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*for a sustainable future*

## OCCASION

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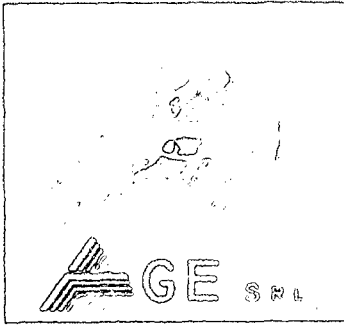
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Pero, 07 May 2003

UNIDO Project MP/ROM/99/34, The phase-out of CFC-11 and CFC-12 in the manufacture of extruded polyethylene and polystyrene foams through the use of n-butane as a blowing agent at Romcarbon S. A.

Contract No. 2000/067

### **Commissioning Report Final Report**

Pursuant to the provisions as stipulated in the above mentioned Contract, paragraph 3.22 e) and f) following is the report on the completion of the final activities regarding final installations as they are specified in the respective Terms of Reference and listed under activities No. 5.1 through 5.4.

Concluding activities aiming completion of the project involved final installations of the equipment including installation and harmonisation of the safety components, commissioning of entire equipment including components, which have been procured and partly installed by Romcarbon Co. itself, start up production trials, demonstration of the safety system functioning and technological as well as safety system on site training.

#### **Activity 5.1**

Installation, commissioning, test-run and production start-up has been carried out by our technicians in good collaboration with the counterpart's personnel. Some works have been done exclusively by our experts but substantial volume of installation works has been done by the counterparts workforce under supervision of our company.

Either direct supervision at the project site or a mode of remote instructions from Italy has been applied during installation of machinery and other components of technological as well as safety system. Technical assistance has been provided for the installation of recycling line even though this was not a part of the contract but technology-wise the component is an organic part of the production process.

Romcarbon Co. obtained our technical assistance also in thermoforming, which was not the subject of the contract as well. However, being an immediate follow up of the extrusion process and thus a part of entire production cycle at the plant the counterpart rightly decided to adapt also this part to the converted foaming process.

#### Activity 5.2

Check up, testing, of equipment and systems related to industrial safety has been carried out under supervision of our company in order to ensure permission of local authorities to introduce converted technology and obtain safety certification as required. Additional evidence documents to show the conformity of supplied equipment with European and Romanian standards have been provided in Italian and English as had been requested by local authorities.

#### Activity 5.3

On-the-job training of the counterpart's staff has been provided in following subjects:

- the operation of the PE&PS foam extrusion lines;
- the maintenance and service of these converted lines and equipment;
- the safe operation parameters, their control and measurements with regard to the relevant rules and regulations;
- quality control

The relevant activities related to above mentioned training took place at the plant prior to the final installations or in a course of installation commissioning and start up exercises.

#### Activity 5.4

With final installation of each technological component related to the conversion technology from CFC 11 and 12 to ODS-free blowing at the extruded PE and PS production plant and hand over the converted technology to the beneficiary, the project site is ready for the contract execution control as stipulated by the respective Terms of Reference. Such control has to be done by all involved parties, including UNIDO and the ministry of Environment of Romania.

Post Conversion Start up Protocol will be provided as soon as the test production is ensured by the counterpart.

#### Safety certification

As stipulated in the Contract and relevant Terms of Reference, the certification of safety measures linked to this contract is due to be done by TÜV.

An unexpectedly long time delay in the project implementation has been accrued due to mostly managerial reasons out coming predominantly from the fact that this technology is considered to be completely new in Romania and thus it takes quite a long time to the local authorities to issue the approval and endorsement to launch the new production process.

Since UNIDO would not accept further time delay until final safety certificate from TÜV is issued we suggest that the certification is executed by CSI Italy.

Based on the mutual agreement on the change of the certifying organization, CSI Italy has been contacted and the final certificate is foreseen by 6 June 2003.

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*L'Amministratore Unico*

