

GOVERNANCE AND MANAGEMENT SYSTEM ENVIRONNEMENTALE IN THE COMPANY: CASE OF OCP JORF LASFAR

O. EL GUEDDAR¹, A. SAHIB EDDINE², F. RAHMOUNI², and A. AAJANE¹

¹Laboratory of Marine Geosciences and Soil Sciences (LGMSS: Unit Associated to CNRST -URAC 45), Faculty of Science, Chouaib Doukkali University, El Jadida, Morocco

²Laboratory of Odo and Research in Economic Science and Management, National School of Business and Management, Chouaib Doukkali University, El Jadida, Morocco

Copyright © 2015 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT: The diversity of constraints and opportunities faced by businesses, especially, economic and financial globalizations, the interdependence of economies, regulatory and technological changes and the internationalization of production systems, opens the door to new environmental challenges which currently does not only represent additional constraints but also new opportunities, even new business. Environmental governance is a hot topic for researchers in science and environmental management. The implementation of this governance in the company ensures effective and sustainable value creation process complies with all internal and external parties involved, and in compliance with legal regulations, internal regulations and ethical principles. Environmental governance is one of the major concerns of the group's leaders. For practice, they have adopted organizational measures recommended by the overall company policy. In this work, we are interested to the environmental practices and the role assigned to the management in order to analyze the environmental governance of OCP Jorf Lasfar. This analysis concerns its environmental policy based on the Environmental Management System according to ISO 14001 standards.

KEYWORDS: Environment, Environmental governance, environmental policy, sustainable development, OCP Jorf Lasfar.

1 INTRODUCTION

In recent years, and because of the multiple and profound malfunctions observed in companies, corporate governance is the subject of renewed interest evident among a multitude of actors, both public and private. Deep institutional reforms were initiated in most Western countries, and more recently in North Africa, to establish new rules of "good governance". This institutional momentum was carrying a conceptual renewal of governance. Organizations today are expected to evolve towards a more open interest of the various stakeholders of the company governance profile. Governance that highlights the ethical dimension and responsibility towards future generations and partners of the organization, a resonant vision of sustainable development.

2 THEORETICAL BACKGROUND OF THE STUDY

Corporate governance is an old concern that has sparked several debates in management in recent years in the business, political and academic. It is defined as a set of institutional arrangements structuring the distribution of power in the company (Charreaux, 1996 and 1997; Turnbull, 1997; Gomez, 1997; Oman and Blume, 2005) in order to create lasting value (Aguilera and Jackson, 2003) in the interests of shareholders (Norburn, 1992) and that of all stakeholders (Monks and Minow, 2001; Demb and Neubauer, 1992), setting objectives while ensuring that they are pursued (cottoned 2010). From this definition, it is clear that corporate governance is the set of formal and informal arrangements to coordinate the relations of power between the different stakeholders, and monitor leaders in order to create and distribute fairly the value.

According to the Organisation for Economic Co-operation and Development (OECD), "Corporate governance refers to the relationship between a company's management, its board, its shareholders and other stakeholders. It also provides the structure through which the objectives are defined a business as well as the means to achieve them and to ensure monitoring results. Corporate governance should encourage the board and management to pursue objectives that are in the interests of the Company and its shareholders and should facilitate effective monitoring of results. "Thus, the implementation of governance in the company ensures effective and sustainable value creation process complies with all internal and external parties involved, and in compliance with legal regulations, internal regulations and principles ethical.

2.1 ENVIRONMENTAL GOVERNANCE

Environmental corporate governance takes into account the management of a company impacts, risks, it is used to evaluate its actions and opportunities for action in the environmental field. It involves taking into account some fundamental aspects of industrial development, which are:

- Environmental values : vision, mission, principles;
- The environmental policy strategy, goals, objectives;
- Environmental Outlook: responsibility, leadership, training, communication;
- The environmental process: management systems, initiatives, internal control, monitoring and review, stakeholder dialogue, transparency, information and environmental assessment;
- Environmental action: use of basic indicators of actions, benchmarking, eco-efficiency, reputation, tolerance, bonds, economic development.

In practice, companies are looking to develop their compliance industrial sites compared to the ISO 14001 environmental standard. Some studies, such as White and Klernan (2004) show a correlation between good corporate governance, environmental and financial returns. This correlation is, according to the authors, most important in areas where the environmental impact is higher, which is probably due to greater sensitivity of public opinion to environmental orientation of the company concerned. Aspects affecting the environment, which have a direct relationship with the productive and economic activities are listed and fought as part of environmental governance. These toxic emissions, reduction of biodiversity, emissions and waste, emission risks, historical corporate responsibility and climate change.

2.2 ENVIRONMENTAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT

Despite the fact that sustainable development is a relatively new design, it is at the heart of many policy initiatives and even corporate strategies. Moreover, the last Summit held in June 2012 in Rio de Janeiro and on the next major issues of humanity demonstrates the imperative to "identify ways that could lead to a sustainable future - a future holder of advantage employment, non -polluting energy sources, greater security and a decent standard of living for all" (United Nations, 2012).

In his chapter on the sustainability of the firm, Desrochers (2012) argues that: "the company shall, in addition to incorporating strategies in the operationalization of business, integrating social and environmental aspects in the process decision-making , while ensuring transparency through a code of ethics "(Desroches, 2012). Thus, governance is essential for reflection and proper implementation of sustainable development issues. Governance is a new form of participatory democracy. It requires coordination, cooperation and partnership between all stakeholders in sustainable development. As shown in Figure 1, the governance and management practices, nodal elements of sustainable development, will undoubtedly reach the rehabilitation of the role of the firm, leading to a rebalancing of the three dimensions.

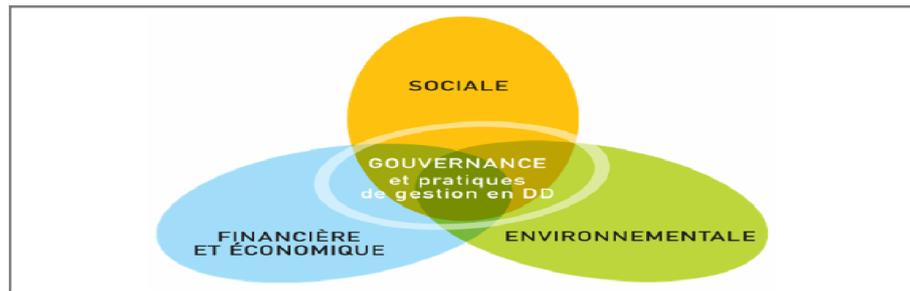


Fig. 1. The concept of sustainable development

Source: Cadieux, J., Craig, F., Valiquette, and L. Prefontaine, J (2012). BNQ 21000. Paper presented at the 7th edition of the Conference on Sustainable Development and Social Responsibility Unisféra, Montreal, April 26.

A sustainable approach reconciles three major objectives: environmental protection, social equity and economic capacity (Jounot, 2004). The intersection of these three spheres leads to a space-time sustainability. Time, on the one hand, it allows the needs of future space and secondly generation, since it supports the principle of equity (Beckma, 2004).

Indeed, Morocco is also part of the same policy of sustainable development by moving towards specific occupations and requiring its companies and citizens to compete long term. The company can become a social actor engaged and can not just be a simple economic agent generator of wealth. It can get involved and commit to better position them selves in relation to sustainable development, which requires it to produce and sell the best economic conditions all keeping a good image of his behavior says ethics ensuring that its products are socially, humanly and environmentally correct.

2.3 OBJECTIVE OF THE STUDY

The theoretical study has shown that environmental governance involves taking into account some fundamental aspects of industrial development, which are:

- **Aspect 1:** Environmental values : vision, mission, principles;
- **Aspect 2:** Environmental policy strategy, goals, objectives;
- **Aspect 3:** Environmental perspectives: accountability, management, training, communication;
- **Aspect 4:** Environmental processes: management systems, initiatives, internal control, monitoring and review, stakeholder dialogue, transparency, information and environmental assessment;
- **Aspect 5:** Environmental action: use of basic indicators of actions, benchmarking, eco-efficiency, reputation, tolerance, bonds, economic development.

The objective of the study is to analyze the environmental governance in the OCP Jorf Lasfar by analyzing its five aspects and analysis of its environmental policy based on the Environmental Management System according to ISO 14001 standards.

3 METHODOLOGICAL APPROACH

For data collection, we made visits to the group and conducted a series of interviews with leaders and relevant departments, based on an interview adapted to the nature of the information sought guide. We also used the annual reports of the Company and its Quality Manual. The guide questions can advance gradually to finally arrive at concrete and specific questions related to the functioning of the group and the degree of involvement in the spirit of sustainable development.

4 PRESENTATION OF THE FIELD OF STUDY

Industrial site of OCP Jorf Lasfar was chosen for the implementation of this industrial complex, taking into account the following benefits:

- Proximity of mining areas to feed its phosphate (Khouribga)
- Existence of a port taking important water
- Availability of seawater and freshwater
- Availability of land for future expansion.



Fig. 2. Location of the Industrial Site PCP Group Jorf Lasfar

This set which is in an enclosure extending over 1800 ha annually produces about 3 million tons of P2O5 in phosphoric acid form, requires the conversion of approximately 11.3 million tonnes of phosphate extracted from the deposits of Khouribga 3 million tons of sulfur, 0.45 million tonnes of ammonia.

Part of this production is processed locally into DAP, MAP, NPK and TSP, about 5 million tonnes equivalent DAP, and purified phosphoric acid is 0.15 million tons P2O5 per year. The other part is exported as an acid phosphoric merchant.

Industrial Jorf Lasfar site comprises 5 entities that employ about 4500 OCP agents. Morocco is the oldest Phosphorus Jorf Lasfar which started in 1986. In 1998, after starting the plant EMAPHOS in partnership with PRAYON (Belgium) and CFB (Germany); the Group inaugurated a new era in the diversification of its finished products in the production of purified phosphoric acid. A year later, the commissioning of IMACID (partnership with BIRLA Group and TATA Chemicals LTD - India) has increased the production capacity of the Jorf Lasfar city to 25% as part of the same policy of partnership, commissioning in 2008 of the PAKPHOS plant, a joint venture between the OCP and the Pakistani Fauji Group and the Bunge plant. Phosphorus Morocco in 2009; joint venture between the OCP and Bunge fertilizer Group of Brazil has increased the production capacity of phosphoric acid to 33% in the Jorf Lasfar site.

5 ENVIRONMENTAL GOVERNANCE OCP JORF LASFAR

Analysis Environmental Governance in the OCP Jorf Lasfar showed a similarity of theoretical and practical data.

5.1 ENVIRONMENTAL VALUES

Aware that protecting the environment is a global issue but also a major concern for all businesses, OCP has integrated into its overall strategy and the recital as a factor of economic competitiveness.

The Group is committed to a responsible approach to sustainable development to identify and permanently reduce the impact of its activities on the environment.

The clear commitment of the leaders of the group, who have executive powers is fundamental to the implementation of any change in a company, and therefore also for the implementation of environmental management.

In the ISO 14001 management systems, commitment and vision of the leaders of the group for the treatment of environmental aspects must be formally declared in a document called "environmental policy". The policy must be available to the public and will be audited for certification.

5.2 ENVIRONMENTAL POLICY OCP JORF LASFAR

Environmental policy OCP Jorf Lasfar group, resulting in the development of cleaner processes by investing in the most advanced technologies, has three objectives:

1. Comply with the regulations,
2. Prevent accidental pollution
3. Seek continuous performance improvement.

A Jorf Lasfar OCP makes significant investments in the development of strategies for self-development and respect for nature and the ecosystem. Environmental policy favors upstream, including:

- The research and development of cleaner production processes and equipment performance.
- The optimization and rationalization needs water, energy and raw materials.
- Reducing the volume of waste, liquid waste and air emissions.
- The prevention of emergency and the establishment of means of intervention situations.
- Compliance with international and national standards.
- Continuous improvement of environmental performance.
- The promotion of health conditions and safety in the workplace.
- Improved internal and external communication.

5.3 ENVIRONMENTAL OUTLOOKS

To implement its environmental policy OCP Group relies on significant human first, with the presence of qualified personnel. A program of training and development is provided according to the needs and technological developments. The plan of organization Quality / Safety / Environment (Figure 4) allows the allocation and prioritization of tasks for better governance of resources.

Human capital is indeed the cornerstone of the building, with a social and cultural diversity and expertise enriched from generation to generation through a variety of skill and potential.

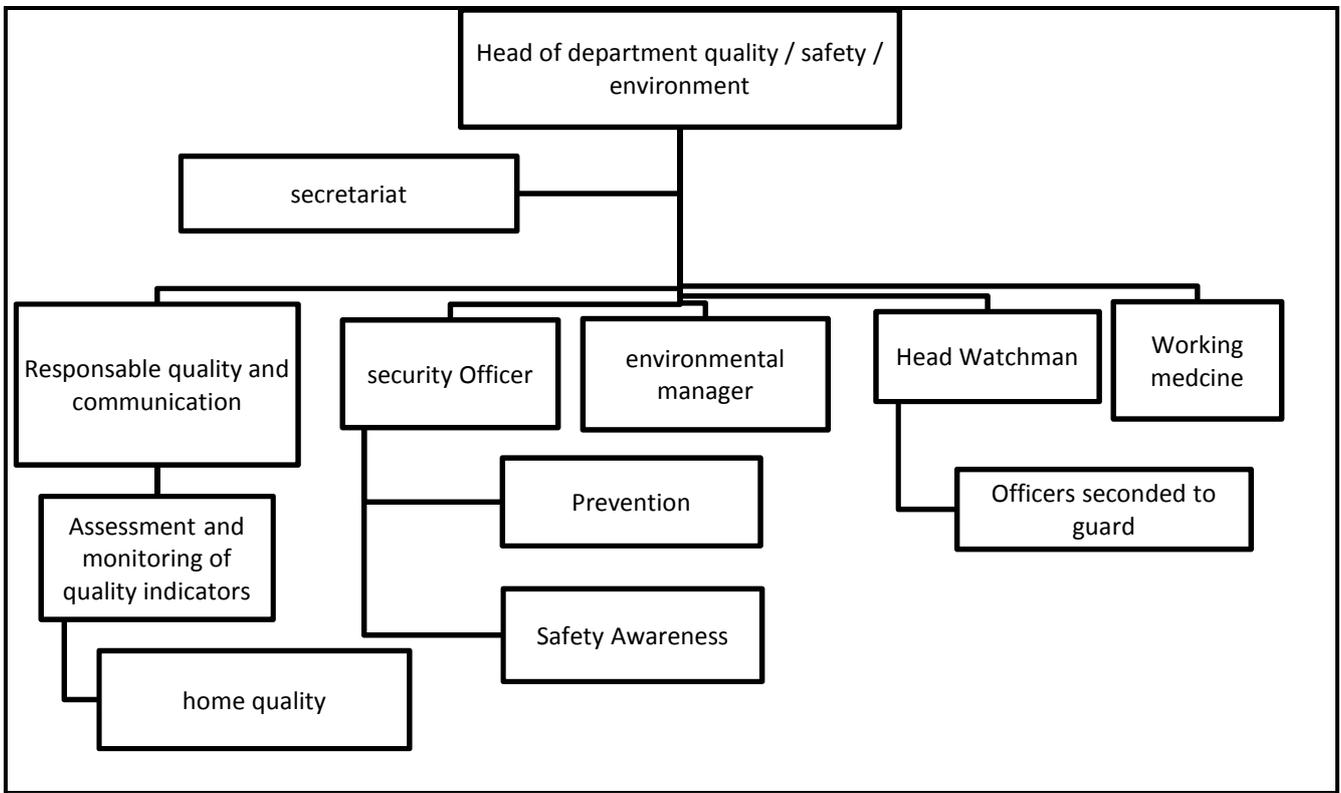


Fig. 3. Organizational Service Quality / Safety / Environment

5.4 ENVIRONMENTAL PROCESSES: MANAGEMENT OF THE ENVIRONMENT

This dynamic protection of the environment is structured and formalized in the context of a system of Environmental Management (EMS) meets the requirements of ISO 14001. The platform OCP Jorf Lasfar is certified according to this standard since 2005 by two organizations: IMANOR (Ministry MCINT) & Bureau Veritas Certification.

The Jorf Lasfar site is considered one of the largest chemical plants in the world have obtained this certification. Successful renewal of this certification in 2008, 2011 and 2014 (3 year cycle). Joint audits each year by two organizations.

Under the said SME actions and measures are carried out:

- The application of formalized procedures for solid waste management.
- The control and systematic monitoring of air emissions, liquid and solid waste and air quality.
- Training and awareness on preserving the environment for staff and subcontractors.
- Improving the landscape by planting a green belt with a commitment to plant thousands of trees per year "Improving the skills of its employees on environmental issues (training program).
- Conducting impact studies and environmental assessments of its activities on the ecosystem. • The inclusion of more important projects to improve environmental performance, particularly for improving the management of gaseous and liquid effluents.
- Desalination of seawater.

5.5 ENVIRONMENTAL ACTION

To identify sources of pollution and pollution and to identify environmental problems in the group, we will study the diagram inflows and outflows So we need to identify inflows and outflow of the group. On the one hand, raw materials, energy, ancillary products and packaging enter. On the other hand, new products and services but also different types of waste (solid, liquid, gas) coming out.

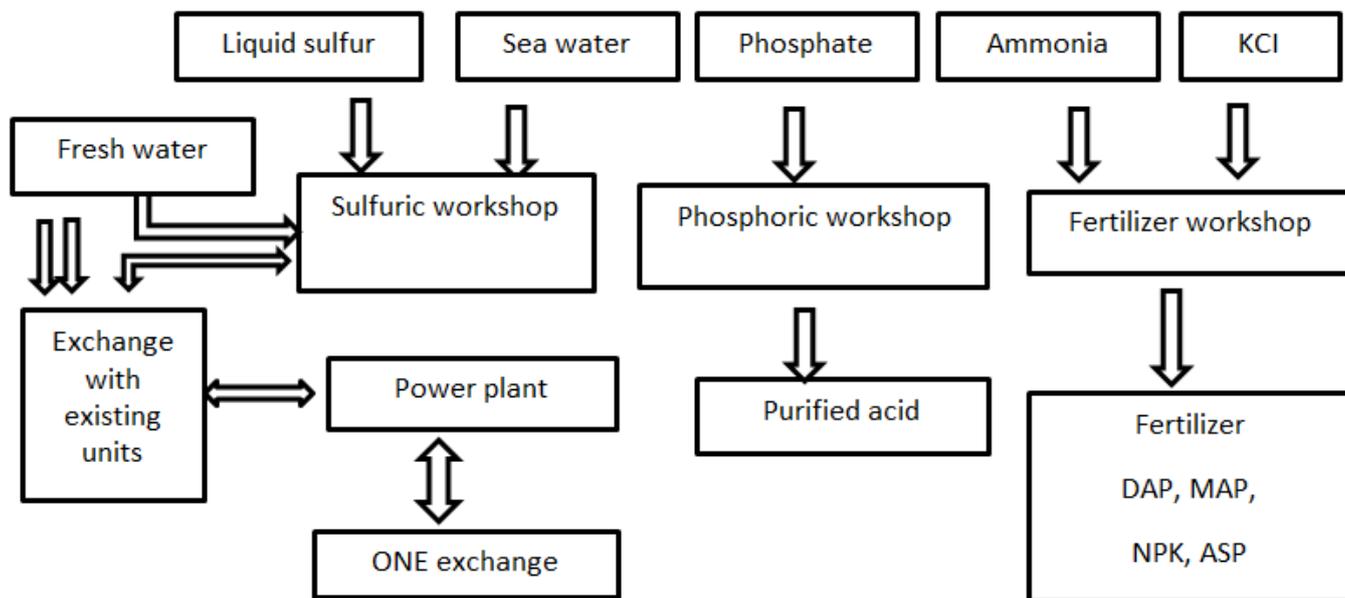


Fig. 4. Diagram of inflows and outflows in the production process OCP

5.5.1 MANAGEMENT OF ATMOSPHERIC RELEASES

- Several million DH are invested annually in the drastic reduction of sulfur dioxide emissions. Investments that have reduced by more than 90 % of waste arising from the operation of the site in ten years without affecting production. Following examples of monitoring dust emissions grinding phosphate Figure 2.

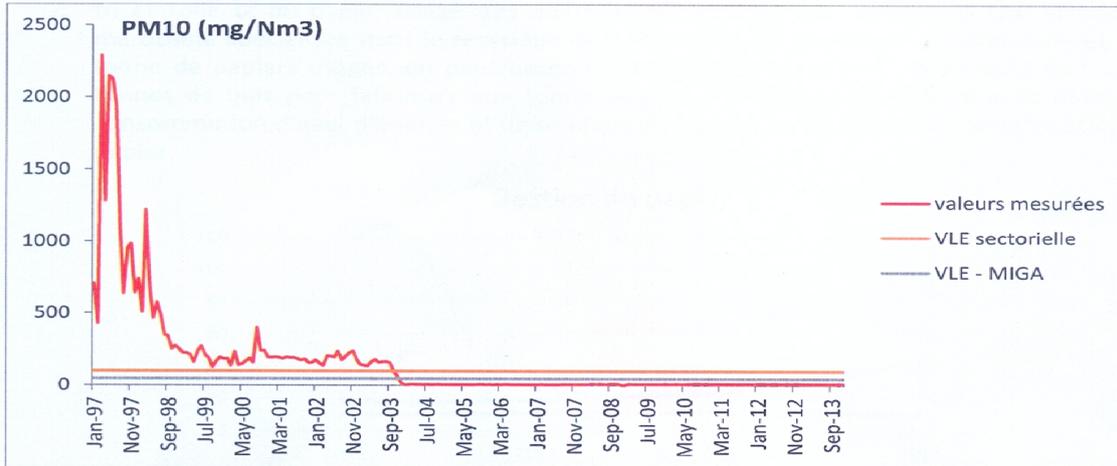


Fig. 5. Evolution of dust emissions phosphate grinding time

- The proposed pipeline will completely eliminate dust emissions (wet phosphate).

5.5.2 WASTE MANAGEMENT:

A procedure for waste management was put in place to define the mode of management of each waste generated. This process is enhanced periodically to include any new provisions in relation to waste. Establishment of a system of sorting, collection and disposal below by non- specialists OCP:

- Waste glass;
- Food waste plastic and PVC;
- Plastic packaging waste;
- spent fluorescent tubes;
- Cartridge filters used sulfuric air;
- Printer toners, looted and aerosols worn;
- Heavy metals (Hg, Pb etZn)
- PPE used;
- Big -Bags unsoiled;
- Used paper and cardboard;
- Medical and pharmaceutical waste medicine work.

• Case of paper and used cardboard:

Before the application of sound management of the paper, waste paper and cardboard used were mixed with household waste. Today, two approaches have been implemented:

- Reducing consumption of new paper (a rate of 5 to 10% per year)

- Sorting and collection of waste paper. The amounts recovered are sold to a Moroccan company specializing in the recycling sector stationery. Note that with a ton of waste paper, we can obtain 900 kg of recycled paper, while it takes 2-3 tons of wood to produce one ton of conventional paper, but with less water consumption of energy and chemicals in the process of papermaking.

• Case of worn Toners:

The laser printer cartridges inevitably end up as waste after use. As part of the environmental protection and the preservation of natural resources, the OCP Group finalized a contract collection and processing 100% environmentally friendly toners and printer cartridges used with a specialized service provider (REVIALIS) that handles:

1. The management of waste cartridges by ecological treatment
2. Traceability cartridges with the submission of a complete mass balance;
3. Supports shipping and transport;
4. A strong commitment to sustainable development certified "No Waste Solution" label used in communication;
5. The benefit of a comprehensive solution Revalis with the "New Life" program.

5.5.3 WATER MANAGEMENT

Water is used in the industrial complex Jorf Lasfar for cooling the sulfuric acid, and the transport of the gypsum from the condensation of steam; it is also used as heat transfer agent and the method for making phosphoric acid. Given the importance of its usefulness and its impact on agriculture in the region, the OCP group made the 80 studies to reduce the need for fresh water. These studies have helped to reduce the need for fresh water only about 3 % of the initial need. To fill the rest of the water requirement (97%) of the complex uses seawater this decision was taken in view of the above, despite its importance:

- From the investment to achieve the feed sea water structures (pier, breakwater, channel) and the use of quality materials and expensive as stainless steel, prestressed concrete pipe.
- The operating costs for information consumption power of the pumping station is 15,000 KW.

With the industrial development program of OCP, and to better manage and upgrade this strategic resource for its mining and chemical sites OCP has introduced an innovative approach to the integrated management of its water needs by implementing an ambitious water strategy articulated around three axes to optimize the use of water resources across the entire value chain of phosphates:

- Abandonment of groundwater extraction,
- Geographical reallocation of surface water,
- Mobilization of non- conventional water resources (construction of wastewater sewage treatment and new units' seawater desalination).

AXIS 1 - Optimizing the use of water resources across the entire value chain:

* Mining Facilities; 20% reduction of water consumption per ton of rock enriched:

- Better water recovery sludge washing. Developed by OCP, the enrichment process wash

- Flotation used in laundries is a continuous system, where the washing sludge waters are recovered more than 80%, before being reinjected into the circuit. Performance achieved by improvements to the process of enrichment, but also systems of separation, settling and spreading.

- Better drainage of moisture from the washed stock phosphate. The drainage system of washed phosphate can recover 50% of the water absorbed by the ore reserve. The method comprises discharging the phosphate stock on a wet surface composed of gravel and a geosynthetic filter, and a geo- membrane for sealing.

* **Chemical plants;** Reduction of nearly 25% of the specific water consumption units phosphoric acid production; Adoption of latest techniques in water recycling: opting for the use of fresh water in some of the process, it is possible to recycle up to 100 % of the water used for washing the gases from acid units phosphoric and evaporation of water from the process of concentration of this acid.

* **Transportation of phosphates;** Savings of nearly 3 million m³ of water per year through minéroduc between Khouribga and Jorf Lasfar. Routing by minéroduc of washed phosphate slurries allows for water and energy savings (train transportation indeed requires dry phosphate, then re - moisten his arrival). This mode of transport is particularly hydraulic ecological progression of pulp being favored by natural gravity, while all of the water used for transportation is reused in chemical installations for the recovery of phosphates.

This large project will generate additional savings that more the Group's commitment in favor of the national program for the protection of raw water aquifers and dams as well as energy. In fact, the drying of phosphate (now to be transported in the form of pulp) , consuming a lot of energy will be stopped at Khouribga and will be limited to Jorf Lasfar solely quantities

to be exported in the raw state. It will be necessary to re-wet the phosphate before being introduced into the chemical processes.

*** Station Project seawater desalination Jorf - 1st stage**

- Unit capacity of seawater intake: 550 000 m³/d
- pretreating unit seawater
- Unit reverse osmosis desalination
- Postprocessing unit of produced water
- Processing Unit tributaries
- Jobs created: 250 000 man-days (construction phase/local workforce to 80%) - 80 permanent (operational phase).

AXIS 2 - Abandonment samples of groundwater and geographical reallocation of surface water:

Remedy the gradual depletion of ground water requires continuous monitoring of withdrawals. In general, the preservation of groundwater mainly requires replacement levies on the water with the use of surface water.

To compensate the water deficit associated with this conservation measure, while fully complying with industrial water needs of its mining areas (phosphate washing, transportation minéroduc ...) OCP therefore reallocates upstream water withdrawals surface from the watershed of the Oum-er-Rbia. Geographical reallocation which also helps reduce evaporation and seepage losses caused by current water withdrawals downstream from dams and dam Daourat Safi. It also responds to a change in the manufacturing process, since the laundry, now directly integrated into the mine, the ore richer while it prepares to transport.

To maintain sustainable groundwater solution, the water supply dam program is emblematic of the geographical reallocation of natural water resources of OCP.

AXIS 3 - Mobilization of non-conventional water resources: construction of water treatment plants and wastewater new units of seawater desalination: Morocco rejects every year 750 million m³ / year in the wild, though. Across North Africa, the cost of water pollution is even considered by this technological methods allow, in fact, optimal wastewater treatment, but they are however very inefficient. A sewage treatment plant or desalination may have an equivalent energy cost to 40% of total operating costs. This brings us to the energy issue, inseparable from the water treatment.

- **Industrial Reuse of urban wastewater:** OCP invests in municipal wastewater reuse to perform the processing and enrichment of phosphates. Biogas recovery from process wastewater permits power generation, covering the energy needs of STEP up to 30%.

- **Desalination of seawater:** The seawater desalination represents a significant source of supply for the future. Full adoption depends on the cost of production, technologies, and finally, the cost of energy. To meet the water needs of chemical plants Group, new units of seawater desalination will be erected, with the reverse osmosis process. Desalination projects allow OCP to fully fulfill its role as eco-friendly business, strengthening its commitment to the national program for the protection of water aquifers and dams.

Water requirements platforms Jorf Phosphate Hub (JPH) will be fully filled. Is that the desalination of sea water use as much energy - necessary for their operation - energy surplus at the unit level. Eventually, more than 65% of the water needs of the Group will be met from seawater and wastewater reuse desalination.

5.5.4 LIQUID WASTE

Composition of liquid discharges

- Cooling water
- Water impregnated with phosphogypsum

Measures taken since the start of the factory:

- Selecting the proper release point phosphogypsum
- Oceanographic and sedimentological study by specialized laboratories.
- Dilution tests on model and general model different configurations of the discharge point.
- Discharge point directly to the coast to the point that forms a rocky headland about 4 km south of the port. This is characterized by strong currents to the southwest (present in 83 % of the time) providing solubilization, dilution and dispersion of rejection.
- Systematic control of the T ° of cooling water (T ° <30 ° C at the factory, with natural cooling on the evacuation routes).
- Double washing phosphogypsum.
- Systematic monitoring of the composition of phosphogypsum.
- Solubilization and disposal of this waste with maximum sea water (20 g / l).
- Systematic monitoring of the quality of coastal waters.
- Periodic assessment and environmental impact studies.
- Ongoing research to improve the management mode of phosphogypsum (Study storage and recovery options).
- Solution improvement in progress: Extension emissaries of liquid effluents into the sea about 3250 m to reach the surf zone. These messengers are provided with diffusers at their ends. This improvement is the result of a series of studies by specialists for improving the management of liquid waste at the site. Modeling solution showed very significant improvements. The solution was subjected to national environmental authorities and obtained the environmental acceptability under the impact of EIA studies conducted on this subject.

5.5.5 ENERGY

OCP adopts an energy strategy that seeks energy efficiency. It thus aims to reach 2015 with a positive balance in its chemical sites Jorf Lasfar passing an installed capacity of 202 MW to 487 MW. Indeed, the site of OCP Jorf Lasafar produces its own energy by recovering heat energy from the production process of sulfuric acid. New power plants are installed with new units built sulfuric acid.

Reducing resource consumption or pollutant emissions and waste can lead to reduced environmental impacts. Such an approach can also benefit the company by reducing its energy bills and waste disposal costs and lowering expenses for raw materials and pollution control.

6 DISCUSSION

The OCP has reformed organizational processes, according to three key principles: Transversality, decentralization and accountability. The cross of decision making, decentralization; is to allow the poles to carry the responsibility policies set by headquarters.

The group efforts to integrate and generalize the approach of environmental management system within its structures of production and administration with commitment and encouragement of senior management. The implementation of this system to consolidate concepts and tools:

- Staff commitment to continuous improvement projects.
- Recognition of the concepts developed by national and international certification bodies. The site is certified ISO 14001 v 2004.

Environmental governance and the group is a tool that has allowed the management and organization of these activities in order to create added value for internal and external customers. It introduces a horizontal and vertical management that lowers the barriers between different entities. This governance to provide better:

- Listening to the market and customers (national and international)
- Management structure.

- Involvement of people.
- Branding with customers and citizens.
- Approval of a competitive advantage.

7 CONCLUSION

Today it is very difficult for companies to deny the new responsibilities that were assigned by the civil society. Therefore they must think their governance by incorporating an ethically correct logic and take seriously their role as agents of sustainable development. This process is respectful of ecosystems and natural resources (support life on Earth, trying to save them (ecologically sustainable development)).

The system of environmental management according to the guidelines of ISO 14001 has a rational use of raw materials and proper management of atmospheric emissions, liquid and solid part of good environmental governance of the group. These efforts will continue for the continuous improvement of the overall performance by working towards reconciling economic imperatives, respect for the environment and social equity.

REFERENCES

- [1] Beekman, V. (2004). Sustainable development and future generations. *Journal of Agricultural and Environmental Ethics*, 17(1), 3-22
- [2] Cadieux, J., Craig, F., Valiquette, L. et Préfontaine, J (2012). *BNQ 21000*. Communication présentée à la 7^{ième} édition de la Conférence sur le Développement durable et la responsabilité sociale d'UNISFÉRA, Montréal, 26 avril.
- [3] Charreaux, G., (1996), « Pour une véritable théorie de la latitude managériale et du gouvernement des entreprises », *Revue Française de Gestion*.
- [4] Charreaux, G., (1997), « Gouvernement des entreprises et efficacité des entreprises publiques », *Revue française de Gestion*.
- [5] Desrochers, J. (2012). Chapitre 9 : Pérennité de l'organisation. In Jean Cadieux et Michel Dion (dir.), *Manuel de gestion du développement durable en entreprise : une approche progressive : En appui à la norme BNQ 21000*. (p. 226-242). Québec : FIDES. (1^{er} éd. 2012).
- [6] Jounot, A. (2004). *Le développement durable*. Saint-Denis La Plaine Cedex : AFNOR.
- [7] United Nations (2012). Rio + 20 the future we want. Document téléaccessible at <www.un.org/fr/sustainablefuture> /. Accessed October 4, 2012.
- [8] Norburn, D., (1992), « Corporate Governance: the paradox of Independence », in Heller, the complete Guide to Modern Management, Mercury.
- [9] Monks, R. and Minow, N., (2001), *Corporate Governance*, Cambridge, MA, Blackwell, dernière édition 1995.
- [10] Oman. C. and Blume, D., (2005), « La gouvernance d'entreprise : un défi pour le développement », *Repère*, 3, OCDE.
- [11] Pigé. B., (2010), *Ethique et Gouvernance des Organisations*, Economica.
- [12] Turnbull, S., (1997), « Corporate Governance: Its scope, concerns and theories », *Corporate Governance: An International Review*, Blackwell, 5, 4, October.
- [13] White A ; and Klenan. M; (2004) *Corporate Environment Governance. A Study into the Influence of Environmental Governance and the Financial Performance*. Environment Agency (United Kingdom Government).