

reflectivity or light radiation of minimum 70%. New fire safety, control and automation were installed.

Petrom Marketing installed vapor recovery systems at all major distribution sites in order to reduce hydrocarbon emissions to a minimum. The coverage of vapor recovery systems in the filling stations network was increased during the last two years to 96%.



### Biodiversity

Biodiversity is a key responsibility of sustainable development. Petrom pays particular attention to operations within nature conservation areas, seeking engagement of specialists and associations. Our processes are planned based on studies and assessments in order to identify the risks and develop proper plans for close monitoring.

### Transport

For the transport of crude oil, gas, oil products and petrochemicals, Petrom uses a logistics structure made up of a pipeline network, chartered double hulled tankers for road transport and rail-specific means of transportation. Rail transport accounts for 80-85% of deliveries from refineries and 30% of oil deliveries from production area, while road transport represents 8 - 10 % for refineries' deliveries. Pipeline transport represents 6.5-10% of deliveries from refineries and 70% for oil deliveries from production area.

Any means of transportation chartered from Contractors must be certified by a competent Regulator and must also fulfill all relevant national and international agreements and requirements.

## Environmental Impacts of Our Products

### Cleaner Fuels

Following the OMV Group's Directives, starting with 2006, Petrom invested in Refining to upgrade products to EU standards. In 2009, a new plant for the production of gasoline with low sulfur content was commissioned at Petrobrazi. The post-treater plant of Fluid Catalytic Cracker unit has a capacity of over 700,000 tonnes, and the investments amounted to more than EUR 90 mn. Starting with 2009, Petrom achieved full capabilities for the production of Euro V fuels.

In 2009, 80% of gasoline sold by Petrom was sulfur-free (sulfur content of <10 ppm), 18% had a sulfur content between 150-700 ppm. Furthermore, 80% of gasoline sold at our filling stations had a maximum aromatic content of 35% and 20% had an aromatic content of 38-42%. All Petrom filling stations sell only gasoline with a minimum 8.51% bio-ETBE content (equivalent of minimum 4% bio-ethanol) and diesel with a minimum 4% FAME content (bio-component).

Within our network of 659 filling stations in Romania and Moldova, we offer LPG at 68 filling stations, which represents a coverage of approximately 10%.

### REACH Implementation

The European Regulation no. 1907/2006 on the Registration, Evaluation, Authorization and restriction of **CH**emicals (**REACH**) came into force in June 2008. As this regulation is mandatory for every EU company which manufactures or imports (from outside the European Community) chemicals (substances and mixtures) and also for downstream users of chemicals (manufactured by other companies), Petrom is highly motivated to address and apply the best strategy for its implementation in a timely manner.

The main steps undertaken by Petrom to implement the REACH Directive are mentioned below:

- ▶ The REACH task force was established in 2008 with members from each business segment. Downstream in the hierarchy, each business segment established teams to perform specific

### Upgrading fuels quality

- tasks for REACH implementation at local level;
- ▶ The process of 'pre-registration', in the REACH IT system, of all substances manufactured/imported by the company, was completed by end of 2008. Thus, the minimum information related to substances manufactured in refining and chemical processes, were published without any costs;
  - ▶ In January 2009, Petrom's Executive Board approved a corporate directive establishing the implementation framework for REACH across the company.

The next step after pre-registration is to register the substances with the European Chemical Substances Agency (ECHA) in Helsinki. This implies gathering of relevant data, preparation of technical dossiers for each substance (action involving associated costs) and their submission to ECHA. To this end, Petrom benefits from the support of the relevant refining consortia (e.g. CONCAWE for most petroleum products, LOA for olefins and aromatics, FERC for fuel oxygenates) of which OMV R&M is currently a member.

Petrom Refining has taken the necessary steps and allocated adequate resources for implementing the process related to substances registration.

#### Legal Compliance

Compliance with environmental regulations is monitored at site level and by business segments using several IT tools. Integration of the monitoring processes is ongoing, with specific challenges at Petrom. In 2005, an extensive process was initiated to update operating licenses and compliance programs. HSE legal compliance audits are performed regularly in all Petrom operations. By December 2009, 95% of all operational units of Petrom had all necessary authorizations and the remaining 5% were subject to reauthorization processes. The systematic follow-up, based on appropriate IT systems, also allows the identification of non-conformance related risk so that actions can be taken in time.

In Petrom Marketing, all operational terminals and filling stations have completed the environmental protection measures imposed

within the corresponding compliance programs. The non-compliance cases are mostly related to historical pollution prior to 2004. Petrom Marketing has currently launched 16 decontamination projects for the former operational terminals subject to demolition and clean-up works.

Our company faced monetary fines for non-compliance totaling EUR 0.44 mn in 2009 (2008: EUR 0.55 mn). The fines are related to environmental incidents covering spills and exceeded discharge limits, waste management related non-conformities, and measures established in authorizations and inspection reports.

#### Environmental expenditure and investments

Since 2007 Petrom has implemented Environmental Management Accounting (EMA), a method of identification, collection and analysis of physical information on the use, flows, and destinations of energy, water, and materials (including wastes) as well as providing financial information on environment-related costs, earnings and savings. The approach is based on the Guidance Document prepared by the International Federation of Accountants (IFAC) and United Nations Division of Sustainable Development (UNSD), developed to support international comparability of environment relevant data.

At Petrom, the main focus is on the financial information regarding environment protection and prevention. Expenses related to installations, activities and projects carried out for protecting the environment and/or reducing the negative impact on the environment, are collected and centralized in a standardized manner.

In 2009, Petrom spent RON 818.4 mn for environment protection and prevention, thereof RON 260.8 mn represent the investment value of finalized environment relevant constructions and modernizations, and RON 557.6 mn represent expenses with internal personnel, external services, fees and taxes for environment related activities such as remediation, research & development, waste management and the

#### Strengthening legal compliance

maintenance of environment-related installations, as well as consumption of water, energy, operating materials and the depreciation of the environment-related installations.

#### **Outlook 2010**

In 2010 we will continue to work towards mitigating the environmental impact of Petrom's operations, with focus on:

- ▶ Consolidation and strengthening of processes related to legal compliance;
- ▶ Ongoing waste management and remediation of historically accumulated waste;
- ▶ Improvement of oil spill prevention plans and drills in order to reduce the spills.

**Continue to mitigate the environmental impact**