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## Joint UNIDO-UNEP Programme on Resource Efficient and Cleaner Production (RECP)

### National Cleaner Production Programme in Albania



## Third Progress Report

1 September – 30 November 2010

Prepared by:



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## 1. THE PURPOSE OF THE PROJECT AND EXPECTED OUTCOMES:

The United Nations Industrial Development Organisation (UNIDO) and United Nations Environment Programme (UNEP) are jointly implementing a National Cleaner Production Programme (NCPP) in Albania as part of the global joint programme on **Resource Efficient and Cleaner Production (RECP)**. It supports the achievement of result 5.1.2 related to legal and regulatory mechanisms and financial incentives in place to:

- reduce environmental degradation and
- promote energy efficiency and sustainable natural resource utilization .

It also builds upon the extensive experience of UNIDO and UNEP to establish and support comparable NCPPs, which are currently operational in 46 developing and transition countries ([www.unido.org/cp](http://www.unido.org/cp)).

The primary aim of the Albanian NCPP programme is to foster the widespread application of Resource Efficient and Cleaner Production (RECP) methods, practices, technologies and policies among businesses and other organizations to contribute to sustainable industrial development and sustainable consumption and production in Albania. The NCPP includes capacity development, promotion and professional training, industry demonstrations and support for creation of supportive policy mechanisms and targets the hotel/tourism accommodation, agro- and food processing and mining and metallurgical sectors.

NCPP is implemented under the guidance of NCPP Steering Committee with membership of national government counterparts respectively:

- Council of Ministers (Department of Strategy and Donor Coordination)
- Ministry of Economy, Trade and Energy (METE)
- Ministry of Environment, Forest and Water Administration (MEFWA) and
- United Nations Resident Coordinator
- UNIDO and UNEP
- Further participation of the business sector is also foreseen

NCPP focuses in three priority sectors in Albania:

1. Tourism -hotels
2. Agro-industry and food processing
3. Mining, minerals processing and metallurgical

Expected Outputs

- Competent network of Albanian national auditors who deliver value-adding RECP services to Albanian enterprises, in particular in the three priority sectors will be established and are expected to make an active contribution to the promotion of CP and NCPP in Albania, in particular by sharing results and experiences and contributing to drafting of overall conclusions and recommendations on CP opportunities for Albanian industries.
- Implementation of RECP concepts, methods and techniques by Albanian businesses with verified environment, resource use and economic benefits
- Mechanisms for mainstreaming concepts and policy instruments for RECP in relevant Albanian policies and regulations have been created

## 2. SUMMARY OF DIFFERENT ACTIVITIES WITHIN THE REPORTING PERIOD

The overall objective of this project is continuous application of preventive environmental strategies to processes, products and services to increase efficiency and reduce risks to humans and the environment. The project has progressed toward achieving its objectives. An outline of activities that have taken place so far is provided below.

Several meetings have been organised with the CP auditors/ national experts as part of the follow up training and in order to assist them in the performance of their tasks and assignments. In this context discussions regarding the CP Interim reports status and the challenges faced in the preparation of the reports were the main topics in the meeting with the national experts on September 4th, 2010.

In addition Mr. Philip Peck from the International Institute for Industrial Environmental Economics at Lund University, Sweden came on mission on October 4<sup>th</sup> – 6<sup>th</sup> to facilitate the national experts CP assessment process. During his mission individual review sessions for each pair of national experts were organized and a final report template was established to facilitate them

### **Mainstreaming RECP in Albanian policies.**

The NCPP team assisted with the preparation, publication and distribution of a complete set of NCPP documents included the RECP strategy to all relevant stakeholders.

NCPP team made substantial efforts and succeeded to bring together all the relevant stakeholders with respect to the mainstreaming of the RECP into the Albanian legislation and policies. In this framework three major events were successfully organized:

**The Technical Working Group Session** was held on 17 November 2010 at the conference hall of the Ministry of Environmental, Forest, and Water Administration (MEFWA) with the participation of technical officials from the relevant line ministries as well as other relevant stakeholders organized by NCPP team in conjunction with the Secretary General of the MEFWA. This event was organized with the purpose of discussing the possible modalities of implementing the proposed strategic measures for mainstreaming RECP in Albanian policy and strategy frameworks. The output from this Technical Working Session will serve as an initial plan of implementation including the key policy instrument (s) that need to be developed for the effective promotion and implementation of RECP

**The Inter-Ministerial and Donors Meeting** was held on 18 November 2010, at the Tirana International Hotel with the participation of the relevant Senior Officials Ministries, relevant Donors and other stakeholders as well. This meeting was organized by NCPP team in conjunction with the Minister of the Environment Cabinet and also the office of Mr. Taulant Bino the Vice Minister of MEFWA, with the purpose of Mainstreaming RECP in the national policy framework and industrial practices which requires the active involvement of all key stakeholders. The Inter-Ministerial and Donors Meeting was organised with the purpose of disseminating the key conclusions and recommendations of the policy review process and to facilitate the contribution and involvement of this stakeholders in the subsequent processes.

**The Media Seminar on Mainstreaming Resource Efficient and Cleaner Production (RECP) in Albania** was held took place on 19<sup>th</sup> November 2010 at the Rogner Hotel Europapark with the participation of the a considerable number of the main Albanian media representatives. This seminar was organized by NCPP team in collaboration with the One UN communication team.

The main objective of this event was to inform the media about NCPP- Albania and the key strategic elements that need to be addressed on mainstreaming resource efficient and cleaner production in Albanian policy and strategy framework. In addition it aimed to improve the understanding of the benefit of promoting RECP and to succeed in further dissemination of the information to the general public.

### **Programme Outcomes**

Within the work to achieve the **Outcome 1: Competent network of Albanian national auditors who deliver value-adding RECP Services to Albanian enterprises and other organizations in particular in the priority industry sectors.**

**Activity 1.1.1** Identify and select national experts for first round of training  
Completed

**Activity 1.1.2** Deliver initial training and administer initial test  
Completed

**Activity 1.1.3** Supervised trainees in demonstration projects  
In the framework of cooperation with national auditors a series of meetings have been organized by NCPP team, where the main objective has been submission and the establishment of the current problems faced by national auditors in their CP companies assessment work.

An official meeting was organized on September 4<sup>th</sup>, at ECAT Tirana premises with the participation of the 12 CP auditors/experts in order to discuss regarding the status of interim reports and the challenges faced by the pairs of auditors on the preparations phases.



The main issues/problems raised in the meeting consist:

- The interim reports procedure regarding hotels was prepared without any major problems. However some difficulties were faced in the case of the reports for the food industry.
- The analyzing process steps and the generating of the CP options were finalized. However problems were faced when it came to the financial calculations.
- KPI calculation needs to be done while the requested data are missing or not given by the companies due to confidentiality issues.



Please find attached Annex 1\_ Minutes of the meeting

In respond to the questions raised a couple of site visits were scheduled accordingly. In addition assistance from the international expert (Mr. Philip Peck from the International Institute for Industrial Environmental Economics at Lund University, Sweden) was requested and provided in order to facilitate the process.

In this framework on October 4th - 6th Mr. Philip Peck, came on mission to Tirana to assist national auditors on their work in finalizing the reports. Individual review sessions were organized at ECAT Tirana premises for each pair of national auditors

In each individual review session the discussion was focused on uncertain or unclear issues like:



- The specific data such as the prices for the raw material; energy and water consumption are very difficult to get.
- There are data missing regarding specific and total consumption of raw materials. In some companies there are no equipment and procedures to register or to monitor them.
- The costs of the classified materials and the estimation of the solid waste. The costs of waste generated and the disposal costs are difficult to calculate.
  
- Finalizing a financial balance after CP implementation is difficult due to data missing and an approximation of data must be done.
- Missing of professional technical support in the field of energy, engineering, logistic.
- Linking the problem of planning and distributing process in companies (cause loss/waste) with a master study from Institute of Statistic was one alternative suggested by the international consultant.



In light of the conclusions of the meetings, feedback and concrete example of the final report, whose draft was prepared by Mr. Peck in collaboration with UNIDO, was further developed.

Please find attached Annex 2\_ Minutes of the Meeting and Photo documentation

**Activity 1.1.4 • Follow Up Trainings for national auditors**  
Completed

**Activity 1.1.5 – Award CP Award to trainees**  
Postponed

**Activity 1.1.5 – Award CP Award to trainees**  
Postponed

Within the **Outcome 2: Implementation of RECP concepts, methods and techniques by Albanian businesses with verified environment, resource use and economic benefits.**

**Activity 2.1.1** Identify and recruit demonstration companies from hotel, agro-processing and minerals sectors  
Completed

**Activity 2.1.2** Conduct RECP assessments by National auditors

RECP assessment is the key issue of this programme. The task started by quick scanning phase where the quick fix and CP alternatives were identified. The required information regarding energy, water, material used and waste have been collected and analyzed. Specifically this activity entailed assessment of CP alternatives/interventions data available at relevant selected companies identifying precise needs for collection of further realistic data regarding the KPI calculation. This phase ended with the preparation of the final reports for the 6 selected demonstration companies. The other 6 reports are still in the process of finalizing them as a lot of related data are missing or not given. The final draft reports have been sent out to the relevant international experts for the comments. The national auditors are working to reflect the comments of the international expert related to the tourism sector. Still pending the comments from Mr. Philip Peck in regards to the other sectors to be reflected by the national auditors.

## **Food and Agro-Processing**

**CP Company: ALD KRIS “DERBY”**

**Business area:** Production of Soft drinks

**Main services:** Soft drinks, Fruit juices, Water

### CP assessments:

- Installation of water flow meters
- Change of osmosis membranes
- Change of Carbon active filters
- Installation of a semi automatic line (filling, capping),
- Insulation of the ozone generator tank
- Regular maintenance of lines, valves, and timely intervention to prevent loss of water due to leakage.
- Assembly of guns on the end of hoses for water / steam (use of high pressure), which are used for manual hygiene maintenance,
- Using the latest rinsing water (pure water) from the CIP system as the first rinsing water (water recirculation)
- Insulation of Chilled water tank, because it is located outside with sun part of the da
- Improving waste management (better classification of waste -reduction of municipal solid waste, in favor of increasing the secondary raw materials)
- Good maintenance of distribution pipes
- Selling the actual gas fired boiler because it is too large and now significantly underutilized. Changing it with a smaller one
- Reconstruction of steam distribution.
- Construction of temporary storage spaces for final product, Applying a well organized logistic plan for moving and using raw materials inside the production area.



- Change of some elements of the contracts with final product distributor. New rule: “the product must be returned from the market into the factory, at least 3 months before the expiry date”
- Improve the practice of storing chemicals (acids and bases apart, oxidizing and organic matter, use the appropriate shelves and containers with sufficient capacity for collection of chemicals in case of accidental spilling, consider the reduction in use of toxic assets)

### CP Company: “VALTELINA” shpk “Lori Caffè”

**Business area:** Coffee Roasting & Packaging

**Main services:** Lori Caffè Espresso, Lori Caffè Turkish

### CP assessments:

- The storage of raw material for the humidity control in the roaster area, because it is an energy saving solution.

- Move the air conditioner because it may have a direct short circuit to an exhaust vent for cooled air.
- To recycled the packaging materials, for example by contracting with the supplier for the collection of the damaged cartons.
- To calculate immediately the consumption of the compressor.
- Construction of a warehouse for the raw materials, final products and promotional materials to create more space this will free up work areas for more rational production, and allow production increases in the future.
- To see the possibilities to warm the water with the hot air of the roster and to use for hygienic of personnel rather than having a separate gas fired boiler for sanitary hot water heating..
- To examine the possibilities of using the natural light to the grinder area rather than electrical lighting.



**CP Company: Stefani & CO**

**Business area:** Brewery

**Main services:** Producers and distributor of beer, soft drinks, mix drinks, energy drink

**CP assessments:**

- Reduction of energy consumption through reuse of wort-cooling water as the process water for the next mash
- Optimisation of steam electricity ratio. Some measures undertaken at “Stefani & Co” included:
  - Vapour heat recovery at brewhouse
  - Reduction in wort boiling time ( from 30 min to 17 min)
  - Insulation of process plant (specially at brewhouse)
  - Heat recovery from wort cooling
  - Variation of keg washing procedure with size of kegs (30 l and 50 l kegs)
  - Optimizing bottle washing machine running
  - Insulation of pipes, valves and flanges at boiler (steam producer).
  - Disposal of solid wastes as by-products preferably saleable)
  - Use of spent grain as animal feed
  - Use for livestock feed of spent yeast that is not reused
  - Disposal of trub by adding it to spent grain
  - Recovery of spilled beer through distillation or evaporation procedures
  - Filtration of bottom sediments from final fermentation tanks for use as animal feed



- Collection of broken glass, bottles, cans and PET that cannot be used, and waste cardboard for recycling.
- Improve brewhouse yield through process changes, mill adjustments (fine milling), optimisation of lauter tun, etc..
- Reduce resource consumption and waste pollutant loadings by reducing Kieselguhr consumption through improved yeast settling by: selecting better quality malt;
- Optimizing brewhouse procedures;
- Installing well designed storage and transfer equipment;
- Providing longer storage periods in order to have an natural settling process (beer clarification).
- CO2 recovery and utilization

**CP Company: “ALSI @ CO”Krik- Krak**

**Business area:** Roast and package dried fruit, kitchen herbs

**Main services:** Roasted and packaged hazelnuts, peanuts, raisin, kitchen herbs etc.

**CP assessment:**

- To see the possibilities of another roaster with gas or to calculate better the energy consumption of the roaster.
- To buy a energy transformator (stabilizer) to convert the energy from 190 v in 220 v.
- We can reuse the package material and the product, when the packed products don't have the right weight.
- We have loss of time, efficiency, safety of employees, high cost of production.
- Its very dark and we have to see the possibilities to use the economic lights.
- We have to think what to do with waste after roasted of final products.
- To control the humidity of the storage area of the raw material and final production.
- To organize the space for storage of final products because they a lot of space but not good management of it.



**CP Company: Sejega**

**Business area:** Food production

**Main services:** Pickled paprika, cucumbers, sauces, salads, powder product, vinegar and industrial honey

**CP assessment:**

- Cardboard recycling,
- Wood palates recycling,
- Glass and metallic jar recycling,
- Internal water recycling,
- Overall insulation
- Recovery of by-products from organic waste
- Increase of raw material use efficiency (losses during unloading, washing and manual handling)
- Assess current steam boiler efficiency
- Evaluate operation costs and possible improvements of oven peppers
- Evaluate costs and efficiency (heat and cooling) of sterilizer



**Hotels and Restaurants**

**CP Company: Hotel Dolce Vita**

**Business area:** Hotel –Tourism

**Main services:** Hotel, swimming pool, parking, conference room

**CP assessment:**

- Reduce the pressure in installation.

- Install flow restrictors (air raters)
- Reduce the frequent change of linen up to one times per three days.
- Put Notes at the rooms, that instruct the guests how to announce the cleaning ladies to change dirty terry.
- Reduce the water consumption, so to reduce of the use of tank water, except in the case of any lack of principal water supplied.
- Install new equipment for heat recovery from chillers' compressors.
- Install new equipment for heat recovery from flue gas
- Install heat exchanger at the washing machines
- Install dish water heat recovery system
- Replace existing bulbs with low energy consumption bulbs in the rooms and corridors
- Instruct the hotel personnel to shut down the corridors lights when it is natural light.
- Install movement sensors.
- Connect to the master switch all the electric consumers of the guests rooms
- Instruct the cleaning ladies to switch off the Air Conditioning, when the guests are not in rooms or the rooms are not occupied. Instruct the guests to switch off the Air Conditioning, when are not in rooms.
- Instruct the cleaning ladies to switch off TV set, when the rooms are not occupied.
- Instruct the cleaning ladies to unplug the mini-fridges when the rooms are not occupied. The plugs can be removed easily.
- Set a higher value of temperature in summer time for fresh air.
- Feed the washing machines with warm water from heating central system.
- Feed the dish washer with warm water from heating central system.
- Reduce the temperature of washing cycle up to 60oC.
- Make the sorting of the dirty items according to the degree of staining, so use separate washing cycles according to the rate of dirty.
- Turn off the heated roll ironer when it is not in use.
- Reduce the distance of the hood from the burners, so to reduce the energy consume.
- Arrange curtains, blinds or shades at the windows, to reduce the warming due to the sunlight



**CP Company: Mondial Hotel**

**Business area:** Hotel services/ hospitality

**Main services:** Accommodation, food and beverages, conferences, money exchange, taxi, souvenirs



**CP areas identified for improvements:**

- Sunlight mirrors (provision of sunlight energy),
- Sunlight mirrors (provision of sunlight energy),
- Provision of 2 furnaces which operate based on load inputs
- Provision of air-conditions that operates based on load status

**CP Company: “At Stela” restaurant and resort**

**Business area:** Hotel –Tourism

**Main services:** Multi services Restaurant, Hotel, Bar, Swimming pool, tennis court

**CP areas identified for improvements:**

- Introduce waste selection and recycling (search for suitable recycling companies)
- Buying in bulk instead of individually packed products.
- Avoiding single use or disposable items.
- Avoiding products with excessive packaging material
- Open 3 times a day for 3 minutes the windows. Install automatic switch off for the air-condition and heater on the windows and doors
- Shading the air conditioner systems placed on the roof
- Remove the server from the office. This will avoid intensive cooling of the office
- Install refrigerators away from heat-generating appliances, such as electric, gas, or firewood stoves, electric or microwave ovens, since their proximity will cause the refrigerator to overwork
- Fix the ventilation of the oven will avoid intensive cooling of the kitchen
- Check with the suppliers
- Turn off all kitchen and restaurant equipment and appliances when they are not needed, including extractor fans, burners, ovens, fryers, plate warmers, coffee makers and conveyor toasters. Leave just one grill, one frying pot, one boiling pot working instead of 4 each



- Between meal services, make sure that all unnecessary lights are turned off in the restaurants and that the heating/cooling system is either turned off or set to a more energy-efficient temperature (e.g., 26°C during the cooling season and 19°C during the heating season)lights, hood , air conditioning
- Cover the pots when boiling water
- Connect the dishwashing machines and laundry washing machines to the warm water when source will be available (hot water from the brewery) Dish washers are the largest energy consumer Install hot water connecter.
- Prolong the life of the cooking oil by regulating temperature , using a minimum amount of oil, keeping the food dry, emptying and cleaning the paths regularly, heating the oil gradually, reducing the oil temperature when not in use
- Install solar panels for producing warm water
- Use the heat from the brewery for heating the ball room and inside pool and therapeutic area
- Check the quest toilets and staff bathrooms for preventing water leaks
- Install foot taps at the kitchen's sinks. This will lead to savings in water consumption
- Cover the pool. Evaporative losses from swimming pools can be significant. Fitting a pool cover can result in 30-50% savings in water and chemical use
- Separate table cloths from the waste when clean up the tables from the restaurant, in order to avoid to get them more dirty Laundry shall not be so intensive which will allow savings of water and energy and chemicals consumption
- Install solar panel for the use of warm water of the indoor pool

**CP Company: Xheko-Imperial Hotel**

**Business area:** Hotel –Tourism

**Main services:** Accommodation; Restaurant; Bar; Conference room; Boutique; Taxi; Wireless

**CP areas identified for improvements:**

- Replace existing bulbs with low energy consumption bulbs in all the area of the façade
- Replace existing bulbs with low energy consumption bulbs in the public toilets
- Installation of the motion sensors in the public toilets (with “LED” lamps 9W) and in the hallway (with “LED” lamps 9W) from the old building.
- Check the lighting in the economic rooms
- Install automatic control system
- Improve door insulation in the conference room and replace the door in the laundry.
- Replacing the door automatic mechanism in the conference room.
- Conference room cooling to be served with a central air conditioning device (not many separate ones within one environment).
- The completing of thermo isolation of heating agent pipelines
- Implementing of automatic system for temperature control
- Decrease the temperature of operation of washing machine (900C is too high).
- Relocate the refrigerators from the kitchen
- Install automatic system controlling of the temperature in the kitchen.
- Install automatic system controlling of the temperature in the hallway.
- Installing the uptake in a lower distance.
- Is more to set up the room temperature on a lower level.
- Connecting the washing machines to the hot water network.
- Decrease the temperature of operation of dish washing machine and connecting it to the hot water network
- Utilization of heat through the heat exchanges of used water before to discharge to the sewage system. (heat exchanger installing)
- Install solar panels for producing the warm water



- The installation of a heat recovery economizer
- Isolation of the thermal agent pipes
- Replace existing bulbs with low energy consumption bulbs.
- Implement rule to shut down minibars when the room is not used
- Changing the locations of minibars
- Replace minibars with hallway refrigerators
- Check the conditioners and boilers where there are no clients
- Decreasing the temperature of warm water heated with electrical boilers
- Use professional detergents which wash at low temperatures
- Implementation of automatic dozing will diminish the actually cost of all cleaning agent use by 20 %.
- Using big professional packages.
- Use pots for honey and jam, use butter in bulk. Buy in bulk instead of individual packed products
- Contact the supplier company for smaller packages
- Use cosmetics from dispensers instead small recipients.
- Using big bottles (1.5lt)
- Separate the waste on different categories.
- Contact the recycling companies for taking back the recycle cardboard, paper and plastic, aluminum cans, glass
- Better collaboration with community and municipality authorities
- Install a controller with two buttons for low and high demand of water in the toilets
- Divide the oil from the other waste water and package it in isolated packs for landfill recycling.
- Replacing the valves in the toilets.
- Notice the client for good practices using only the necessary towels, sheets and other materials



**CP Company: Hotel Belvedere**

**Business area: Hotel - Tourism**

**Main services:** Accommodation; Restaurant; Bar; Conference room; Pool; Fitness + Sauna; Jacuzzi; Small Luna Park; Parking

**CP areas identified for improvements,**

- Paint the walls with light colors
- Remove curtains from the windows in the hall in the conference rooms and in the restaurant and replacing them (when it is necessary) with light colors curtains.
- Replace existing bulbs with low energy consumption bulbs in the restaurant, in the conference rooms and lobby
- Replace existing bulbs with low energy consumption bulbs in the public toilets
- Introduce housekeeping measure to break the routine
- Install motion sensors in the public toilets and in the hallway

- Introduce housekeeping measure to break the routine
- Install motion sensors in conference rooms
- Improve windows and doors insulation in the hall, in the bar-restaurant and conference rooms
- Replace old windows and doors.
- Place automatic doors at the entrance
- Installing equipment above the automatic doors to stop the inside air going out
- Replacing the existing washing machines with the eco friendly-washing machine
- One bigger unit (professional) instead of several small units.
- Replacing the existing refrigerators with the new environmentally friendly one
- Installing the ventilation hood lower (at the proper standard height) in the kitchen
- Relocate the refrigerators far away from heating sources in the kitchen
- Covering the pool during the night for stopping water evaporation
- Connecting the washing machines to use hot water from the source (if there is no network installing it), instead of heating it up
- Replace existing bulbs with low energy consumption bulbs in the rooms
- Introduce housekeeping measure to break the routine



- Implement rule to shut down minibars when the room is not used
- Pull the minibars at a short distance from the wall
- Introduce housekeeping measure to break the routine
- Use professional detergents
- Install equipments for automatically dosing
- Use portions for honey jam and butter. Purchase them in bulk instead of individual packed products
- Serve sugar in big jars with spoon portions, or in sugar cubes, etc
- Contact the supplier company for smaller containers
- Use cosmetics from dispensers instead small sample sizes
- Separate the waste on different categories like plastics, card board, metal etc.
- Contact the recycling companies for taking back the recycle cardboard, paper and plastic, aluminum cans and glass
- Installing eco dishes washing machine
- Install a high efficiency controller (with two buttons)for the toilet flush adjusting low and high use of water
- Introduce automatic dosing for the pool chemicals
- Introduce housekeeping measure to break the routine
- Placing the warning about towels, water and energy friendly usage in a more visible spot in the toilet.
- Introduce housekeeping measure to break the routine

## Mining and Mineral Processing

**CP Company: Pashkashesh**

**Business area: Mining**

**Main services:** Lime stone from quarry, Sand for plastering (0-3 m), Concrete sand (0-5 mm), Granulated stone 1, (5-12 mm), Granulated stone 2, (12-30mm)

**CP assesments:**

- Assess improved site layout and quarry shaping
- Perform quarry extraction with rationally planned benches and, haul tracks etc.
- Revise blast management (mats etc.) to prevent damage to capital equipment
- Pursue increased limestone yield, decreased reject and decreased dump 'area take' by seeking to prevent cross contamination – first by complete soil removal – this may be achieved by benching (with vertical drill patterns from above)
- Perform detail costing of 'mullock production' to support decision making.
- Seek optimisation of running (bottle necks in transfer of material from pit/benches) – a review of operational records and logs, energy consumption etc. may be required for this.



- Explore maintenance strategies on road – collaboration with other road users – a maintained road will reduce truck wear and fuel use.
- Assess options of small versus larger trucks – efficient & modern trucks versus old and smaller
- Seek improved and rational transfer to main road
- Collaboration with other actors might be feasible
- Conduct a thorough option generation for capture of fines.
- Dust control for worker health - e.g. Masks (worker protection), water trucks, dust suppressants, etc. (dust mitigation.
- Rational and ordered bench placement and maintenance Improved access roadways (location and slope) runoff control and water capture (dust suppression)
- Better drilling patterns and blasting techniques
- Protective structures for fixed plant (combined with dust control and capture
- Assess alternative value operations - Example: drill rig is operated at circa 50% capacity options for increased utilisation could be explored

**CP Company: Antea**

**Business area:** Antea Cement sh.a. produce and trade construction materials; quarry

**Main services:** Cement and Clinker production and sales; production of raw limestone

**CP assesments:**

- Topsoil versus bauxite
- Stripped vegetation

- Bench reshaping for rehabilitation
- Rock breaking



**Activity 2.2.1** Seminar for public launch of NCCP Albania  
Completed

**Activity 2.2.2** Develop, maintain and expand Albanian website on RECP

The NCCP website was designed as part of the whole ECAT website ([www.ecat-tirana.org](http://www.ecat-tirana.org))  
<http://www.ecat-tirana.org/project2/project2.php?Kategoria=52>

The separated pages contain the project tasks and all the activities and results carried out during this period were updated.

**Deliverables:**

- WEB site of the programme:  
<http://www.ecattirana.org/project2/project2.php?Kategoria=52>

### **Activity 2.2.3** Produce and distribute information flyer on NCPP

The information flyer for the RECP programme in Albania was prepared.  
Please find attached the Annex 3\_ The information flyer

#### **Deliverables:**

- The information flyer

### **Activity 2.2.4** Organize and deliver three regional awareness workshops

One is completed the other two to be done

### **Activity 2.2.5** Postponed

### **Activity 2.2.6** Postponed

### **Activity 2.4.1** Finalize enterprise level resource productivity and environmental performance indicators

Completed

### **Activity 2.4.2** Collect performance level for demonstration companies at start (baseline and completion of RECP assessment

To be done

Within the **Outcome 3 - Mechanisms for mainstreaming concepts and policy instruments for RECP in relevant Albanian policies and regulations have been created;**

### **Activity 3.1.1** Asses policy and strategy context

Completed

### **Activity 3.1.2** Draft strategy options

Draft completed

### **Activity 3.1.3** National Consultation Workshop on Policies for Resource Efficient and Cleaner Production (RECP) in Albania

Completed

### **Activity 3.1.4 Technical Working Group Session on Mainstreaming Resource Efficient and Cleaner Production in Albania**

The Technical Working Group Session was held on 17 November 2010 at the conference hall of the Ministry of Environmental, Forest, and Water Administration (MEFWA) with the participation of technical officials from the relevant line ministries as well as other relevant stakeholders organized by NCPP team in conjunction with the Secretary General of the MEFWA, Ms. Myrvete Pazaj and Ms. Valbona Kuko, Director of the Department of Strategy and Donor Coordination

This event was organized with the purpose of discussing the possible modalities of implementing the proposed strategic measures for mainstreaming RECP in Albanian policy and strategy frameworks. The output from this Technical Working session will serve as an initial plan of implementation including the key policy instrument(s) that need to be developed for the effective promotion and implementation of RECP

Several meetings with the high officials, Mrs.Valbona Kuko, Director of the Department of Strategy and Donor Coordination, Prime Minister's Office and Mrs. Myrvete Pazaj, General Secretary of the Ministry of Environment, Forest and Water Administration (MEFWA) were organized by Mrs. Mima to coordinate the Technical Working Group Session and relevant institutions contributing to the Mainstreaming RECP in Albanian Strategies and legislation.

The following relevant stakeholders participated to the event:

- UN Resident Coordinator a.i. in Albania
- United Nations Environment Programme (UNEP)
- Department of Strategy and Donor Coordination, Council of Ministers
- Ministry of Environment, Forest and Water Administration (MEFWA)
- Ministry of Economy Trade and Energy (METE)
- Minister of Agriculture, Food and Consumer Protection
- Ministry of Tourism, Culture, Youth and Sport
- Ministry of European Integration
- Nation Agency of Environment and Forest
- National Agency of Natural Resources
- Civil Society and Academy



Mrs. Myrvete Pazaj, General Secretary of the MEFWA chaired the meeting and opened the remarks stating the support that the Ministry of Environment is giving to the NCPP Albania. Mr. Detlef Palm, UN Resident Coordinator a.i. in Albania in his presentation talked about the basis for the integration and coordination of Resource Efficient and Cleaner Production with on-going programmes and initiatives. Mrs. Mima presented NCPP-Albania & Industrial Demonstration on Resource Efficient and Cleaner Production. She gave an overview of the programme followed by Mrs. Julinda Mani that showed some concrete examples of the work done with the selected demonstrated companies towards the CP interventions and financial benefits.

Mainstreaming RECP in Albanian Policy and Strategy was presented by Dr. Desta Mebratu, Head, Business and Industry Unit UNEP, DTIE who stated that stated that NCPP Albania would be a useful vehicle to facilitate the transition towards sustainable industrial system.

Policy Instruments used in Eastern Europe were presented by Mr. Valdas Arbaciauskas, UNEP Consultant.

How to implement it and Who is going to do What were the main subject of the exercise of the two divided technical working groups.



An initial plan of implementation including the identification of the key policy instrument (s) that needed to be developed for the effective promotion and implementation of RECP was identified. An establishment of a working group, with the technical representative from relevant ministries under the direction of Department of Strategy and Donor Coordination, regarding the policy and institutional integration was proposed.

In this context the working group should include RECP elements in the Strategy of Energy and Water (which are under review) and should become part of the consultations of the legislation to include RECP, especially for small and medium enterprises.

The collaboration with both law and technical international experts (UNEP/ UNIDO), to undertake real steps towards water tariffs, landfills, hydro and other energies sources regarding the process of removal the subsidy was considered a necessity of the initial plan proposed.

A broad overview of the laws and regulations pertaining to technology transfer and capacity building as well as prosperity and fiscal incentives were presented.

Reviewing of the public procurement procedures from the project experts regarding the possibilities in green procurement development is considered a necessity. This will be achieved through the collaboration with the Public Procurement Agency.

The Technical Working Group Session evaluated synergies between ongoing activities and the extent to which they could contribute to Integration of RECP in National Strategy for Development and Integration (NSDI), and Business and Investment Development Strategy (BIDS). MEFWA is in the approximation process with EU legislation in the field of water, waste & industrial pollution, and METE in the field of energy efficiency,

Please find attached Annex 4\_Invitation, Agenda, List of participants, Minutes of the Meeting, Photo documentation and Presentations

### **Activity 3.1.5 Inter-Ministerial and Donors Meeting on Mainstreaming Resource Efficient and Cleaner Production in Albania**

**The Inter- Ministerial and Donors Meeting** was held on 18 November 2010, at the Tirana International Hotel with the participation of the relevant Senior Officials Ministries, relevant Donors and other stakeholders as well. This meeting was organized by NCPP team in conjunction with the Minister of the Environment Cabinet and also in conjunction with the office of Mr. Taulant Bino the Vice Minister of MEFWA, with the purpose of Mainstreaming RECP in

the national policy framework and industrial practices which requires the active involvement of all key stakeholders.

The Inter-Ministerial and Donors Meeting was organised with the purpose of disseminating the key conclusions and recommendations of the policy review process and to facilitate the contribution and involvement of this stakeholders in the subsequent processes.

A lot of preparatory work was done by NCPP team in order to draw the attention of Albanian Government Officials and of the international organizations on the importance and participation to the Inter-Ministerial and Donors Meeting on Mainstreaming Resource Efficient and Cleaner Production in Albania.

A series of individual meeting were organized with Mrs.Valbona Kuko, Director of the Department of Strategy and Donor Coordination, Prime Minister's Office, Mr. Taulant Bino, Vice Minister of Ministry of Environment, Forest and Water Administration (MEFWA), Mrs. Enkeleda Malaj, Director of the Cabinet of Minister of the MEFWA and Mr. Nils Taxel special assistant to UN RC.

The following relevant stakeholders participated to the meeting:

- UNDP Country Director in Albania
- United Nations Environment Programme (UNEP)
- Department of Strategy and Donor Coordination, Council of Ministers
- Ministry of Environment, Forest and Water Administration (MEFWA)
- Ministry of Economy Trade and Energy (METE)
- Minister of Agriculture, Food and Consumer Protection
- Nation Agency of Environment and Forest
- USAID
- SIDA
- INPAEL
- European Bank for Reconstruction and Development
- World Bank
- Civil Society and Academy



Opening remarks were foreseen to be presented by the Minister of MEFWA Mr. Fatmir Mehdiu who in the last minute was not able to participate to the event due to a sudden emergency . .

Mr. Bino was chairing the meeting and had an introduction presenting the Mainstreaming Resource Efficient and Cleaner Product (RECP) in Policies and Strategies of Albania as a theme that is influenced and affected by the leading model. Results coming from the NCPP Albania are expected to be implemented/ integrated in the national development model..



Mr. Norimasa Shimomura, UNDP Country Director underlined the complementarities of what is being promoted under NCPP-Albania with a number of activities that were going in the country. Suggestion to include a follow-up component in the new UNDAF (that was in its final stage of development), were given. UN Regional Office would serve as an important key coordinator in the future possible development.



Albania & Industrial Demonstration on Resource Efficient and Cleaner Production was presented by Mrs. Marieta Mima, Director of the NCPP – Albania with details and overview of the programme. Some concrete examples from the work of the national auditors and the businesses from the three priority sectors were presented by Mrs. Julinda Mani and these examples drew the attention of the participants.

Mr. Tokli Thomaj, Vice Minister of Ministry of Agriculture and Food declared that since the legislation was standardized the system must be standardized and the tourism rural strategy must be part of the cross-cutting policy. The importance of the involvement of the agri – culture in the Programme was suggested.

Involvement of the Ministry of the Agriculture and Ministry of Tourism in the Steering Committee of the NCPP, as an important step in the near future was stressed out by Mr. Bino and Mrs. Mima.

Dr. Desta Mebratu, Head, Business and Industry Unit Sustainable Consumption and Production Branch Division of Technology, Industry and Economics (DTIE) United Nations Environment Programme (UNEP) presented the Mainstreaming RECP in Albanian Policy.

Strategy and Policy instruments used in Eastern Europe and concrete experiences was presented by Mr. Valdas Arbaciauskas, UNEP consultant. Assistance to promote CP, focused not only on good housekeeping but in technology as well will be given to Albanian partners by UNEP consultants.

In the view of the importance on the compliance and complementary role of this programme with other programmes under implementation in Albania the recommendation of a cross-cutting approach was given by Mrs. Kuko. The possibility to implement an intensive capacity building was emphasized.

The law for the environment permission and the obligation to bring the best available techniques as the first steps of MEFWA taken towards the pollution reduction were stated by Mrs. Laureta Dibra Chief of Water, Air and Climate Change department of the MEFWA. Setting up the CP capacities or ISO, EMAS near the Ministry of the Environment and the pressure on the application of the Waste Management Law was suggested.

In the lights of the importance of the SME as well as the standards the focus on incentive measures or other measures were discussed by Mr. Paolo Bacca, INPAEL. Funds allocation for the implementation on different environmental friendly aspects was considered a necessity.

In this frame work the soft loans to finance the project and collection of the revenues from the taxes were some alternatives suggested by Mr. Arbaciauskas.

The representatives from the World Bank and USAID emphasised the relevance and importance of the seminar and their willingness for further co-operation with the NCPP programme.

In the light of the conclusions of the meeting the interesting ideas regarding the instruments that Albania must use to encouraging development and strategies were appreciated. The participants expressed the need for further similar activities and was stated that a further dissemination process would be very useful.

Please find attached Annex 5\_ Invitation, Agenda, List of participants, Minutes of the Meeting, Photo documentation and Presentations

### **Activity 3.1.6 Media Seminar on Mainstreaming Resource Efficient and Cleaner Production (RECP) in Albania**

The Media Seminar on Mainstreaming Resource Efficient and Cleaner Production (RECP) in Albania was held took place on 19<sup>th</sup> November 2010 at the Rogner Hotel Europapark with the participation of the a considerable number of the main Albanian media representatives.

This seminar was organized by NCPP team in collaboration with the One UN communication team. The main objective of this event was to inform the media about NCPP- Albania and the key strategic elements that need to be addressed on mainstreaming resource efficient and cleaner production in Albanian policy and strategy framework. In addition it aimed to improve the understanding of the benefit of promoting RECP and to succeed in further dissemination of the information to the general public.

The following participants attended this event:

United Nations Environment Programme (UNEP)

ONE UN Programme

“Klan” newspaper

SCAN TV Channel

Alsat TV Channel

MAPO

“PANORAMA” newspaper

“ABC news” TV Channel

Top Channel TV

“Shekulli” newspaper

National Agency for Environment and Forest



Mrs. Nora Kushti from One UN Program in Albania opened greetings&remarks acknowledging NCPP as part of the One UN Programme in Albania. Building capacities of Albanian industries to be more resource efficient and reduce their environment impact by promoting RECP was the focal point of discussions.

The mainstreaming RECP in Albanian Policy and Strategy was presented by Mr. Mebratu. The importance of media involvement in the process and how the media group as a player in this process should contribute to the country was noted. Emphasis was laid on smooth information flow to raise public awareness on RECP. The necessity for Albania to focus on RECP rather than end of pipe solutions was emphasised and the media group has a mayor role in this process.

During the media seminar emphasis was laid on public awareness associated with environmental issues with focus on the following:

- How journalists seek to sensitize public opinion, better information is required from journalists and at the same time they should be the best source of information users.
- Albania has significant water resources but people have to learn and understand how to preserve these hydro resources. This can only occur through a long and continues education process.
- Specific campaigns or campaigns on environment and production, would be a very reliable way for the sensitization together with the introduction of concrete policies.

NCPP-Albania & Industrial Demonstration on Resource Efficient and Cleaner Production was presented by Mrs. Mima. She provided details about the challenges faced and the persisting work of the NCPP team and the national auditors. It was underlined that cooperation with business was not always very easy but slowly they have become fully awarded of the benefits from the process. In addition it was underlined the importance of the introduction of policies in Albanian legislation that would strengthen and improve certain aspects of the existing rules and regulations. .

A poster, a video presentation with global RECP focus was displayed.

In the light of the conclusions of the seminar it has to be underlined that the successful feedback/evaluation from all relevant participants regarding the RECP provided valuable insights particularly when viewed in light of the preparation of the media/public awareness process.

Please find attached Annex 6\_Invitation, Agenda, List of participants, Minutes of the Meeting, Photo documentation and Presentations