

RESPONSIBLE CARE – A TOOL FOR ALL THE INDUSTRY

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ABSTRACT: The Responsible Care Initiative of the American Chemical Council, generated by the chemical industry sector in order to minimize the public damage produced by several catastrophic incidents (Bhopal, Seveso, EXXON Valdez, etc.) is a voluntary step taken by managers, going towards stakeholders, to prove them the commitment to make the chemical industry environmentally friendly, safer for human individuals and communities health. It also aims at observing, monitoring and assisting industrial products from cradle to grave, along all their life cycle. The Initiative was endorsed by the European Chemical Industry Council (CEFIC) as well as thousands of chemical industrial platforms on all continents. Up to now, the Responsible Care Initiative did not find its way in Romania. The present paper describes the experience of implementing the Responsible Care Initiative in a machinery manufacturing company. It is found to be similar to ISO 9001, ISO 14001 or OHSAS 18001 certification though many dissimilarities are mentioned. Finally, the Responsible Care Initiative is inserted in the sustainable enterprise strategy, using the Sustainability Balanced Scorecard developed by the authors.

1. INTRODUCTION

As defined by the official Responsible Care Initiative (RCI) website (Responsible Care, 2010), RCI “is the chemical industry’s global voluntary initiative under which companies, through their national associations, work together to continuously improve their health, safety and environmental performance, and to communicate with their stakeholders about their product and processes”. Practically, caring about the health, safety and environmental impact of companies’ products, tracking them during all their life cycle, honestly and pro-actively collaborating with stakeholders and stressing the importance of partnerships in decision making leads to a new kind of industrial and business ethics that helps the chemical industry sector to improve its public image, to work safer, while still profitable and sustainably. The RCI was endorsed and commended by UNEP as a major contribution to the structuring of the sustainable development paradigm, at the World Summit on Sustainable Development (Johannesburg, 2002).

The basic ideas of the RCI are included in the Responsible Care Global Charter and address the following subjects:

- Companies must voluntarily go far beyond the strictest norms and regulations currently in force. They must identify and address all their environmental, health and safety problems, all the risks potentially generated by their business at a very early stage of planning and design
- Environmental, health and safety concerns must not stop at the Company’s fence but must go beyond it, to the contractors, customers, providers, transporter and distributors, as well as waste management authorities, through all the life cycle of their products;
- Companies have nothing to hide. They acknowledge the public interest in their business and are eager to transparently discuss all critical environmental, health and safety issues with all interested stakeholders;
- All suggestions to continually improve the health, safety and environmental performance are encouraged and welcome. The dialogue with all stakeholders is institutionalized, made substantial and permanent;

- Resources must be efficiently used and waste minimized
- Communication and co-operation is a global matter and support is gracefully offered to all partners in the RCI at a state level, as well as at a global level.

Recently (2005), a tailored version of the very familiar ISO 14001 standard was devised for chemical industry companies (RC14001), though there is no restrictions to apply the RCI concept to any company that has potential safety, health and environmental problems. There are a few marked distinctions between the classical ISO14001 and the RC14001, the last one focusing better on interaction and communication with all stakeholders, increasing the role of environmental, health and safety protection along the entire life cycle of the products and adding the Product Stewardship philosophy to the business dimension of companies.

Up to now, there are 53 National Responsible Care Associations. At the European level, though only 20% of the chemical companies are RCI members, they add up to some 80% of the chemical sector production.

2. COMPONENTS OF THE RCI

For a company to adhere to the RCI, the following steps are necessary to be observed and implemented:

- Endorse the Responsible Care Global Chart and the associated Guiding Principles;
- Implement all the elements in the National Responsible Care Programme. For that to be carried out, a National Responsible Care Association must exist;
- Decisively make progress toward sustainable development, starting by implementing best available techniques, taking sound measures to protect resources and to minimize waste generated;
- Continuously and transparently report performances to stakeholders and general public. This also includes acceptance of auditing by external authorities interested in the environmental, health and safety record of the company;
- Product Stewardship – set up an effective and efficient product system management;

- Promoting and facilitating the inclusion of more and more companies in the RCI;
- Active support for the national and global Responsible Care Governance;
- Caring and accepting stakeholders concerns and suggestions;
- Allocating necessary resources to fully implement the RCI;

More specific, a company:

- must formally (yet voluntarily) adhere to the basic RCI documents (Global Chart, Guiding Principles). Hence, a proper name and logo must also be adopted and used by the company to show its participation in the RCI;
- must produce and apply a series of codes of practice, checklists, forms, security codes and other documents required by the national RCI Association;
- must devise a set of key performance indicators that should monitor and ensure progress on the way of the RCI;
- must set up a powerful communication system with all stakeholders, about environmental, health and safety issues, must measure and publicly report performance;
- must participate at forums discussing environmental, health and safety problems of concern at a local and regional level;
- must help and support other companies in the RCI, when need be.

The success of the RCI depends on the dedication and participation of all the RCI adherents as well as on the existence of effective mechanisms that ensure a robust Member Support Network. This is done at a global level and calls for the inclusion and contribution of all member companies. "Working together" is one of the slogans of the RCI.

After some 20 years of successful industrial practice, the RCI proved its potential to become a single, integrated management system at company level, to address environmental, health and safety problems while continuing to be a profitable company that applies sustainable technologies and makes use odd resources in a responsible manner.

3. IMPLEMENTING THE RCI IN A ROMANIAN COMPANY

The paragraph describes the main elements of a nucleus-project, financed by the Romanian Ministry of Industry and Trade, aiming at the implementation of the RCI in a Romanian Company that is not part of the chemical industry.

3.1. Selecting the target company

The partners in the project were:

- INCD-ECOIND, the Romanian National Research and Development Institute for Industrial Ecology. The role of INCD-ECOIND experts in the project was as facilitators and referees, in instances when the local experts failed to agree on a specific matter
- S.C. ROMPRIM S.A., a machinery manufacturing company, based in Bucharest, as the target company of the Project. Experts from ROMPRIM included the environmental managers, engineers, economists. The support from the top company management was constant and substantial.

The selection of the focal point was made after a preliminary investigation phase that included:

- set up of a comprehensive questionnaire to be sent to p[potential Project partners. The Questionnaire intended to

evaluate the size of the organization, the basic profile of its applied technologies, its environmental, health and safety problems, its current ISO certifications, the existence of the company strategy. Some 80 Questionnaires were distributed and 42 companies replied in due time.

- Devising a procedure for selecting the target company by using a multiple criteria decision making matrix. Several performance criteria have been established and their scale of relevance generated. Criteria included: existence of ISO certifications, existence of company strategy, existence of modern management systems (Total Quality Management, Activity Based Cost, management of change), environmental concern (environmental cost accounting, life cycle analysis), health and safety concerns (personal care management), company policy for communicating with stakeholders. Each of the companies was given marks along each of the selected criteria. Finally, a score for each company was established by adding up the products of the company's marks by the relevance of the criterion. As a result, a shortlist of 5 companies was generated, those companies were visited and the final selection was done after a thorough inspection of the company and discussions with the top management.

The selection phase lasted for 2 months.

3.2. Preliminary Company auditing

The implementation of the RCI started by setting up a Responsible Care Implementing Unit (RCIU) that included specialists from ROMPRIM as well as from ECOIND.A SWOT analysis was conducted at ROMPRIM in order to identify the internal and external reference system of the company, potential stakeholders.

A thorough analysis of the ISO company's environmental, quality and health and safety certifications was carried out in order to spot the exact needs of the future RCI management system

The RCIU worked with full support form the top management of the Company. Middle managers showed their marked interest and openly described the exact situation in the Company, enabling a sound diagnostic of it.

3.3. Building up the RCI elements

As long as there is no Romanian National RCI Authority, the main objective of the Project was to devise the entire infrastructure needed for RCI Certification so that the Company can ask for a certification once such a National RCI Authority comes into place, or as an alternative, go and ask for a certification to a National Authority in another EU country.

The elements of the RCI that have been built up by the RCIU consisted of:

- general policy documents (the Declaration of the CEO);
- translation and adaptation in Romanian of the RCI Global Chart and of the Guiding Principles that the company has to adhere to;
- specific policy documents (e.g., for communicating with stakeholders);
- a Guide to evaluate the ecological risk entrained by the company activities;
- a Guide to evaluate health and safety problems potentially generated by the company activities;
- detailed Checklists to be used by top and middle management of the Company when carrying out the RCI implementation;

- identification of modification in the company general structure to accommodate a new office dedicated to the implementation of the RCI. It was decided that the Environmental Protection Management Office (carrying out the ISO 14001 implementation) takes over this responsibility. A careful analysis of the existent and future, expanded tasks and responsibilities of the Environmental Manager was done by the company top management together with the ECOIND experts, in order to ensure that the expanded job will be still effective and efficient.

- Targeted Job Description documents were discussed and accepted for the RCI Responsible and for the person that will be responsible for communicating with stakeholders

- Adaptation of the documents addressing all kinds of risks generated by the Company activity (documents existing in the ISO certifications and other management systems of the Company, as the Emergency Situation Management, for example) was carried out and needs for expanding them or developing new ones, identified.

Up to now, the insertion of the RCI in the Company took 15 months but the process is still ongoing. The basic idea was to consolidate existing documents and management components so that the implementation of the RCI does not become an extra cumbersome affair. It was thought that, on the contrary, the RCI approach should simplify, to make easier, more straightforward, the managing tasks in the target company.

During this process, the help and support of managers at all levels was swift and robust. Policy documents were distributed to all departments of the target company in the very early Project stages, so that every employee can learn about the new initiative, can understand and be a part of it.

3.4. Barriers

The RCIU did not start the implementation of the RCI from scratch. The ROMPRIM experts had gathered an invaluable experience during the implementation of other dedicated management systems and during the ISO certifications acquired by the company (ISO 14001, ISO 9001, OHSAS 18001). The basics about such management systems were already in the company and it only had to be adapted to the RCI requirements. As an example, all problems connected to the right coding of documents, their archiving, circulation, distribution, updating went straightforwardly due to similarities with the same issues of ISO / OHSAS certifications.

On the contrary, including the stakeholders in the process, setting up a reliable communication system with the same stakeholders, the adjacent communities and the general public did not go as swiftly as expected.

As a general observation, inviting and accepting neighbours and other stakeholders as equal partners is a problem in itself since, historically, all previous conflicts, disagreements, arguments, controversies involved exactly the same neighbours and stakeholders now sought after. Problems arising in the backyard of the target company had immediate negative effects upon the neighbourhood (a large hospital, a factory, a military unit and several blocks of flats). The other way round is also

true: accidents happening in the backyard of the company's neighbours would have bad effects upon the situation in the target company.

At this stage, the role of ECOIND experts was essential, they facilitating the meetings and conveying, from one partner to another, messages of good will and benevolence. It was found that impersonal communication like general messages, brochures and even e-mail messages were preferred to face-to-face discussions but it was stressed that the philosophy of the RCI explicitly asks for openness, directness and honesty among all interested parts.

Building up confidence and establishing a dialogue with all stakeholders cannot be accomplished in a fortnight and the process is still ongoing at the target company.

3.5. Risks

Environmental, safety and health risks generated by the company were identified, in the past, by experts from the target company. The main problem, during the RCI implementation was to expand the risk analysis beyond the fences of the company and to address potential problems that could arise during the entire life cycle of company's products.

The analysis encompassed all potential risks generated by the most important company's stakeholders:

- Contractors
- Material and utility providers
- Transporters
- Distributors
- Beneficiaries
- Service and maintenance of products
- Recyclers
- Waste management companies.

In addition, risks have to be addressed in the earliest possible stage of product design and company planning. In order to ensure that all important risk causes have been taken into account, the following matrix was devised.

Tagged cells in Table 1, below, indicate that the risk analysis implied by that particular cell has already been analyzed by the RCIU, at the target company.

There are several risk evaluation procedures that have yet to be completed.

In fulfilling the risk analysis, the contribution of contractors, distributors, transporters, etc., will always be of help since they themselves must comply to environmental, safety and health regulations and even they are not part of the RCI, they have in place procedures, they have carried out analysis, risk analysis, etc., that fits readily in the target company RCI mainframe.

Data for evaluate environmental, health and safety risks were found on the INTERNET (e.g., the portal of the World Health Organization, see WHO, 2010).

INCD-ECOIND contributed, in this respect with all its previous expertise in identifying and characterizing risks associated to industrial processes.

Table 1. Risk follow-up Matrix

Phase in the Company's activity	Environmental Risk	Safety Risk	Health Risk
Policy Documents	√	√	√
Conception, Design, Planning	√	√	Ongoing
Implementing, commissioning	√	√	Ongoing
Operational phase (internal processes)	√	√	√
Stakeholders:			
<i>Contractors, material and utility providers</i>	√	Ongoing	Ongoing
<i>Transporters</i>	√	Ongoing	Ongoing
<i>Distributors</i>	√	Ongoing	Ongoing
<i>Beneficiaries (users of company's products)</i>	√	√	√
<i>Service and maintenance of company's products</i>	√	√	√
<i>Recyclers</i>	√	√	Ongoing
<i>Waste management companies</i>	√	√	Ongoing
Control and Monitoring of risk assessment	√	√	Ongoing

4. INSERTING THE RCI IN THE COMPANY'S STRATEGY

Collecting certifications (quality, environmental, health and safety, RCI) in a company becomes a fashion. The main question with those certifications is that they prove their efficiency, they add up value to the company and to its products. From that point of view, ECOIND experts believe that each of such certifications should find its way in the company strategic and operational mainframe, contribute to process effectiveness and efficiencies, and improve the company public image.

This must be done in a coherent and harmonious way and the best way to do that is to find a place in the company's strategic and operational framework.

INCD-ECOIND has an 8-year experience in devising and implementing sustainable enterprise strategy and a modified Balance Scorecard approach was successfully used in all such previous projects.

At the target company, after the identification of specific company strengths, weaknesses, opportunities and threats, the RCIU members were asked to:

- Identify the importance of each SWOT analyses element from the point of view of the organisation on a scale of 1 to 10;
- Indicate the organisation's capacity to address each element proposed by SWOT analyse on a scale of 1 to 10.

Multiplying those two scores together to generate a single unit value generates a first hierarchy of SWOT elements, which can be used to assess both their relevance to the organisation and

the ability of the organisation to tackle the identified elements (e.g. in terms of resources, in-house skills and capacity).

Next, in an iterative process, this hierarchy was discussed with the help of the INCD-ECOIND consultants, appropriate adjustment were made on a consensual basis. The result was a final list of priorities and, subsequently, strategic objectives to be addressed by the company. This enabled a straightforward set up of company's vision/mission and fundamental values. The role of the INCD-ECOIND consultants was critical in signalling possible errors and inconsistencies.

In order to structure an integrated approach which would address all a company's problems (e.g. technological, financial, environmental, marketing and customer-related etc), as revealed during the company assessment, a version of a Balanced Scorecard was developed by INCD-ECOIND consultants and implemented in the present project.

Table 2 illustrates the structure of the Strategic maps of the target company, organized along the classical 4 perspectives of the Balanced Scorecard, but also along the three pillars of sustainable development. Each perspective includes, therefore, an economic component, an environmental and a social one.

Such an approach has two important outcomes:

- forcing managers to address all aspects of sustainable development in a balanced manner;
- as the strategic map is a public document or can be readily modified to become public, it shows to all interested people (employees, local administration, enforcement agencies, banks, local communities) the commitment of the company to go beyond financial issues and its environmental and social awareness.

Table 2. The Strategic Map. Responsible Care contribution is marked RCI

<i>Vision, Mission Strategic Target: BEST IN BRANCH UNTIL 2015</i>						
Strategic Perspectives	<i>sFinancial</i>	Sound circulation of funds			Green Company	
	<i>Stakeholders</i>	Customer trust	New markets, clients	New, high value-added products, services	RCI: Align own actions with those of stakeholders	RCI: Work together with stakeholders, Global RC Community
	<i>Internal processes</i>	BAT ISO 9001	RCI: Product Stewardship	Increase use of renewables	ISO 14001 RCI	RCI: Better work conditions
	<i>Learning and growth</i>	Acquisitions, Mergers	Tailoring products and services	Value employees' ideas	RCI: Zero waste policy	RCI: Good citizenship
		<i>Consolidate</i>		<i>Differentiate</i>		
			<i>Diversify</i>		<i>Environment</i>	<i>Social</i>
	<i>Economical</i>					
<i>Three pillars of Sustainable Development</i>						

At the company level, this means a positive answer to one simple question: Has everybody done their job?

It is emphasised that Responsible Care and Sustainable Development do not necessarily require spectacular actions in terms of major investments and works and the movement of many persons in concerted actions but the responsible fulfilment of the day-to-day tasks of each individual. Each small individual contribution is summative, contributing towards the achievement of a critical mass which determines a change in company's practice toward a stable equilibrium.

Placing the RCI elements at their right place, in the Strategic Map clearly shows the integrating potential of the Responsible Care approach. Implementing the RCI means those important elements at the operational, environmental, social, stakeholder level have been successfully taken into consideration. Wherever the RCI meets another certification in the Strategic Map, a special attention was paid that there are no redundancies. In this way, important simplifications can be achieved. The critical points addressed in this way were:

- Harmonize the ISO 9001 certification with the RCI Product Stewardship approach
- Harmonize the ISO 14001 certification with the RCI environmental issues
- Harmonize the OHSAS 18001 certification with the RCI health and safety issues
- Analyze stakeholders in the reference system created by RCI.

In adopting the framework described in Table 2, managers are compelled to stretch their thinking to ensure that every module is addressed. Empty table cells will immediately point out that managers attach a lack of value to a particular aspect of sustainability.

- After the Strategic objectives have been set up, each such objective must be detailed, attaching to every one of it:
- Action Plans
- Key performance indicators

- Target for these indicators
- Deadlines for these targets
- Responsibilities (appoint right persons to carry out specific jobs)
- Resources to enable their progress.

This is an ongoing matter at the target company.

The duration of implementing the Sustainable Strategy of the Company was found to be 6-12 months, depending on the complexity of the strategic objectives and on the company expertise in devising long term plans.

5. CONCLUSIONS

The Responsible Care proves a valuable tool for integrating existing environmental, health and safety concerns of the Company, expanding them to include stakeholders, developing them to address product quality, servicing, maintenance, recyclability, along all its life cycle.

The described project fully demonstrated the potential of the Responsible Care to be implemented not only in chemical companies but in any unit that faces risks and problems in the field of environmental protection, and health and safety.

Though the full implementation of the RCI take many months, the outcome is a single, comprehensive, integrated management system for environmental and health and safety problems at the company level. The next steps for Romanian enterprises will be to join a Responsible Care National Association, once this organization will be set up, and the global Responsible Care community.

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