;
10. Design chemicals and products to degrade after use;
11. Analyze in real time to prevent pollution;
12. Minimize the potential for accidents.

Although many of the Green Chemistry principles have not yet been applied in Viet Nam, their application could play an important role in reducing the potential for toxic releases or emissions from processes and products that continue to use or emit POPs.

Since 2018, UNDP in Viet Nam has been implementing the project **Application of Green Chemistry in Viet Nam to Support Green Growth and Reduction in the Use and Release of POPs/Harmful Chemicals**. The project aims to create the enabling environment for the introduction of Green Chemistry in Viet Nam and introduce GC applications in productive sectors with the specific goal of reducing the use and release of chemicals controlled under the Stockholm and Minamata Conventions. The project will also stimulate reduction in use and release of chemicals of high concern not covered under the Conventions. Co-benefits may arise from adopting GC application in reducing greenhouse gas (GHG) emissions.

Specifically, the project aims at reduction of the use of Persistent Organic Pollutants (POPs) and release of Unintentional Persistent Organic Pollutants (U-POPs) through introduction of green chemistry approaches in six industrial sectors in Viet Nam: chromeplating, pulp and paper manufacturing, plastic manufacturing, textile, pesticides, and paints & solvents. Specific guidance for each sector will be developed, and the green chemistry approach will be streamlined into the relevant legislation.

Two industrial facilities from 2 different sectors (out of the above six sectors) were selected in 2019 for the practical demonstration of the Green Chemistry approach: (i) **electroplating** and (ii) **paints & solvents**. The green chemistry approach will be demonstrated by application of a number of general interventions as well as sector-specific measures capable of reducing the use and releases of POPs in the two sectors selected for the practical demonstration.

The project is structured in 3 components:

1. Developing the enabling environment for Green Chemistry in Viet Nam;
2. Promote awareness on Green Chemistry and the benefits of the application of Green Chemistry and its guiding principles; and
3. Introduce Green Chemistry approaches into priority sectors and at least 2 entities.

The activities to be carried out under this contract are related to Output 3.1.3. (*Green Chemistry approaches introduced in at least 2 entities*) of the project, which is one of the outputs under Project Outcome 3.1 (*15 g-TEQ/a of U-POPs releases, 1 ton of POPs, and 0.002 tons of mercury reduced, and at least 65 tons of CO₂ through the introduction of GC in priority sectors*).

This component will ensure close coordination with the MPI/GEF/UNIDO/SECO project *Implementation of Eco-Industrial Park Initiative for Sustainable Industrial Zones in Viet Nam*. Even though the interventions under this project will not focus on priority zones, but on priority sectors, it will be possible to exchange lessons learned and experiences resulting between this project and the MPI/GEF/UNIDO/SECO project.

OBJECTIVES OF THE CONSULTANCY

The objectives of the assignment are to provide technical support, guidance, supervision and follow-up to the selected entities in the electroplating and paints & solvents sectors for implementation of demonstration GC activities.

The 03 selected ICs will, in close partnership with UNDP and PMU/MOIT, develop a specific Green Chemistry intervention at the selected facilities from the electroplating and paints & solvents sectors, including initial assessment of POPs use/release, modification of the facility operations, and environmental monitoring. After approval of the GC intervention, the consultant team will support the introduction/monitor the implementation of the chosen GC approaches and technologies at the selected industrial facilities.

An indicative list of possible GC interventions in the electroplating and paints & solvents sectors is provided in **Annex 1** at the end of this TOR.

DUTIES AND RESPONSIBILITIES

Three International Consultants (IC) will work on this assignment:

1. 01 Environmental Expert
2. 01 Electroplating Expert
3. 01 Paints & Solvents Expert

Environmental Expert

1. Together with other international experts and National Consulting Firms (NCF), make an inception visit to the two industrial facilities selected for demonstration and provide specific training for the execution of specific tasks and monitoring to be carried out by the NCF under this assignment;
2. Contribute to the GC intervention programs developed by Electroplating Experts and Paints & Solvents Experts
3. Provide substantive comments and feedback to the other experts on the team and to UNDP Viet Nam;
4. Make the visit to the selected facility after the implementation period for presentation of results of the demonstration period and obtaining acceptance of the GC interventions by management of the selected facilities;
5. Work with Electroplating Experts and Paints & Solvents Experts to determine POPs/PTS emission factors, estimate total POPs/PTS releases,
6. Establish methods for calculation and carry out calculation of POP/PTS GHG and other substances emissions and reduction and energy savings achieved after the implementation of the GC interventions compared to the baseline situation.
7. Develop a thematic report on environmental benefit from the GC intervention at the selected two industrial facilities.
8. Prepare, in coordination with the Electroplating Expert and Paints & Solvents Expert, consolidate a final report from the assignment for submission to UNDP and PMU.

Electroplating Expert

1. Work with NCF to collect data and information about the industrial facility selected, carry out desk review and prepare mutual workplan between ICs, NCF;
2. Make an inception visit to the industrial facility selected for demonstration:

- a. Collect additional and necessary information about the design, operation, and other related factors that can substantially influence the magnitude of POPs/PTS use and releases (including simplified mass balances, types and amounts of chemicals and raw materials used in the production process, etc.);
 - b. Determine the selected factory's chemical profile and conduct a detailed analysis of the production processes and waste inventory with reference to POPs/PTS;
 - c. Determine POPs/PTS emission factors, taking into account technologies, process characteristics, and operating practices at the demonstration facility;
 - d. Determine activity rates as values per product manufactured, feed material processed, or quantities of materials released;
 - e. Using the emission factors and activity rates, estimate total POPs/PTS releases and identify ways of ensuring compliance with the Green Chemistry principles;
 - f. Collect data on energy and water consumption at the selected demonstration plant and construct the facility's energy and water profiles;
3. Develop GC intervention program at the plant and seek for agreement with timelines for implementation
 4. Make the second visit to the industrial facility selected for kick off GC intervention
 - a. Provide basic training to the industrial facility staffs and other related stakeholders regarding the GC approach, findings and intervention program.
 - b. Propose modification of the production processes and operation characteristics with the aim of substitution of hazardous chemicals with safe alternatives;
 - c. Prepare an environmental monitoring plan at the selected industrial site (e.g. including online monitoring of stack flue gas, periodical sampling of effluents, etc.);
 - d. Develop a supervision application program of the proposed modifications of the production processes and operation practices and implementation of the environmental monitoring plan;
 5. Make the third visit to the selected facility after the implementation period for presentation of results of the demonstration period and obtaining acceptance of the GC interventions by management of the selected facilities;
 6. Prepare, in coordination with the Environmental Expert, a thematic report on GC intervention at electroplating plant, contribute to final report from the assignment for submission to UNDP and PMU.

Paints & Solvents Expert

1. Work with NCF to collect data and information about the industrial facility selected, carry out desk review and prepare mutual workplan between ICs, NCF;
2. Make an inception visit to the industrial facility selected for demonstration:
 - a. Collect additional and necessary information about the design, operation, and other related factors that can substantially influence the magnitude of POPs/PTS use and releases (including simplified mass balances, types and amounts of chemicals and raw materials used in the production process, etc.);

- b. Determine the selected factory's chemical profile and conduct a detailed analysis of the production processes and waste inventory with reference to POPs/PTS;
 - c. Determine POPs/PTS emission factors, taking into account technologies, process characteristics, and operating practices at the demonstration facility;
 - d. Determine activity rates as values per product manufactured, feed material processed, or quantities of materials released;
 - e. Using the emission factors and activity rates, estimate total POPs/PTS releases and identify ways of ensuring compliance with the Green Chemistry principles;
 - f. Collect data on energy and water consumption at the selected demonstration plant and construct the facility's energy and water profiles;
3. Develop GC intervention program at the plant and seek for agreement with timelines for implementation
 4. Make the second visit to the industrial facility selected for kick off GC intervention
 - a. Provide basic training to the industrial facility staffs and other related stakeholders regarding the GC approach, findings and intervention program.
 - b. Propose modification of the production processes and operation characteristics with the aim of substitution of hazardous chemicals with safe alternatives;
 - c. Prepare an environmental monitoring plan at the selected industrial site (e.g. including online monitoring of stack flue gas, periodical sampling of effluents, etc.);
 - d. Develop a supervision application program of the proposed modifications of the production processes and operation practices and implementation of the environmental monitoring plan;
 5. Make the third visit to the selected facility after the implementation period for presentation of results of the demonstration period and obtaining acceptance of the GC interventions by management of the selected facilities;
 6. Prepare, in coordination with the Environmental Expert, a thematic report on GC intervention at the paint and solvent plant, contribute to final report from the assignment for submission to UNDP and PMU.

METHODOLOGY

Before the start of the assignment, the consultant team will work with local consulting firms to draft a detailed Assignment Plan, discuss it with UNDP and PMU/MOIT, and submit the final Assignment Plan for approval by UNDP and PMU.

DELIVERABLES

The selected ICs will collaborate to produce the following deliverables in English:

No.	Deliverable	Deadline
1	Draft Assignment Plan for discussion with National Consulting Firm UNDP and PMU	Two weeks after signing of the contract
2	Final Assignment Plan for approval of UNDP and	Upon discussion with UNDP and

	PMU	PMU
3	Inception visit of the selected industrial facility, including specific training of NCF.	Within 04 weeks after approving of the final assignment plan
4	Report from the inception visit of the selected industrial facility and the GC intervention program.	02 weeks after the inception visit, but not later than 3 months after signing of the contract
5	Environmental monitoring plan and supervision application program after the second visit	02 weeks after the second visit but not later than 6 months after signing of the contract
6	Final report from the assignment	3 weeks after the third visit, but not later than November 10, 2020

DURATION OF ASSIGNMENT AND DUTY STATION

Estimated number of working days for each IC:

- Environmental Expert: 50 working days over a period of 8 months (including home based and mission to the plant)
- Electroplating and Paint & Solvent Expert: 60 working days for each expert over a period of 8 months (including home based and mission to the plant).

Duty Station: Home-based with travel to Hanoi and the selected industrial facilities. Selected ICs will each have at least three 5-day missions to Viet Nam (at the PMU office in Hanoi and the selected industrial plant in their sector). **Tickets for three missions to Viet Nam and 6 days per diems in Ha Noi to be included in the financial offer.** Travel costs to the selected industrial plans in their sector will be paid separately by the PMU based on **UN-EU cost norms (see attached file for reference)**

COMPETENCIES

- Demonstrated commitment to UNDP's mission, vision and values;
- Sensitivity and adaptability to culture, gender, religion, race, nationality and age;
- Highest standards of integrity, discretion, and loyalty;
- Functional competencies;
- Excellent analytical and research skills;
- Excellent communication skills (spoken, written and presentational);
- Good interpersonal skills and ability to work in and with teams;
- Ability to set priorities and manage time effectively.

EXPERIENCE AND QUALIFICATIONS

Environmental Expert

- Postgraduate or higher education degree in chemistry, environment, engineering, or related fields.

- At least 10 years of practical working experience in environmental management, chemical and waste management in industrial processes, and management of hazardous and toxic chemicals, including POPs/PTS.
- At least 10 years of experience in following environmental areas: energy saving in industrial processes, management of POPs/PTS, management of hazardous chemicals and hazardous waste, environmental monitoring of industrial processes (including the development of monitoring plans), sampling of waste and environmental indicators, and handling of waste and hazardous substances
- Good understanding and experience in POPs/PTS baseline assessment and calculation
- Good understanding and knowledge of MEAs (especially the Stockholm Convention on POPs, the Minamata Convention on Mercury, and the Basel Convention).
- Working experience in developing countries, especially in Viet Nam, is an advantage.
- Good writing skill (with submission of at least two sample reports).

Electroplating Expert

- Postgraduate or higher education degree in chemistry, engineering, or related fields.
- At least 15 years of practical working experience in chemical and in industrial processes, with at least 08 years working in the electroplating sector.
- Proven knowledge of the use of chemicals in industrial processes in the electroplating sector.
- Understanding and knowledge of MEAs (especially the Stockholm Convention on POPs, the Minamata Convention on Mercury, and the Basel Convention).
- Working experience in developing countries, especially in Viet Nam, is an advantage.
- Good writing skill (with submission of at least two sample reports).

Paints & Solvents Expert

- Postgraduate or higher education degree in chemistry, engineering, or related fields.
- At least 15 years of practical working experience in chemical and industrial processes with at least 08 years working in the paints & solvents sector.
- Proven knowledge of the use of chemicals in industrial processes in the paints & solvents sector.
- Understanding and knowledge of MEAs (especially the Stockholm Convention on POPs, the Minamata Convention on Mercury, and the Basel Convention).
- Working experience in developing countries, especially in Viet Nam, is an advantage.
- Good writing skill (with submission of at least two sample reports).

PAYMENT TERMS

Payments will be authorized upon approval and acceptance of the contract deliverables by UNDP.

- First payment of 10% of the contract value will be made upon submission and acceptance of the final Assignment Plan.

- Second payment 30% of the contract value will be made upon approval of Report from the inception visit of the selected industrial facility and the GC intervention program.
- Second payment 30% of the contract value will be made upon approval of Environmental monitoring plan and supervision application program after the second visit
- Last payment of 30% of the contract value will be made upon submission and acceptance of the Final Report.

ANNEX 1:

Possible interventions for reduction in the use and release of POPs in the two target sectors

I. Electroplating

GC category	Situation in the solvent and bio-solvent industry in Viet Nam	Potential GC intervention	Relevance to POPs/PTSs
1. Prevent waste.	Waste slug and wastewater containing POPs and toxic metal are a common issue of the Chrome Plating Industry in Viet Nam.	<ul style="list-style-type: none"> • Increase the number of closed-loop processes to prevent the release of contaminants in wastewater, including PFOS. • Ensure rinse water is treated before release. • Improve waste treatment processes. • Reduce CrVI to CrIII before discharge. 	Yes, direct.
2. Maximize atom economy.	Most small-scale chrome-plating plants use basic processes without automated control of bath conditions.	<ul style="list-style-type: none"> • Reduce/optimize the use of etching agents. • Adopt Direct Current (DC) rectifiers and automated control of the chromium bath to reduce the loss of the plating agent (chromium). 	Yes, direct.
3. Design less hazardous chemical syntheses.	Chrome plating processes making use of PFOS as etching agent and mist suppressant.	<ul style="list-style-type: none"> • Use alternative non-PFOS mist suppressant (see below). 	Yes, direct.
4. Use safer solvents and reaction conditions.	PFOS based mist suppressants used for the prevention of chrome-contaminated mists in the workplace.	<ul style="list-style-type: none"> • Use non chemical mist-suppressants (like polypropylene floating balls) or non PFOS mist suppressants. • Introduce alternative chrome-plating processes 	Yes, direct.

		(under development: trivalent chromium, spray and PVD coatings).	
5. Increase energy efficiency.	Most chrome-plating small-scale plants use basic processes without process control to reduce energy consumption.	<ul style="list-style-type: none"> • Introduce process control to reduce energy use for heating baths (e.g. insulation of plating baths to prevent energy losses). 	Yes, indirect(U-POPs).
6. Use catalysts, not stoichiometric reagents.	Sulfuric acid mostly used as catalytic agent	<ul style="list-style-type: none"> • Use of less toxic, more balanced, mixtures of catalysts to reduce toxicity of the bath. 	No.
7. Analyse in real time to prevent pollution.	No real-time monitoring of effluent implemented in most of the small-scale plants.	<ul style="list-style-type: none"> • Real time monitoring of air and wastewater effluents. 	Yes, indirect.
8. Minimize the potential for accidents.	Airborne release of chromic acid in the workplace is one of the major causes of worker illness. However, the use of PFOS as mist suppressant introduces a new source of risks in case of non-closed loop processes.	<ul style="list-style-type: none"> • Use of non-chemical mist suppressant like poly-propylene floating balls on the bath surface. • Use of chromic acid scrubbers. 	Yes, direct.

II. Paints & Solvents

GC category	Situation in the solvent and bio-solvent industry in Viet Nam	Potential GC intervention	Relevance to POPs/PTSs
1. Design less hazardous chemical syntheses.	The petro-chemical industry and the chlor-alkali process produce most of the solvents used in Viet Nam.	<ul style="list-style-type: none"> • Firms manufacturing non-harmful bio-solvents are emerging. • Promote the development of industries in the bio-solvent sector. 	Yes, direct and indirect.
2. Design safer chemicals and products.	The use of chlorinated and halogenated solvents is widespread in industrial processes. Some solvents produced by the petrochemical industry (BTEX series) are also commonly used and known for their toxicity. SCCP are used in the formulation of paints.	<ul style="list-style-type: none"> • Design solvents, which can replace halogenated solvents or BTEX solvents commonly used in products. • Redesign paint mixtures to avoid the use of SCCP. 	Yes, direct and indirect.
3. Use renewable feedstocks.	As the petrochemical industry and the chlor-alkali process produce most of the solvents used in Viet Nam, feedstocks are non-renewable. A limited number of firms are currently investing in bio-solvents.	<ul style="list-style-type: none"> • Production of solvents from the distillation of vegetable, renewable feedstock. 	No; however, can reduce GHG emissions.
4. Design chemicals and products to degrade after use.	Chlorinated solvents and aromatic solvents are usually hard to degrade. Most of the solvents used in Vietnamese industry are imported chlorinated or aromatic solvents. Some paint formulation is still based on the use of SCCP.	<ul style="list-style-type: none"> • Develop the production and promote the use of bio-degradable solvents to replace chlorinated, non-degradable solvents. • Develop the production of paints not containing SCCP. 	Yes, direct and indirect.

ANNEX IV

OFFEROR'S LETTER TO UNDP
CONFIRMING INTEREST AND AVAILABILITY
FOR THE INDIVIDUAL CONTRACTOR (IC) ASSIGNMENT

Date _____

(Name of Resident Representative/Bureau Director)
United Nations Development Programme
(Specify complete office address)

Dear Sir/Madam:

I hereby declare that:

- A) I have read, understood and hereby accept the Terms of Reference describing the duties and responsibilities of [*indicate title of assignment*] under the [*state project title*];
- B) I have also read, understood and hereby accept UNDP's General Conditions of Contract for the Services of the Individual Contractors;
- C) I hereby propose my services and I confirm my interest in performing the assignment through the submission of my CV which I have duly signed and attached hereto as Annex 1;
- D) In compliance with the requirements of the Terms of Reference, I hereby confirm that I am available for the entire duration of the assignment, and I shall perform the services in the manner described in my proposed approach/methodology which I have attached hereto as Annex 3 [*delete this item if the TOR does not require submission of this document*];
- E) I hereby propose to complete the services based on the following payment rate: [*please check the box corresponding to the preferred option*]:
 - An all-inclusive daily fee of [*state amount in words and in numbers indicating currency*]
 - A total lump sum of [*state amount in words and in numbers, indicating exact currency*], payable in the manner described in the Terms of Reference.
- F) For your evaluation, the breakdown of the abovementioned all-inclusive amount is attached hereto as Annex V;

G) I recognize that the payment of the abovementioned amounts due to me shall be based on my delivery of outputs within the timeframe specified in the TOR, which shall be subject to UNDP's review, acceptance and payment certification procedures;

H) This offer shall remain valid for a total period of _____ days [*minimum of 90 days*] after the submission deadline;

I) I confirm that I have no first degree relative (mother, father, son, daughter, spouse/partner, brother or sister) currently employed with any UN agency or office [*disclose the name of the relative, the UN office employing the relative, and the relationship if, any such relationship exists*];

J) If I am selected for this assignment, I shall [*please check the appropriate box*]:

- Sign an Individual Contract with UNDP;
- Request my employer [*state name of company/organization/institution*] to sign with UNDP a Reimbursable Loan Agreement (RLA), for and on my behalf. The contact person and details of my employer for this purpose are as follows:

K) I hereby confirm that [*check all that applies*]:

- At the time of this submission, I have no active Individual Contract or any form of engagement with any Business Unit of UNDP;
- I am currently engaged with UNDP and/or other entities for the following work:

Assignment	Contract Type	UNDP Business Unit / Name of Institution/Company	Contract Duration	Contract Amount

- I am also anticipating conclusion of the following work from UNDP and/or other entities for which I have submitted a proposal:

Assignment	Contract Type	Name of Institution/Company	Contract Duration	Contract Amount

L) I fully understand and recognize that UNDP is not bound to accept this proposal, and I also understand and accept that I shall bear all costs associated with its preparation and submission and that UNDP will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the selection process.

M) **If you are a former staff member of the United Nations recently separated, please add this section to your letter:** I hereby confirm that I have complied with the minimum break in service required before I can be eligible for an Individual Contract.

N) I also fully understand that, if I am engaged as an Individual Contractor, I have no expectations nor entitlements whatsoever to be re-instated or re-employed as a staff member.

O) Are any of your relatives employed by UNDP, any other UN organization or any other public international organization?

YES NO If the answer is "yes", give the following information:

Name	Relationship	Name of International Organization

P) Do you have any objections to our making enquiries of your present employer?

YES NO

Q) Are you now, or have you ever been a permanent civil servant in your government's employ?

YES NO If answer is "yes", WHEN?

R) REFERENCES: List three persons, not related to you, who are familiar with your character and qualifications.

Full Name	Full Address	Business or Occupation

S) Have you been arrested, indicted, or summoned into court as a defendant in a criminal proceeding, or convicted, fined or imprisoned for the violation of any law (excluding minor traffic violations)?

YES NO If "yes", give full particulars of each case in an attached statement.

I certify that the statements made by me in answer to the foregoing questions are true, complete and correct to the best of my knowledge and belief. I understand that any misrepresentation or material omission made on a Personal History form or other document requested by the Organization may result in the termination of the service contract or special services agreement without notice.

DATE: _____

SIGNATURE: _____

NB. You will be requested to supply documentary evidence which support the statements you have made above. Do not, however, send any documentary evidence until you have been asked to do so and, in any event, do not submit the original texts of references or testimonials unless they have been obtained for the sole use of UNDP.

Annexes *[please check all that applies]:*

- CV shall include Education/Qualification, Professional Certification, Employment Records /Experience
- Breakdown of Costs Supporting the Final All-Inclusive Price as per Template

GUIDELINES FOR CV PREPARATION

WE REQUEST THAT YOU USE THE FOLLOWING CHECKLIST WHEN PREPARING Your CV:

Limit the CV to 3 or 4 pages

NAME (First, Middle Initial, Family Name)

Address:

City, Region/State, Province, Postal Code

Country:

Telephone, Facsimile and other numbers

Internet Address:

Sex, Date of Birth, Nationality, Other Citizenship, Marital Status

Company associated with (if applicable, include company name, contact person and phone number)

SUMMARY OF EXPERTISE

Field(s) of expertise (be as specific as possible)

Particular development competencies-thematic (e.g. Women in Development, NGOs, Privatization, Sustainable Development) or technical (e.g. project design/evaluation)

Credentials/education/training, relevant to the expertise

LANGUAGES

Mother Tongue:

Indicate written and verbal proficiency of your English:

SUMMARY OF RELEVANT WORK EXPERIENCE

Provide an overview of work history in reverse chronological order. Provide dates, your function/title, the area of work and the major accomplishments include honorarium/salary.

References (name and contact email address) must be provided for each assignment undertaken by the consultant that UNDP may contact.

UN SYSTEM EXPERIENCE

If applicable, provide details of work done for the UN System including WB. Provide names and email address of UN staff who were your main contacts. Include honorarium/salary.

UNIVERSITY DEGREES

List the degree(s) and major area of study. Indicate the date (in reverse chronological order) and the name of the institution where the degree was obtained.

PUBLICATIONS

Provide total number of Publications and list the titles of 5 major publications (if any)

MISCELLANEOUS

Indicate the minimum and maximum time you would be available for consultancies and any other factors, including impediments or restrictions that should be taken into account in connection with your work with this assignment.

Annex V

FINANCIAL OFFER

Having examined the Solicitation Documents, I, the undersigned, offer to provide all the services in the TOR for the sum of USD .

This is a lump sum offer covering all associated costs for the required service (fee, meal, accommodation, travel, taxes etc).

Cost breakdown:

No.	Description	Quantity	Unit Rate	Total
1	Consultancy fee			
2	Out of pocket expenses			
2.1	Travel – returned tickets (3 missions to Ha Noi)	3		
2.2	Per diem in Ha Noi (6 days/ mission)	18		
2.3	Full medical examination and Statement of Fitness to work for consultants from and above 65 years of age and involve travel – (required before issuing contract).			
2.5	Others (pls. specify)			
	TOTAL			

** Individual Consultants/Contractors who are over 65 years of age with assignments that require travel and are required, **at their own cost**, to undergo a full medical examination including x-rays and obtaining medical clearance from **an UN-approved doctor** prior to taking up their assignment.*

I undertake, if my proposal is accepted, to commence and complete delivery of all services specified in the contract within the time frame stipulated.

I agree to abide by this proposal for a period of 120 days from the submission deadline of the proposals.

Dated this day /month _____ of year _____

Signature _____

(The costs should only cover the requirements identified in the Terms of Reference (TOR) Travel expenses are not required if the consultant will be working from home).