

## A case study about the Value Based Management process at Hydro Oil & Energy

### - Practical issues when using the Balanced Scorecard

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#### **Abstract**

The strong competition for new assets prevailing in the oil and gas industry, have put pressure on companies within the industry to become lean and value creating. In Hydro Oil & Energy, the concept of Value Based Management was introduced in order to ensure value creation by operationalizing the company's overall strategy. The tool used in Hydro O&E is the Balanced Scorecard. In this thesis we have concluded that the company's purpose of using the Balanced Scorecard as a mean of maximizing shareholder value, entitle it to be a Value Based Management tool. Comparing theory and our empirical findings we have enlighten some problematic areas when using a Balanced Scorecard for this intended purpose. We have, through the case study conducted, been able to conclude that insufficient dialogue, communication and involvement are the main reasons why the intended outcome of the Balance Scorecard is undermined. We have also seen that there is a need for a facilitator function that can support sectors within Hydro Oil & Energy but that this function must involve the line managers and rely on a common professional language adapted to Value Based Management. We have further shown the contradictory effect that the company's bonus system can have on the commitment towards the use of the Balanced Scorecard.

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# 1. Introduction

## 1.1 Background

Oil and gas prices have today a significant impact on the global economy and therefore also on the society. The high oil price has created large net incomes for oil companies leading to a strong general purchase power in the industry. This together with the nature of non-renewable resources that means diminishing assets has created a situation with strong competition for new assets.<sup>1</sup> Growth is now on the agenda again for most of the private oil companies, and they have all started to examine new ways of adding value.<sup>2</sup> In order to excel in this competition the importance of being a lean and effective organization is increased. The Value Based Management (VBM) theory was introduced in Hydro Oil and Energy (O&E), as well as in many other companies during the nineteen nineties.<sup>3</sup> This concept emphasizes creation of shareholder value by directing focus throughout the organization towards value drivers. The Balanced Scorecard (BSC) tool is sometimes used in this context. One of Hydro Oil & Energy's main challenges is to become an established global player within the oil and gas industry. To succeed, it becomes crucial that the entire company focus on value creation. Finding the subject of VBM interesting and the oil and gas industry exciting, we have embraced this case study, trying to elicit some problematic area in the practical use of the VBM and particularly the BSC.

## 1.2 Purpose

The purpose of this thesis is to study and learn about the VBM process in Hydro O&E, focusing on practical issues when using the BSC concept. What can these practical issues be and what are their underlying reasons? This implies capturing some of the perceptions within the company. We also aim to compare and contrast normative literature with the VBM at Hydro O&E.

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<sup>1</sup> Head of PPM, Finance, 2006-10-09

<sup>2</sup> Antill, Arnott, 2003, p.3

<sup>3</sup> Norsk Hydro ASA VBM-introduction document, 1999

## **2. Method**

### ***2.1 Delimitations***

We are interested in deepening our understanding of VBM in the oil industry, and do so by focusing on Hydro. Hydro consists of three larger independent organizations, namely Aluminium, Oil & Energy and Other Businesses. We do not intend to study Hydro in its entirety, but describe the VBM process in Hydro O&E, which is one part of Hydro. This means that any conclusions drawn may be uncharacteristic not only for the industry, but also for the company as a whole. Hydro Oil & Energy is a large and diverse organization with many sectors. Even so, they all share the same underlying VBM process based on Hydro Oil & Energy's overall strategy, report to the same financial unit and are to a large extent interdependent. Therefore, we have limited ourselves to this part of the company. We have chosen to not limit ourselves further to a specific sector within Hydro O&E since we see a value in the variety of tasks, which can enlighten different aspects of problematic areas in the use of BSC. In addition it was an explicit request by our contact person in Hydro to specifically examine the system perception within Hydro Oil & Energy.

In examining the Value Based Management (VBM) system we will mainly focus on the BSC. The reason for focusing on the BSC is that we feel it is the key ingredient in the system at Hydro Oil & Energy. When considering the incentive program we will exclude the individual rewards that apply to higher-level managers. This is in order to focus on the collective performance related pay that applies to the majority of the employees. However, we do not intend to focus on how to design a well functioning bonus system.

We would also like to underline that we, in our approach, have focused on identifying problematic issues in the VBM process within Hydro O&E and not focusing on what is already functioning well. Considering the complexity of the organization and the limited scope of this thesis, we do not expect to come to any exhaustive answers on the questions stated, but hope to be able to make some indications on interesting issues and problematic areas.

## ***2.2 Research approach***

In the aim to answer the purpose of this thesis we chose a case study as our research method. The choice of a case study can, according to Yin, be motivated by three reasons: firstly if there is a lack of theoretical framework within the field, secondly if the field of study has limited empirical evidence, thirdly if the purpose of the research is to examine a particular empirical phenomenon in its appropriate context. Yin also states that case studies should be used when performing contemporary studies of events over which the researcher has no control.<sup>4</sup> All the reasons above are to some extent valid in this thesis. The VBM and BSC are relatively new concepts within the governance area. Although these concepts have come to fashion, there is still a lot to be studied and learned about them, from both a theoretical and an empirical point of view. The uniqueness of the event, to study these concepts in Hydro O&E, and the lack of control over the phenomena to be examined, further motivates the choice of a case study.

## ***2.2 Empirical data***

Yin acknowledges six different sources of data gathering for case study research: documentation, interviews, databases, direct observation, participant observation, and physical artefacts.<sup>5</sup> The primary source of information for this thesis has been interviews, but documentations have also been used frequently. As a result of the position within Hydro of one of the authors, we have also had the opportunity to apply more direct observation and participant observation to some extent. This position has been in a financial unit of the company. The advantage of this approach is that information can be gathered, and conversation can be held without the inhibitions an interview set up may imply.

The interviewees were chosen considering their position in the organization as well as their active involvement in the studied system. To select employees with extended knowledge, advice from our contact person was received and regarded. Consequently most of the interviewees are in their day to day work involved in the VBM process in an active way and even sometimes responsible for certain aspects of it. But we have also interviewed some who

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<sup>4</sup> Yin, 1994, p.9

<sup>5</sup> Yin, 1994, p.79

are only affected indirectly. These interviewees are from different parts of the company as well as different levels. All the interviews, but one made over the phone, were conducted face to face between September 29 and November 14 2006, and lasted 30-90min. Some of the questions asked were standardized and predetermined, while there was also an element of flexibility of questions as the interview went along. Notes were taken during the interviews as well as recordings that were transcribed to paper form afterwards. The material included in this thesis has been read and approved by a representative from Hydro O&E.

The reliability signals if the results of a case study can be repeated through the same procedure as taken by the investigators.<sup>6</sup> Hence, conducting the same study it should be possible for another investigator to come to the same conclusions. As we have focused a great deal on the perceptions of employees within the company, the results and conclusions are highly dependent on the interviewees included in the study. This element of subjectivity complicates the repetition of the results as well as the reliability of the study conducted.

## ***2.3 Theoretical framework***

We have chosen the framework of Ittner & Larcker to define VBM. This will serve as an introduction to the concept and the connection to the BSC. When describing the BSC we rely on the extensive work of Kaplan & Norton, the inventors of the BSC concept, and the work of Olve, Roy and Wetter. We will also apply the model by Olve, Petri, J.Roy, and S. Roy on the evaluation of the practical use of the BSC. Furthermore we consider the opinions of Iver Bragelien, associate professor at the department of finance and management science at the Norwegian School of economics and business administration (NHH), whom we have interviewed. Bragelien is a renowned researcher with an extensive knowledge within management science and who is very familiar with Hydro O&E.

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<sup>6</sup> Yin 1994, p.33

### **3. Theory**

#### **3.1 VBM**

In the Value Based Management (VBM) framework of Ittner & Larcker the key issue is the focus on the operational and financial drivers of shareholder value within the organization. According to the authors the VBM framework is about selecting strategies that are aligned with increased shareholder value, identify value drivers in order to set Key Performance Indicators (KPIs) and define action plans. They conclude that the strive for creation of shareholder value has lead to the development of modern management techniques, such as the BSC.<sup>7</sup>

Although Ittner and Larcker conclude the BSC to be a VBM tool, this is not an all accepted opinion. Malmi & Ikäheimo find this a bit problematic since the scorecard can be used where the focus is not on creating shareholder value. But they agree that the BSC can be applied as a VBM-tool, if used for the right purpose.<sup>8</sup>

As already mentioned we use the work of Kaplan & Norton when describing the BSC. The BSC is a comprehensive framework for managers to derive a set of KPIs from the company's vision and strategy.<sup>9</sup> This is done by organizing the measures into four different perspectives namely the customer, the Internal business process, the Financial and the Learning and growth perspectives.<sup>10</sup>

#### **3.2 BSC in a VBM context**

For the BSC to apply to the VBM ideology it has to be based on value drivers. It is a way to visualize and operationalize the company's strategies. It is a tool that signalizes the road that should be taken and that helps achieving it. The top management need to set strategies and KPIs and it needs to be done dynamically over time. The KPIs of each team should reflect the

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<sup>7</sup> Ittner & Larcker, 2001, p.353

<sup>8</sup> Malmi & Ikäheimo, 2003, p.237

<sup>9</sup> Kaplan, Norton, 1996, p.24

<sup>10</sup> Kaplan, Norton, 1996, p.25

governance needs for that specific unit.<sup>11</sup> More importantly, scorecards are about overview and balance, and not primarily about many separate KPIs.<sup>12</sup> Later in this thesis, the two words “KPIs” and “measures” will be used interchangeably.

### **3.2.1 BSC and KPIs**

Olve, Petri, J.Roy and S.Roy claim that the BSC gives meaning to the work helping to realize the potential of the employees, adapting and reacting to the demands on organizations. For all individuals to respond in the best interest of their organization, they need to understand its strategy, and the implications of the strategy for their own tasks. Scorecards and strategy maps are tools for furthering the organization’s ability for strategic thinking, and focusing on achieving intended strategies.<sup>13</sup>

Mission statements are adopted by many companies to communicate fundamental values and goals to their employees. A mission statement addresses core beliefs and identifies core products and target markets. The BSC provides managers with a comprehensive framework translating a company’s vision and strategy into a logical set of objectives and performance measures. These are organized into four different perspectives: customer, financial, internal business process and learning and growth.<sup>14</sup> Not only should a good scorecard provide a balance between these four perspectives, it should also help to find a balance between static and dynamic measurement and focus. Stability of the BSC is important, at the same time, the BSC must be allowed to be flexible enough to react to changes in the environment.<sup>15</sup> The BSC provides a framework, a language, which can be used to communicate mission and strategy. It uses measurements to communicate the drivers of current and future success to the employees.<sup>16</sup>

The overall company BSC should be broken down into scorecards reflecting the need of the sub-levels. This process should consist of alignment upward as well as downward, meaning

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<sup>11</sup> Iver Bragelien, Associate, 2006-10-27

<sup>12</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.3

<sup>13</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.7

<sup>14</sup> Kaplan, Norton, 1996, p.24 -25

<sup>15</sup> Olve, Roy and Wetter, 1999, p.118

<sup>16</sup> Kaplan, Norton, 1996, p.24 -25



that it should not be perceived as a sort of over centralized management tool.<sup>17</sup> The BSC should not be used as a control tool, evaluating past performance. It should rather be used to articulate and communicate the strategy of the business, and to help aligning organizational, cross-departmental, and individual initiatives to achieve common goals.<sup>18</sup>

The BSC includes measures with a variety of aspects and conditions that are of importance to a business. However, the emphasis should not be on the measures alone. The essence of the scorecard is the processes and the continuous discussions relating to the measures. And yet, one must remember that the measures do have a central role. Olve, Roy and Wetter define measures as “compact descriptions of observations, summarized in numbers or in words”.<sup>19</sup> In the BSC process, these measures are created and then operationalized through action plans. The action plans resulting from this process should identify the people in charge and the time frame for achievement regarding each measure.<sup>20</sup>

Otley resorts to some criticism of the guidance in the BSC theory when he mentions that there is little guidance on how to select specific performance measures or how to make adequate trade-offs between different measures. He further elaborates on the BSC as a dynamic and recognized tool and states that although the literature recognizes the BSC, it gives little assistance on how to be managed.<sup>21</sup>

The number of measures that should be set for each scorecard depends on the level at which the measures are to be used.<sup>22</sup> The number of essential measures should decrease when moving down the organization. This is in order to avoid measuring departments, units and individual employees on variables that they cannot influence.<sup>23</sup> A measure should be chosen in a way that the persons immediately concerned could recognize that it is addressed to them. This implies that there can be situations where the organization has to use many different and specific measures. However, there is a need of uniformity and thus a desire for vertical and

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<sup>17</sup> Olve, Roy and Wetter, 1999, p.129

<sup>18</sup> Kaplan, Norton, 1996, p.25

<sup>19</sup> Olve, Roy and Wetter, 1999, p.122-123

<sup>20</sup> Olve, Roy and Wetter, 1999, p. 141

<sup>21</sup> Otley, 1999, p. 375-376

<sup>22</sup> Olve, Roy and Wetter, 1999, p.130

<sup>23</sup> Ibid

horizontal comparisons within the organization. This may be a reason to cut back on the number of measures used.<sup>24</sup>

### 3.2.2 BSC Dilemmas

One of the major problems by introducing a measurement system, such as a BSC, is the risk of setting goals that do not reflect the strategy. When you introduce a measurement system you lower the priority on the activities that are not to be measured. The message is then that what is not measured should not be done! The strength in measurement systems is that you turn your focus towards what is being measured but at the same time the weakness is that you might not be measuring what is most important. Thus, it is crucial to choose measures that support the strategies and which could be used in an active and dynamic way. A high degree of freedom for the units in an organization to set their own targets might therefore be risky. When the units are responsible for setting the KPIs, the result can be too easily achievable goals. It is not obvious that the self-made targets are set with the right stretch. One should also remember that a target is not objective only because you can measure it. The Reporting process can be objective while setting measures is a subjective process and can thus lead to manipulation.<sup>25</sup>

Another issue is that the KPIs set are often what can be measured rather than what the organization really wants to achieve. The problem with the BSC and the included KPIs in practise is that these are often countable measures. A countable measure, especially if it is static, might fail to measure and direct focus towards the most important issues in a department. For Example, consider an offshore oil plant that has a specific production target. In a case of a hurricane that destroys the production facility, the oil field will not reach its production target. However, the oil plant team might have done a heroic effort to turn the situation from being economically catastrophic into a situation where a small profit is made. This will however not be rewarded since the production target is not reached. The countable KPIs will fail to capture these situations.<sup>26</sup>

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<sup>24</sup> Olve, Roy and Wetter, 1999, p.144

<sup>25</sup> Iver Bragelien, Associate Professor, 2006-10-27

<sup>26</sup> Ibid

Furthermore, when measures are defined, a language is created to be used when things are described. The intentions and needs of the users decide whether a language, e.g. a set of KPIs, can be considered adequate. The broader the field of intended use, the more difficult to define and select measures equal to the purpose. The issue may become even more problematical if the users of the BSC do not share the same professional language or have not learned the language sufficiently. Designing measures becomes easier if individuals with the same professional background use the BSC. However, one particular benefit from the KPIs is precisely that they trigger internal discussions about their meaning.<sup>27</sup>

### ***3.3 Successful Implementation of a BSC system***

Venkatraman and Gering suggest that organizations need to focus on four activities in order to implement the scorecard concept successfully. These areas are “Making the strategy explicit”, “Choosing the measures”, “Define and refine”, and “Deal with people”.<sup>28</sup> This means aligning the measures with the company strategy, making the measures robust and programmable for it solutions, and getting the measures accepted and internalized within the organization. Gering and Venkatraman also point out that this, while it seems to be quite simple, is not an easy task to complete and that the different steps need the involvement of different interest groups.<sup>29</sup> Olve, Petri, J.Roy and S.Roy mean that the BSC is a tool for describing what the organization intends to do and when it has achieved it. From their experience within the field, and considering the studies of Gering and Venkatraman, they identify a number of attributes to be regarded for the BSC to be both useful and actionable.<sup>30</sup> In this thesis we treat all these attributes except IT-support since it has not been perceived as a relevant issue here.

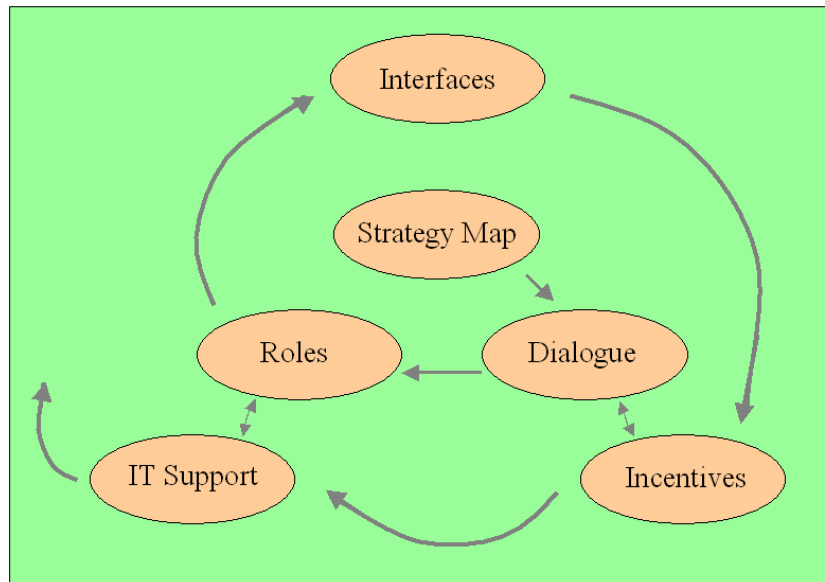
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<sup>27</sup> Olve, Roy and Wetter, 1999, p.122, 125

<sup>28</sup> Gering & Venkatraman, 2000, p1

<sup>29</sup> Gering & Venkatraman, 2000, p4

<sup>30</sup> Olve, Petri, J.Roy and S.Roy, 2003, p.34-37



Source: Olve, Petri, J.Roy and S.Roy, 2004, p.2

### 3.3.1 Strategy maps

Vision has a key role in producing a useful change since it helps to align, direct and inspire actions of the employees. Without an appropriate vision, an effort to implement a system can easily result in a set of incompatible, confusing, and time-consuming projects, moving in the wrong direction or nowhere at all.<sup>31</sup> The vision and purpose of the BSC is that it facilitates communication about strategy throughout the whole organization. In order to achieve this, any scorecard project should start by strategy visualization. Whenever a BSC is perceived as just another format for monitoring performance, it is likely to fail. People will regard the scorecard as a surveillance tool and thus resist it, or they might perceive it as meaningless paperwork that add a to their reporting workload.<sup>32</sup> Without considerable communication, employees' hearts and minds cannot be captured and they will not make the short-term sacrifices necessary to make the new system a success. Good communication is needed not only through words and but also through actions. "Nothing undermines change more than behaviour by important individuals that is inconsistent with the verbal communication".<sup>33</sup>

<sup>31</sup> John P.Kotter, 1996, p. 7

<sup>32</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.2

<sup>33</sup> John P.Kotter, 1996, p. 9-10

### 3.3.2 Dialogues

BSCs and strategy maps are communication tools. By illustrating initiatives and performance within organizational units, they enable discussions about direction, degree of success, and trade-offs. During these dialogues, the two parties should discuss the strategy map, validate the assumed links, set targets together, analyze results, and use outcome to encourage action.<sup>34</sup> Dialogues should not only be conducted within the management team but also between management and superior management, between management and other units, and between management and employees.<sup>35</sup>

### 3.3.3 Roles

The implementation of the BSC should begin with an executive team. Optimally the executive team should share the vision and strategy with the whole organization.<sup>36</sup> It is important to create a project group with the sufficient time and energy to keep the BSC-process moving. How the work is organized is crucial for having a successful outcome. The project should be given weight in the organization but it should at the same time be open to ideas from all parties. An issue here is that, most members of the executive team usually have busy schedules. Management and other individuals who possess respect in the organization should act as missionaries and demonstrate their interest.<sup>37</sup> Some companies strive to identify “ambassadors” in all units where BSCs are introduced. These ambassadors are to ensure commitment towards the BSCs and need to have high credibility among their colleagues.<sup>38</sup>

There is not a single correct answer to how the responsibilities of an executive team should be assigned and to whom. To a large extent this will depend on how one manages strategy visualisation and dialogues, as these will determine the reach and the scope of the project. One example is in Ericsson who located the responsibility for BSC implementation and maintenance, not in the Controller department, but in Operations and HR. This is because they meant that the controllers were more concerned with getting their reports out in time.

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<sup>34</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.3

<sup>35</sup> Olve, Petri, J.Roy and S.Roy, 2003, p.149

<sup>36</sup> Kaplan, Norton, 1996, p.200

<sup>37</sup> Olve, Roy and Wetter, 1999, p.116

<sup>38</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.4

Operations and HR on the other hand focused on achieving a shared view of where the company should be heading and were more suitable as facilitators in the local scorecard work.<sup>39</sup>

John P.Kotter also supports the importance of roles. According to him, successful implementation of change requires the support of a coalition of employees who are powerful – in terms of formal titles, reputation and relationships, information and expertise, etc. If one fails here, quality programs might turn into sources of more bureaucracy. No matter how capable or dedicated the head of the change implementation group is, guiding coalitions without strong line leadership have very difficult to succeed.<sup>40</sup>

### **3.3.4 Interfaces**

Interfaces deals with how the BSCs of different levels relate to one another. In traditional financial reporting, all accounts are aggregated into a common corporate report. In the BSC tool, sometimes the interfaces between different levels in an organization are based on logic and not on aggregated numbers.<sup>41</sup> In order to achieve strategic alignment from top to bottom in the organization, it is important to link measures at different levels and to find KPIs that are perceived as meaningful, uncomplicated and tangible by those they concern. Often measures are more specific at lower levels whereas the corresponding measures are more general at higher levels. If one can identify the cause-and-effect relationships of the measures, it will be even easier to create motivation and commitment, among the employees, towards the measures. These relationships will increase the understanding of why the success factors set in the measures are important.<sup>42</sup>

Some companies try to break their BSCs down to the individual level. Whether this is an appropriate policy depends on the nature of the business. This step is most natural for employees who are fairly autonomous. For example this might be a logical solution for salesmen who sometimes are their own profit centres. However, in businesses where

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<sup>39</sup> Olve, Petri, J.Roy and S.Roy, 2003, p.190-191

<sup>40</sup> John P.Kotter, 1996, p. 6-7

<sup>41</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.5

<sup>42</sup> Olve, Roy and Wetter, 1999, p.134-135

employees work in teams, this might not be as suitable.<sup>43</sup> The important is that all workers can see the link between their task and the company's strategy in order to understand their own importance and their ability to create value. It is not necessarily good to involve an individual employee on lowest level in a BSC that only concerns drivers well above his activities. This would be rather negative for the employee's motivation since he cannot affect the scorecard's result.<sup>44</sup>

### **3.3.5 Incentives**

In order to create commitment, organizations must create incentives for the employees. However, complex weighting schemes for bonuses based on scorecard results may have large consequences for the "balance" of BSCs, as they signal a trade-off, rather than initiating a strategy and learning discussion which is what most scorecard promoters suggest. Many organizations introduce BSCs to help employees to understand the reasoning behind what they are being asked to do. Creating such discussions is often also a way of creating incentives.<sup>45</sup> When all employees understand the business unit's long-term goals, as well as the way these are to be achieved, the organizational efforts and initiatives can be directed towards making the system successful. Individuals can see how their particular actions contribute to achieving the business unit's objectives. Thus, by communicating the strategy and linking it to personal goals, the BSC creates a shared understanding and commitment among all participants in the organization.<sup>46</sup>

Kaplan and Norton state that, ultimately the BSC must be linked to compensation for it to be able to change the culture of the company. One of the major advantages of linking reward system to the BSC is that the long-term objectives embedded in the BSC are reflected in the incentive plan as well. The somewhat alternative approach of the BSC reward system involves setting threshold levels of the measures that all needs to be obtained for any bonus to be received.<sup>47</sup> Also Otley acknowledges this as being congruent with the BSC ideology. This is since the measures should correspond to critically important areas and what is important is

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<sup>43</sup> Olve, Roy and Wetter, 1999, p. 137-139

<sup>44</sup> Iver Bragelien, Associate Professor, 2006-10-27

<sup>45</sup> Olve, Petri, J.Roy and S.Roy, 2004, p.5-6

<sup>46</sup> Kaplan, Norton, 1996, p.200

<sup>47</sup> Kaplan & Norton, 1996, p. 217-219

to achieve satisfactory performances in all areas to get the balanced effect of the BSC.<sup>48</sup> But Kaplan & Norton further advocate a careful approach as it is utterly important that the measures are the right ones, and that they are reliable. Olve, Roy and Wetter share this opinion as they conclude that if a bonus system is to be tied to the BSC, then the selection and construction of the measures included becomes extremely important.<sup>49</sup>

### **3.3.6 Education**

Kaplan and Norton add another important factor that organizations must emphasize in order to ensure a successful BSC. To close the gap between what is required for ensuring the right performance and what exists today, businesses must invest in educating employees.<sup>50</sup> For the BSC to be able to influence personal and team priorities, communication and educational programs must be set up. A condition for implementing strategy is that all individuals, from operational employees to the board of directors, understand the strategy and the behaviour that is required to achieve the strategic objectives. A consistent and continuing program, educating the organization on the component of the strategy and providing ongoing feedback on actual performance, is the foundation of organizational alignment.<sup>51</sup> A successful implementation is not fully completed until changes are truly integrated into the culture. This process might take up to ten years. It is important that the organization have ensured that the next generation of managers truly do personify the new approach.<sup>52</sup>

## **4. Empirical findings**

### ***4.1 Hydro Oil & Energy***

Hydro is a Fortune 500 energy and aluminum supplier founded in 1905, with 33,000 employees in nearly 40 countries. The company's mission is to "strengthen the viability of our customers and the communities we serve".<sup>53</sup> Hydro O&E is a leading offshore producer of oil

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<sup>48</sup> Otley, 1999, p. 376

<sup>49</sup> Olve, Roy and Wetter, 1999, p. 140

<sup>50</sup> Kaplan, Norton, 1996, p.28-29

<sup>51</sup> Kaplan, Norton, 1996, p.202

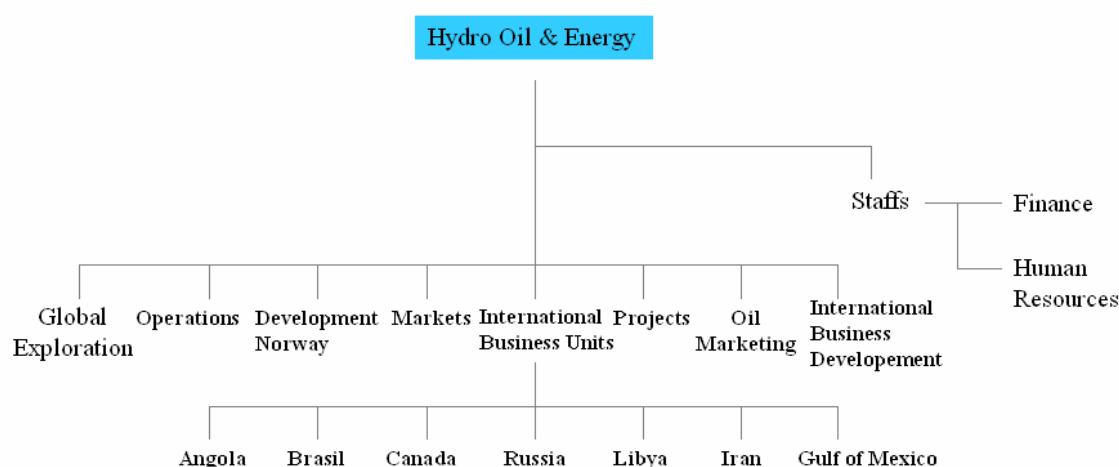
<sup>52</sup> John P.Kotter, 1996, p. 12-15

<sup>53</sup> [www.hydro.com](http://www.hydro.com), as of 2006-11-10



and gas, based on a strong position in the development of the Norwegian petroleum industry during the past 40 years. The company has an excellent reputation for its project execution skills and expertise in deep waters and rough seas. It is also at the forefront of wind and hydrogen energy production. Hydro O&E is operating 13 oil and gas installations. The company has the Norwegian continental shelf as its base, but produce oil and gas in Angola, Canada, Russia and Libya, and have activities in the Gulf of Mexico, Iran, Denmark, and Sweden.<sup>54</sup>

## Hydro Oil &Energy organization chart



Hydro O&E is comprised by 7 sectors, 7 International Business Units (IBU) and 1 Staffs. The sectors on their parts are divided into Business Units, Departments and Units. Staffs includes Finance and Human Resources. In this thesis, we refer to the IBUs as sectors.

**Staffs** is composed by Finance and Human Resources. **Finance** coordinates the common business plan for O&E, makes quarterly management reporting including KPIs for the O&E business areas as a whole, prepares accounts and presents financial results for all sectors in O&E. The Business Planning process is coordinated by the Planning and Performance Management unit (PPM) within finance. **HR** is responsible for making the organization fit enough to fulfill its strategy.<sup>55</sup>

<sup>54</sup> [www.hydro.com](http://www.hydro.com), as of 2006-11-10

<sup>55</sup> HR Manager, 2006-10-19

**Global Exploration** is responsible for volume and risk assessment for prospects and undeveloped technical resources. The largest sector is **Operations**. This sector is responsible for operations of the fields Oseberg, Oseberg Øst, Brage, Troll Oil, Njord, Fram, Grane and Heimdal, in addition to the development of these fields in connection with infrastructure and installations. **Development Norway** is responsible for exploration and development of new fields in the Norwegian Continental Shelf, in addition to the business-related follow-up of Hydro O&E's overall non-operator engagement in Norwegian oil and gas activities. **Markets** is responsible for the commercial operations of the group's oil, gas and power areas. The sector is also responsible for Hydro O&E's power production and refinery operations, in addition to the transport of oil and gas. The sector also includes the Hydrogen unit and Norsk Hydro Electrolysers.

**Projects** assists all the sectors and IBUs with technical studies and the execution of investment projects. **Oil Marketing** is responsible for sale and distribution of petroleum products to end consumers in Sweden. Norsk Hydro Olje AB operates through 550 gasoline and diesel stations. The company is also a significant supplier of heating oil to the residential market and serves 70 000 electricity customers.

**International Business Development** has, through close co-operation with business units abroad and units in Norway, an important responsibility in driving Oil & Energy's international upstream strategy and for executing international business development projects. Hydro O&E's international activities are visualized in the organization chart under **International Business Units**. These Business Units include Canada, Gulf of Mexico, Angola, Iran, Russia and Libya.<sup>56</sup>

## ***4.2 VBM-introduction at Hydro***

### **4.2.1 Background**

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<sup>56</sup> Intranet Hydro per 2006-11-12

In April 1999 Egil Myklebust, at that time the Chief Executive Officer of Norsk Hydro ASA, said to Hydro's top leaders at Brattreien, Norway, "We will change our planning processes and we will change our steering system. I want this and I want it this year."<sup>57</sup> For this reason, a project known as Value Based Management was created. The project's aim was to provide methods and tools to determine how best to create and add value, and it introduced new planning and follow-up processes together with a new steering model. It was an attempt to align operations, including individual actions and management decisions, with overall corporate and divisional strategy.<sup>58</sup>

At the time, Hydro as a whole was a below average performer in giving returns to its shareholders. This meant that to the investor, 400 out of the top 500 companies quoted by Fortune, was a better bet than Norsk Hydro for giving a satisfactory return on his or her investment in stocks. Hydro was meeting neither its internal targets nor its shareholders' expectations. Hydro's performance in terms of its own profitability target had been disappointing. Only once in the past six years had the company managed to achieve this. It was accepted that Hydro had too little focus on profitable growth. In stretching itself to develop into a global player in its key industries, it had paid too much attention to increasing sales volumes without first being sure of acceptable profit margins.<sup>59</sup>

All units at Hydro at that time went through a rigorous and detailed process to create budgets and use these budgets as key measurement tools.<sup>60</sup> The company used around 200 measures. One of the main ideas of Value Based Management was to direct focus towards what was important.<sup>61</sup> The company did not have the methods, tools and measures to determine some critical elements affecting the business.<sup>62</sup> This would be provided by the introduction of VBM. Every business area would have a maximum of 10 KPIs that answered the questions; What is important? What is our vision? What do we want to achieve? Which are our strategic objectives? Where and what are the Value Drivers?<sup>63</sup>

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<sup>57</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>58</sup> Ibid

<sup>59</sup> Ibid

<sup>60</sup> Ibid

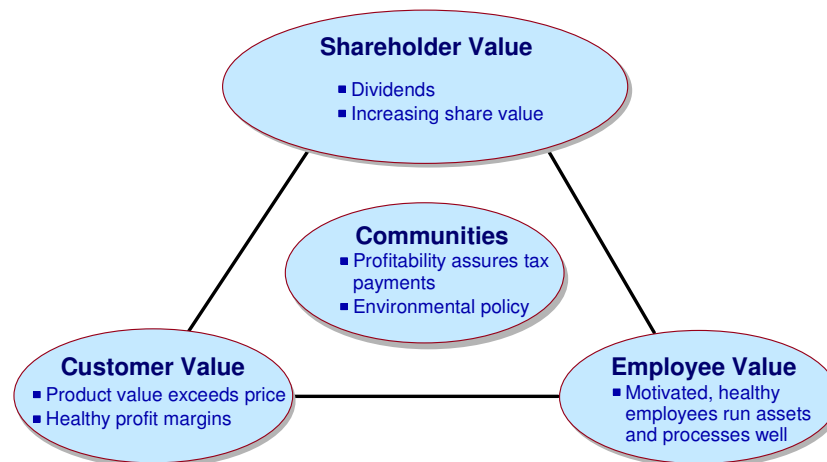
<sup>61</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>62</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>63</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

The new system was not about centralization, but about involvement in order to ensure that everyone in the organization would know what they were accountable for and could measure and track their performance against a set of written and agreed objectives. Everyone would understand how their decisions would create the greatest value for Hydro as a corporation. It would provide a framework that allowed for a more structured and systematic approach to the way Hydro went about planning and operating its businesses.<sup>64</sup>

The creation of superior shareholder value would be the goal, the means would come from satisfying customers, motivating and developing the company's employees and communities, improving efficiency, and growing only when one could demonstrably create value.<sup>65</sup>



Source: Norsk Hydro ASA VBM-introduction document, 1999

#### 4.2.2 The project group

The corporate management team, led by Egil Myklebust, was to drive the changes necessary to improve the performance of the company. The project team, which included representatives from all different parts of the organization, aimed to train, educate and communicate to the degree needed and asked for by the divisions and units. This was to ensure that the principles of value creation were firmly embedded in the organization.

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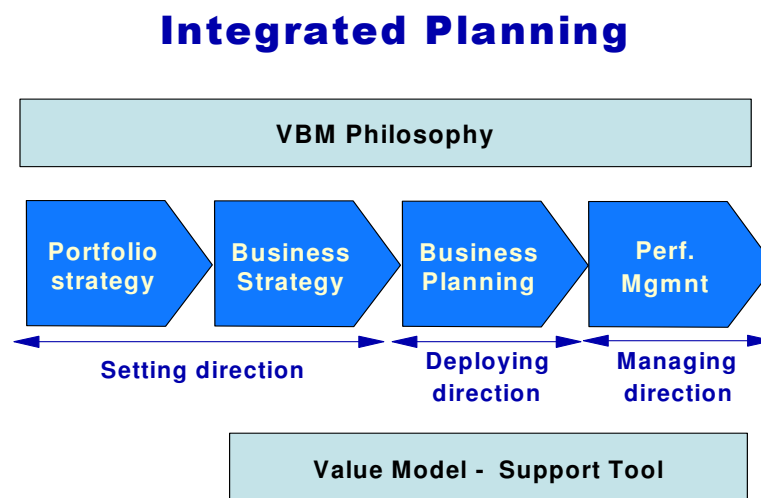
<sup>64</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>65</sup> Ibid

The project would provide education and training in VBM, value modeling and planning. This would include templates, manuals and other support material, prompt and detailed additional support when and where required, internal and external examples and solution possibilities, a working value model for your business, and feedback on project performance and its continuous improvement. The goal of the project was to provide everyone with the methods and tools to determine how best to create and add value. The implementation group was supposed to only implement the system but not maintain it.<sup>66</sup>

### 4.3 The formal framework of VBM at Hydro O&E

The Framework for value creation goes from deciding on what businesses Hydro wants to be in, through directing how best to get those businesses to create value, to plan exactly what and how the businesses are going to be involved in and finally to measure and manage the performance of companies, teams and individuals.<sup>67</sup>



Source: Norsk Hydro ASA VBM-introduction document, 1999

#### 4.3.1 Integrated Planning

The integrated planning process is based on the VBM philosophy. VBM helps the organization to measure and manage value creation for shareholders, employees and

<sup>66</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>67</sup> Ibid

customers. The main objectives of the planning process are to drive corporate goals and strategy down through the whole organization and ensure that all employees know and understand how to create value.<sup>68</sup>

Integration is about converting strategy into the things that the employees do every day. The process starts with corporate management. The corporate portfolio process provides direction and value creation targets; the Sectors use these to begin developing the strategic plan for their business. Then, in their strategy, they identify the best way to achieve these targets. The annual business plan includes strategies for the year ahead and is focused on developing Key Performance Indicators, targets and action plans that can execute the business strategies for the coming year. This approach ensures that everyone understand clearly the strategy and goals - and eliminates activities that stand outside the strategic scope. Everyone in Hydro O&E must have clearly defined targets and actions that lead to value creation. Each person, regardless of position, must understand how he or she contributes to the overall strategy and, thus, creates value for the company. The results of the steps in the Integrated Planning Process is visualized and commercialized through the BSC.<sup>69</sup>

The VBM system is not meant to be a pure Management system and should involve everyone.<sup>70</sup> Individuals should see the links between their goals, their managers' goals and the company strategy.<sup>71</sup> However, it is not obvious that involving all employees at all levels in the company's overall strategies is a good idea since the strategies can be competitive advantages and thus should be kept confidential. So internal communication about strategies should be discussed more in order to understand how we can communicate enough to the employees in order to give them sufficient direction, but not so much that it will lead to a loss of our competitive advantages.<sup>72</sup>

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<sup>68</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>69</sup> Ibid

<sup>70</sup> Senior Economy Consultant PPM, 2006-10-03

<sup>71</sup> Manager in Finance Department, Involved in VBM introduction, 2006-09-29

<sup>72</sup> Ibid

### **4.3.2 Business Planning - Six Steps to Success**

Business planning is about making the strategy happen. This requires that all parts of the organization to set targets in accordance with strategic goals and identify the actions needed to reach the targets.<sup>73</sup>

#### **Step 1. Adopt the vision and strategic goals**

Agree upon, and communicate the company vision and strategy throughout the organization.

#### **Step 2. Identify the KPIs and establish Balance Scorecards**

The concept of the BSC is initiated here and is considered as an essential element in VBM. There should always be a balance between creating value for shareholders, customers, internal processes and people. The set of KPIs must be balanced and the individual KPIs should be relevant, consistent, measurable, comparable, controllable and simple. The BSC and KPIs should not be regarded as only reporting tools but also as useful tools for the work in the units. The reports are something that managers should continue to follow up even after they have been reported upwards. The process should not stop there.<sup>74</sup> It is important that the whole organization is thinking value throughout the whole year and not only during the Business Plan period.<sup>75</sup>

#### **Step 3. Set stretched targets**

Once the KPIs are identified, all levels of management will hold "stretch" target-setting sessions with their staff. The sessions are interactive, beginning with upper levels of management and moving down through the organization. Each level of management must ensure that their KPI targets support the upper-level targets.

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<sup>73</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>74</sup> Manager in Finance Department, Involved in VBM introduction, 2006-09-29

<sup>75</sup> Ibid

#### **Step 4. Develop action plans**

After having set stretched targets for your KPIs, you need to develop action plans to achieve these goals. Action plans are the concrete initiatives that the units implement to meet their targets. Each is assigned to an individual and requires a timeline for completion. Although the initial action plans are developed during the annual business planning cycle, additional action plans should evolve throughout the year as new information and ideas come to light.

#### **Step 5. Approve plans**

Once a sector has completed its action plans and filled in the BSC template, the business plan is presented to senior management. Corporate Review Meetings (CRM) are held in which the sector management, the head of Finance, the head of HR, and the head of O&E participate.

#### **Step 6. Prepare for follow up**

During the performance management process, the corporate and sectors should follow up and discuss whether the KPIs are suitable and how they will recognize and reward good performance or manage poor. The sectors, departments, units and individuals should have a work plan established to clearly define responsibilities and accountabilities for results, and determine how to recognize and reward good performance or manage poor.<sup>76</sup>

### **4.3.3 Hydro Leadership Development Process**

Hydro uses a systemized tool for target setting, performance appraisal and development for their employees. This process is called the Hydro Leadership Development Process (HLDP). The HLDP is closely linked to business planning. The essence of the HLDP is to be a forum where employee and manager discuss the individual's performance, needs, and his/her present and future role in the organization. This is done through a dialogue meeting and a follow up dialogue after approximately 6 months.<sup>77</sup> It is compulsory to perform the HLDP process and its fulfilment is followed up very closely.<sup>78</sup>

The HLDP meeting should include performance feedback and development discussion including last year's performance and business plan for coming year. Evaluation of the previous year's business performance based on the achievement of the KPIs should also be

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<sup>76</sup> Norsk Hydro ASA VBM-introduction document, 1999

<sup>77</sup> HLDP – documentation, Hydro intranet

<sup>78</sup> Vice President, Field Evaluation IBD, 2006-10-02



included in the meeting. The results of the HLDP are used, for example, to redistribute personnel and as a basis for the negotiations of the individual's base salary.<sup>79</sup>

#### ***4.4 The Integrated Planning process in practise***

The portfolio and strategy decisions for Hydro as a whole are done on aggregated level in the Corporate Centre. This is done in May and June and the result here will be the base from which the O&E Business Strategy is determined. In August, this Business Strategy is introduced to the different O&E Sectors, leading to the different Sector KPIs and targets. In October, the Business Planning is at full blast. Here, the different sectors and business units discuss how they are going to achieve the targets. When this is done the Performance Management phase gets started where the final KPIs and targets are approved. Throughout the whole process, the PPM unit in O&E Finance has a crucial role.<sup>80</sup> PPM shall ensure the implementation of the VBM process and map the sectors' strategies. It has an educating, supporting and controlling function. It is however the sectors' responsibility to develop a well balanced and good BSC.<sup>81</sup>

Every sector has its own BSC. These are derived from the Hydro corporate vision and include KPIs, which are set to achieve Hydro's long-term growth ambitions.<sup>82</sup> Every level provides their KPI set. The most important KPIs are extracted upwards and consolidated into the sector KPIs.<sup>83</sup> O&E's BSC including KPIs and targets are discussed during an O&E management meeting, fine-tuned and sent to the corporate centre and finally to the Hydro board for approval.<sup>84</sup>

##### **4.4.1 Examples from different sectors**

###### **Operations**

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<sup>79</sup> HLDP – documentation, Hydro intranet

<sup>80</sup> Manager in Finance Department, Involved in VBM introduction, 2006-09-29

<sup>81</sup> Head of PPM, Finance, 2006-10-09

<sup>82</sup> Senior Finance Manager IBD, 2006-10-02

<sup>83</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>84</sup> Senior Finance Manager IBD, 2006-10-02

Operations have a centrally defined BSC that flows down through the organization so that the different units have clearly defined directives. The KPIs are discussed with department managers. “Our activity do not change substantially from each year, why we tend to not change the KPIs substantially. It would require a tremendous amount of effort.” Some KPIs are shared between Business units that are involved in the process. The aggregated KPIs are sometimes broken down and some times delegated down through the organization.<sup>85</sup>

One discussion here is if the KPIs should be set as stretched goals top-down. However, if goals are set top-down without a bottom-up involvement, then the only thing delivered is a stretched budget. “If you don’t have the organization with you, then the process might be less motivating.”<sup>86</sup> Without having total democracy, they try to consider all opinions. This in order to achieve commitment to the goals and ensure that all managers anchor the process in their organization.”<sup>87</sup> The extent to which the KPIs are broken down in this sector, works different on different places. Operations have BSCs defined all the way down to single platforms. The BSC concept stops on that level. Then the platforms define targets and goals themselves for the day-to-day work. In Operations, it is normally easy to define countable targets.<sup>88</sup>

### **Hydro Golf of Mexico (HGOM)**

Hydro started their activities in Golf of Mexico in the end of 2005. Because of this the introduction of the VBM system is fairly recent experience. A business Plan had to be stored and a Balance Score Card had to be created. This was made by a management group with representatives from the whole HGOM organization.<sup>89</sup>

Head of finance in HGOM explains that the challenge is to create KPIs which are specific enough and that are measurable. It is much easier to draw this up for operational departments and units. However, for Stab functions such as HR, this is much more difficult to do.<sup>90</sup> HGOM does not have BSC on lower levels. HGOM uses HLDP to link the actions of the employees to the KPIs through indicators. Also, the action-plans on all levels are aligned with what is said on top level. Another challenge for HGOM is that they are often non-operators,

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<sup>85</sup> Vice President and Manager, Finance, Operations, 2006-10-25

<sup>86</sup> Ibid

<sup>87</sup> Ibid

<sup>88</sup> Ibid

<sup>89</sup> Head of Finance Golf of Mexico, 2006-10-06

<sup>90</sup> Ibid

and as such, at many times they have limited influence over production, which is one of our main KPIs. It becomes an even bigger problem since it is tied to bonuses.<sup>91</sup>

## **Development Norway**

All departments and units in Development Norway have their own strategies, which are supposed to support the overall O&E strategy. When these strategies are set, KPIs are introduced, looking at what drives value. The most important issues are extracted and a BSC is created.<sup>92</sup>

When the strategy is the same as last year and thus the KPIs don't need to be changed that much, focus can be on defining targets and the whole Business Plan process can be done much faster. However, the intention is to have some discussion about the KPIs even though the company's strategy has not changed substantially from the year before. This is especially true for units where there is a large rotation of people.<sup>93</sup>

A Business Controller means that in Development Norway the KPIs are usually influenceable. However, the influence is sometimes limited as they are involved in non-operating fields where they are not in full control. One example is production, which is one of the most important factors in Hydro O&E. If the partners cannot deliver the promised production, that KPI in the Development Norway sector can turn red although their influence here is limited. But even though they can only partly influence the partners, the KPI is there in order to ensure focus on the important issue.<sup>94</sup>

One contract negotiator with whom we spoke to mentioned that his unit has 2 KPIs. One is to facilitate a minimum of 15 commercial agreements. However, his team cannot influence the number of contracts or the underlying conditions in the projects they are involved in. This KPI was set on the level above their unit.<sup>95</sup>

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<sup>91</sup> Ibid

<sup>92</sup> Business Controller Development Norway, 2006-10-04

<sup>93</sup> Ibid

<sup>94</sup> Ibid

<sup>95</sup> Contract Negotiator Development Norway, 2006-11-09

## **Oil Marketing**

In Oil Marketing the intention is to set the KPIs in a way that if they are achieved, one consequently achieves the financial budget targets as well. The statuses of the KPIs are checked each month and the result is published on the intranet, where everyone can see it. For each of the KPIs on the BSC that is reported to Hydro O&E, there is a plan of action on how to achieve it. The Each department is responsible for the follow up on its activities.<sup>96</sup>

Apart from the horizontal departments, managed by head of departments, there are also vertical processes, managed by process owners. The process goals constitute part of the total goal achievement of the KPIs. “We try to push it down to lower levels – almost all the way down to individual level”.<sup>97</sup> How far it can be broken down depends on the nature of the activities to be performed. The first time it was very time consuming to set the KPIs, now it’s more of fine-tuning. Dialogues occur once a year about the KPIs. The stretch of the KPIs is also discussed in these dialogues.<sup>98</sup>

### **4.4.2 The perceptions**

#### **4.4.2.1 The BSC and KPI**

The KPIs work as a signaling tool for where the organization should focus.<sup>99</sup> What is important is not the KPIs themselves but what can be gained during the discussions about the KPIs. A bad KPI in an important area is better than none at all, since this will initiate a discussion about that specific area. The qualitative values gained from the discussion are what matters the most.<sup>100</sup> For example, a red KPI does not necessarily mean that you have done a bad job. If a unit has a KPI that is reached every year, then this can mean that the unit manager has not put the necessary time in order to discuss and define a well-stretched target.<sup>101</sup> However, it is still very difficult to set important and measurable KPIs, which are

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<sup>96</sup> Finance Manager Oil Marketing, 2006-11-14

<sup>97</sup> Ibid

<sup>98</sup> Ibid

<sup>99</sup> Senior Economy Consultant PPM, 2006-10-03

<sup>100</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>101</sup> Vice President and Manager, Finance, Operations, 2006-10-25

well stretched and motivating. Especially the more technical aspects can be a challenge. It can be difficult for someone from PPM in Oslo to know whether the production target of a field or the cost target of a drilling well is accurate enough. In practice benchmarking targets and flexibility to make adjustments, becomes important. Even more crucial is to have managers with the right competencies throughout the organization.<sup>102</sup>

The BSC should focus on few but important issues. The idea is that the optimal amount of KPIs is around 10.<sup>103</sup> Enough time must be set for the Business Plan Process so the KPIs can be fully worked through. Otherwise there is a risk that the different KPIs measure the same thing.<sup>104</sup>

The KPIs are supposed to be set throughout the organization, but not on individual level. The individual employee is evaluated through the HLDP. Which is to be indirectly linked to the units KPIs. However, this link is not always clear.<sup>105</sup> Setting KPIs for individuals or even smaller units and departments would today be too time-consuming and one would need to simplify it. It is also difficult to implement where a unit use mainly non-financial measures or in stab-functions. "We would rather like to see action-plans, linked to the scorecards, which go all the way down".<sup>106</sup>

A target becomes important for those who are measured by it, meaning that they should have a target that they feel that they can represent.<sup>107</sup> There should be a link between the KPIs and BSC and the HLDPs since the managers should talk about these. However, this is not a formalized requirement.<sup>108</sup> It is still important that the employees are involved and can see their part and importance in creating value for the company. For example, paying suppliers invoices might not be perceived as a very important task if you are not aware of the fact that Hydro is extremely dependent on being perceived as professional by its suppliers. "We have noticed that when we show interest on a specific part by measuring it, we get a substantial improvement in that specific area".<sup>109</sup>

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<sup>102</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>103</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>104</sup> Business Controller Development Norway, 2006-10-04

<sup>105</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>106</sup> Head of PPM, Finance, 2006-10-09

<sup>107</sup> Business Controller Development Norway, 2006-10-04

<sup>108</sup> HR Manager, 2006-10-19

<sup>109</sup> Vice President and Manager, Finance, Operations, 2006-10-25

#### **4.4.2.2 Finance managers or people involved in the KPI setting process**

All Finance managers that we spoke to were in favor of the VBM process and the BSC. The head of Financial Reporting & Performance at the Corporate Centre believes that the KPI system has functioned inline with the intentions.<sup>110</sup> Other comments have been: “In general, we would say that the BSC system works very well”,<sup>111</sup> “the KPIs in general are very good”<sup>112</sup>, “the system as a whole works very well and the goals are motivating.”<sup>113</sup>

All interviewees who are or have been actively involved in the VBM process believe that, if accurately implemented, the KPI system is an effective tool which created a good discussion about what to focus on and what to do in order to turn a red KPI green.

However, some problematic areas could be discerned.

#### **Scope and frequency**

Since the introduction of VBM in Hydro, new things have subsequently been introduced, which have to be involved in the process. Two examples are requirements of risk analysis and currency reporting in the Business Plan. With the additions it has become an extensive process.<sup>114</sup> An issue with the Business Plan Process is that it must be done during a limited period of time. This becomes a problem since there will be a need for enough people who have capacity to put a lot of time on it during a short period of time. Since free capacity is a scarce resource, the Business Plan process tends to be done too fast.<sup>115</sup> This is also emphasized by another manager who considered that it could be a problem to set apart enough time to prepare good KPIs.<sup>116</sup> An IBU manager stated that some people perceive the system as bureaucratic and as a lot of extra work. In some departments and units, people feel that the plans and reports are just something that has to be reported. It is not easy to create a sense of

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<sup>110</sup> Head of Financial Reporting & Performance, Corporate centre, 2006-09-29

<sup>111</sup> Vice President and Manager, Finance, Operations, 2006-10-25

<sup>112</sup> Head of Finance in an IBU, 2006-10-06

<sup>113</sup> Project Economist Development Norway, 2006-11-09

<sup>114</sup> Head of Finance in an IBU, 2006-10-06

<sup>115</sup> Business Controller, 2006-10-04

<sup>116</sup> Manager in Finance Department, 2006-09-29

ownership and commitment to the new system. People do it because they have to, and report it upwards to Norway.<sup>117</sup>

The HR manager believes that the Business Plan process should be included in the daily work of everyone. Today, the whole process is a once a year process which is comprehensive and time-consuming, while disappearing during the rest of the year. Unit strategy and main focus could be updated continuously. This would accentuate the guiding quality of the system. The reporting is just one part of the process.<sup>118</sup>

A Business Controller who previously worked In Markets say that when he started in markets, they had a discussion about KPIs every 3-month on department level during the quarterly reports, and monthly on sector level. He is in favor of the monthly solution and means that in his current department, the discussion is every 3-month which is too seldom. The point with KPIs is to make value creation more visible at all time and not only once a while.<sup>119</sup>

## **Static**

According to a Business Controller, sometimes, the Hydro O&E Management can change the conditions in a way that a specific unit might not reach its KPI. Still, the KPI is not changed because of this. The unit can however point this out to a ‘complaint board’ and in that way take away that specific KPIs effect on the bonus.<sup>120</sup> A Senior Consultant means that the KPIs are too static since they can’t easily be changed. You can change their link to bonus if you have a really a good reason. The targets themselves can be changed in the quarterly Corporate Review Meetings. But in order for that to happen, one must have very good reasons, thus this is not happening frequently. This Robustness can hurt motivation.<sup>121</sup>

The Business Controller in Development Norway also says that another downside with the KPIs is that you have no incentive to do even better once you have a green KPI.<sup>122</sup> The system

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<sup>117</sup> Head of Finance in an IBU, 2006-10-06

<sup>118</sup> HR Manager, 2006-10-19

<sup>119</sup> Business Controller, 2006-10-04

<sup>120</sup> Project Economist, 2006-11-09

<sup>121</sup> Senior Economy Consultant, 2006-10-03

<sup>122</sup> Business Controller, 2006-10-04

should be able to respond faster to a change in the strategy. Today, everything is formally changed only when you get to the Business Planning process.<sup>123</sup>

## **Involvement**

One Senior Finance Manager whom we have spoken to mean that the Business Plan process is mostly a management tool. Due to this, it motivates the concerned manager while responsibilities down in the hierarchy could be a bit watered out.<sup>124</sup> Today, not everyone down to the single employee understands how their work creates value in order to reach their unit's KPIs. There seems to be a problem to set apart enough time to involve all employees.<sup>125</sup> Also the HR Manager believes that today, managers do not have time to, involve everyone in the process during this short period.<sup>126</sup> A Manager in Finance believed that motivation and acceptance for the KPIs could be increased if the employees were more involved in the discussions. "But today, some people feel that the KPIs are just something that have to be reported upwards."<sup>127</sup> The Finance Manager of an IBU meant that they did not set KPIs on lower levels in order to avoid too many measures and time-consuming paper work.<sup>128</sup>

By involving individuals in the discussion, one does not necessarily mean that the company should set individual KPIs. In general the KPIs are not individual but there may be cases where the work tasks of individual employees are captured within a specific KPI.<sup>129</sup> According to a Vice President in International Business Development they do not set individual KPIs, instead they have success criteria. The reason for this is that the people in their unit work in very different areas, shifting from one asset to another, as there is a need. "We can help Angola, but also Canada if they would need help. Individual KPIs could make it more difficult to use the organization in an optimal and flexible way".<sup>130</sup>

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<sup>123</sup> HR Manager, 2006-10-19

<sup>124</sup> Senior Finance Manager, 2006-10-02

<sup>125</sup> Manager in Finance Department, 2006-09-29

<sup>126</sup> HR Manager, 2006-10-19

<sup>127</sup> Manager in Finance Department, 2006-09-29

<sup>128</sup> Head of Finance in an IBU, 2006-10-06

<sup>129</sup> Senior Finance Manager, 2006-10-02

<sup>130</sup> Vice President, Field Evaluation IBD, 2006-10-02



## **Other issues**

During organizational changes, suddenly the worked out plans and KPIs can loose their meaning and have to be reformulated. Considering that the organization structure has been changed frequently managers might feel that the whole process is a waste of time.<sup>131</sup> There is also another aspect of insufficient communication. There is today a large rotation of the employees within the organization One example are expatriates who usually are managers on two-year assignments. For the VBM knowledge to not diminish as employees move, there is a need for education and communication.<sup>132</sup> Another issue with the VBM process is that it is a bit difficult for everyone to understand. What are VBM, BSC and KPI? These concepts can be difficult to understand if one has never heard them before, and what one does not understand will not be motivating. Thus the meanings of these concepts are important to communicate better.<sup>133</sup>

### **4.4.2.3 Other Employees**

#### **Involvement**

When having a KPI it is important that those affected by it are aware of it, accept the KPI, and can influence it. But some of the employees with whom we have spoken to do not feel that the KPIs are set today by the people who work with their results. “I feel that someone on a higher level has more power over our KPIs than we have. We should be given more opportunities to discuss the KPIs. Today, there is a lack of involvement in several levels”.<sup>134</sup>

Another opinion is that the meaning behind the KPIs are far from well described and discussed and that there should be a more active internal dialog about the purpose of the KPIs. “There has only been one meeting with a short oral briefing about the KPIs”.<sup>135</sup>

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<sup>131</sup> Manager in Finance Department, 2006-09-29

<sup>132</sup> Ibid

<sup>133</sup> Manager in Finance Department, 2006-09-29

<sup>134</sup> Principal Engineer, 2006-11-09

<sup>135</sup> Contract Negotiator, 2006-11-09

## **Relevance of the KPIs**

The Principal Engineer's unit have a consulting role towards other departments in O&E. Some KPIs at this person's department are set in a way that can have a negative impact on aspects of the group's work. They can also have a limiting effect on creativity and flexibility. "In business environments like ours that do not work with production there are difficulties in setting good KPIs."<sup>136</sup> They have a KPI that is countable but that do not measure the quality of the job performed. This is nothing that motivates or drives the actual tasks of day-to-day work. "For example, if getting the choice of working with a less important DG1 project and a more important DG4 project, I would choose the DG4 project although this is more time-consuming and will have a less positive impact on the KPI than the DG1 project."<sup>137</sup>

The Contract Negotiator means that one reason why the KPIs are not discussed enough is because they are not perceived as relevant. He explained that his unit's KPIs are more or less irrelevant since they measure something that cannot be influenced by their team.<sup>138</sup>

At one sector, KPIs goes down all the way to unit level, but this is not necessarily perceived as a good thing. "We should instead use the HLDP to give directions. Today, we have the HLDPs, but these are not used actively. The KPIs themselves should be set on a more aggregate level".<sup>139</sup> However, the Principal Engineer believes that if the KPIs were designed in the right way and could be influenced, it could be a great tool.<sup>140</sup>

## **Limited commitment**

When the KPIs are not accurate and accepted, they do not become motivating but rather a source of frustration. "Today, you are not driven by the KPIs in your day to day work since they become regarded solely as a table that have to be filled in and has little to do with reality."<sup>141</sup>

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<sup>136</sup> Principal Engineer, 2006-11-09

<sup>137</sup> Principal Engineer, 2006-11-09

<sup>138</sup> Contract Negotiator, 2006-11-09

<sup>139</sup> Principal Engineer, 2006-11-09

<sup>140</sup> Ibid

<sup>141</sup> Ibid

The Contract Negotiator means that the KPIs are nothing that they focus on in his unit and that there is a lack of commitment also from managers higher up. Because of the early notion of that the O&E bonus trigger would be difficult to meet, indications from some managers about the decreased importance of the KPIs could be discerned.

#### **4.4.3 Facilitators**

When the VBM process was introduced, facilitators were educated and put in place to contribute with tools and methods, to support the sectors and ensure an effective implementation by motivating the employees and directing their focus. However, the facilitator group was only put in place in order to implement the process, not to maintain it. The idea was that the business units would then be able to do it themselves. But due to reorganizations and a high level of job rotations, the competences learned by key employees was sometimes lost and the new people was not as well introduced to the VBM-tools. Another issue is that many processes are done only once a year, meaning that each year the unit managers will have to start by re-updating themselves to the tools used, which is very time consuming in itself.<sup>142</sup> All, but one, of the interviewed were positive to the idea of reintroducing the facilitators or at least reinforcing the VBM process. Many of the employees interviewed believe that PPM has this role today.

The people at PPM only see the sector level scorecards and do not have the role to implement VBM all the way down. PPM has a coordinating, facilitating and supportive role, functioning as a link between O&E and the Corporate Centre. But PPM has limited capacity to go into each sector's measures. It is the managers in the different sectors and business units who are responsible for ensuring a correct implementation of the system.<sup>143</sup> One Manager in the Finance department considers that that the whole process would become much more efficient and less time-consuming, if the PPM employees could physically visit the different Business Units, gain knowledge about their operations and on place, help them to fill the Business Plan Templates and explain how to use them in order to manage value creation. In this way, the

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<sup>142</sup> Manager in Finance Department, 2006-09-29

<sup>143</sup> Head of PPM, Finance, 2006-10-09

Business Units would put less time on editing mistakes and the PPM employees would put less time on gathering wrongly filled templates and redistributing them.<sup>144</sup>

#### **4.5 Performance Related Pay**

During the VBM introduction in Hydro O&E the reward system was designed to be in line with the other organizational changes undertaken. Hydro has a reward system that applies to the majority of the employees and is linked to the BSC and its KPIs. The Bonus is annual and can amount to a maximum of one monthly salary.<sup>145</sup> The Bonus system is called Performance Related Pay (PRP) and is based on an overall O&E EBITDA trigger and unit KPIs. 70 percent of the bonus corresponds to the unit KPIs for the specific employee while the remaining 30 percent is based upon the achievement of the normalized EBITDA of Hydro Oil and Energy. This means that for any bonus to be received O&E must achieve at least 95% of its business plan EBITDA of Hydro O&E. If this is not the case the performance achieved on the KPIs has no implications regarding bonus payment, since there will be none.<sup>146</sup>

“I think many people believe that they have no influence over the O&E level bonus trigger.”<sup>147</sup> This lack of influence on the O&E trigger seems to be a widely shared belief. In some units or departments more so than other. During good times when the Hydro O&E trigger level was expected to be reached, the unit and department KPIs become more important for people to care about. Some interviewees mentioned that the achievement of the KPIs might not be motivating when the target EBITDA is not to be reached. The essence of these reasoning appears to be that you lose not only the incentive effect of the bonus but possibly also the importance of the KPIs. One employee commented that ever since the bonus system was introduced Hydro has been performing well, thus it is difficult to say how the PRP will affect behavior when the strong oil market turns.<sup>148</sup>

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<sup>144</sup> Manager in Finance Department, 2006-09-29

<sup>145</sup> Prosjekter Bonusordning 2006, p.2

<sup>146</sup> Prosjekter Bonusordning 2006, p.2

<sup>147</sup> Business Controller, 2006-10-04

<sup>148</sup> Contract Negotiator, 2006-11-09

One employee informed us: “I don’t think that everyone is aware of how the Bonus system works, especially how the EBITDA trigger works is badly communicated.”<sup>149</sup>. On preparing for our interview an employee, not entirely sure of how the system worked, asked around to gain the information. Three managers had to be asked before an answer with certainty could be given.

#### **4.4.5 Perceptions at HLDPs role in VBM**

There are discussions going on, aiming to more extensively use the HLDP-tool to implement the company’s and the sectors’ overall strategy throughout the organization. “It is important that the individual employee understands why focus is directed in a specific direction and also what his/her part in reaching the goals is.”<sup>150</sup>

The connection between the KPIs and the HLDP, although stated in the HLDP documentation, has clearly not been internalized nor commonly agreed upon. Some say that there are KPIs that are explicitly included. Others say it is no formal link but that it is still considered and discussed to some extent. Finally there are those who say that there are no connections what so ever. “My experience is that there is no link between the individual goals and the KPIs and company’s overall strategy.”<sup>151</sup> While there seem to be dissonance among individual perceptions about the connection between the HLDP and the KPIs, there is an almost unanimous positive opinion about the way the HLDP system is designed. This opinion expresses that it is structured in a good way, with a formalized reporting procedure. That it is a good forum, where the employee is explicitly told what is important, what is expected and gives feedback. It also gives thought to critical thinking: career moves, roles and ambitions.<sup>152</sup> Also the dialogue is perceived as not only a way for management to state expectations and align corporate and individual goals, but also a forum for the employee. “It’s an opportunity for the employee to express what he wants to do and together with the manager think of how to achieve it. I feel it works well”<sup>153</sup> An articulated prerequisite is the commitment of the people involved, especially the manager, and the time available to perform the process.

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<sup>149</sup> Business Controller, 2006-10-04

<sup>150</sup> Head of HR, O&E, 2006-11-22

<sup>151</sup> Contract Negotiator, 2006-11-09

<sup>152</sup> Senior Finance Manager, 2006-10-02

<sup>153</sup> Manager Oil Marketing, 2006-11-14

According to a manager, only the dialogue meeting uses a form of five pages and takes about 3 hours to go through.<sup>154</sup>

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<sup>154</sup> Ibid

## **5. Discussion**

### ***5.1 BSC In VBM context***

#### **5.1.1 Is Hydro BSC, a VBM tool?**

The explicitly stated goal of shareholder value creation and the intention of value creation throughout the organization at Hydro O&E make us believe that the VBM ideology is prevailing in the company today. This conclusion is built upon the internal documentation studied, the interview held with the head of Financial Reporting & Performance at Hydro corporate centre, and our perception of the value creation intentions within the Hydro Balance Scorecard framework. We see no reason for this to not be the aim of the company and do not elaborate this question any further. Though Ittner & Larcker claim the BSC to be a VBM tool, Malmi and Ikäheimo requires that for this to be the case, the superior purpose of the BSC must be to create shareholder value. As we have affiliated to Hydro O&E's aim for creating shareholder value, consequently the BSC can be seen as a VBM tool. Comparing the BSC concept in normative literature, proposed by Kaplan & Norton and Olve et al., and the one described in the Hydro documentation, there is a very clear resemblance. Not surprisingly, it can be expected that the BSC implemented was in fact based upon the guidelines of this literature. The Hydro BSC recommendation of a balance between creating value for shareholders, customers, internal processes and people, corresponds well to the four perspectives of the BSC expressed by Kaplan & Norton.

#### **5.1.2 BSC Dilemmas**

The employee involvement in the KPI and target setting process is a difficult issue. In the literature there is no clear answer to how to go about this. It states only that the involvement can effect the commitment to the measures and that it is highly dependent on organization and situation. This is also the case in Hydro Oil & Energy. There is an aim to include units and individuals in this process but the perception of the BSC as a management tool can be distinguished. We have come across more than one employee that feel that the KPIs are not focusing on what is important in the day-to-day work and that the influence was not there to

make the change. There are in no way any significant conclusions to be drawn on the structural inadequacies of the system from this limited information. On the other hand it is important to note the fact that there are employees and even units that have KPIs they feel are irrelevant and that they feel they can do nothing about. From management level there are concerns expressed about to little stretch of the targets as the involvement of the individuals increases in the target setting process.

The company aims to set KPIs that are influencable in order to create motivation. At the same time it is crucial to measure and direct focus to what is the most important. However, what is the most important cannot always be fully influenced. This can, for example, be seen in some projects in non-operating fields where production is an important KPI, even though influence on the outcome is limited. In this case directing focus becomes superior to influence. The restricted influence can have a severe impact on the motivation of the concerned, as even an extraordinary work effort performed by a employee, a team or a unit can result in little, or no, effect on the outcome and the completion of the KPI.

Furthermore, in order to not cause restrictions on flexibility, it can be an idea to not select too specific KPIs. However, the more general the KPIs are, the less understandable and guiding will they be. It will also be more difficult for a single employee to see the direct link between his own work and the KPIs. Another issue with the BSC is incongruence in the professional language spoken by the different parts of the organization. Considering the finance background of the PPM employees and the engineer background of employees in more operational positions, it might be difficult to rely on PPM to ensure stretched targets. Therefore, the different sectors cannot expect the PPM to fully overtake a facilitator role.

### **5.1.3 Implementation**

#### **Strategy visualization**

When the VBM project was introduced, a group who got the mission of communicating a need for change and what the company wanted to achieve, implemented the project. Everybody should understand the reasons and fundamentals of the new system. Today, there exists a large amount of documentation in the field of VBM and its purpose in Hydro O&E. Although the massive documentation there seem to be an insufficient communication in some



fundamental areas. For example, one manager actively working with the process meant that the system was primarily a management tool, as opposed to the VBM idea of including everyone in the process. Other employees meant that they were not well informed about what they were measured on and why. Another example is the perceptions of the employees who regarded the BSC as solely a reporting tool and that it was only something that was looked upon during the Business Plan process. This is in direct contrast to the purpose of the VBM system, as stated in Hydro's VBM-introduction documents and normative literature.

Considering the high level of rotation of employees within Hydro O&E and the reorganizations that have occurred during the recent years, communicating what the company want to achieve with the VBM process becomes crucial. According to the theory, failing to communicate will lead to confusion and misunderstanding creating a situation where the BSC process can be perceived as meaningless paperwork, which is just another form of surveillance. This might be the case in one of the International Business Units where the system was recently introduced and where an extensive use of BSC was perceived as too much bureaucracy.

Hydro O&E seem to have created a robust and accepted vision about the purpose of the system considering that everyone interviewed who actively work with the process have a profound believe in the concept. We believe that this is because the vision has been well communicated to them and it is included in their day-to-day work.

## **Dialogue**

Two major issues when it comes to ensuring a successful BSC in a VBM sense are involvement of all employees in KPI setting and discussions. Wherever there are no KPIs, the employee should be involved in discussions about the action plans. The Hydro employees should see the links between their goals, their managers' goals and the company strategy.

In Hydro O&E, we have seen a tendency in some areas to not put enough emphasis on discussing the KPIs, but only the stretch of the targets linked to them, if the company and the sector strategies have not been changed since the last year. Another reason given for not having a discussion about the selection of the KPIs is if they were discussed throughout fully the first time they were set. They are thus perceived as accurate enough. We believe that this

might be dangerous since one of the greatest values coming from the process is the continuous discussion about the measures per se. There may be a more accurate adoption to the strategy or one might realize that the KPIs set from the beginning was not as good as first believed.

Furthermore, some of the people we have spoken to meant that they had not been fully involved in setting the KPIs that they were getting measured by and had not sufficiently been given the opportunity to discuss these. As a consequence, they feel that the KPIs set do not measure what is most relevant and they feel no commitment to them. Considering the interview with the Contract Negotiator, we can see that sometimes, the lack of involvement and discussion about the KPIs can create a negative loop where bad communication can lead to KPIs that are perceived as irrelevant. When the employees perceive the KPIs as irrelevant, they loose commitment to them and do not see the meaning of initiating a discussion about them since they do not feel directed by the KPIs anyway.

Another aspect of loosing the countinuous discussion about the KPIs is that it all has to be done during the Business Plan process during the autumn. Considering the short time fram which is given for carrying out the Business Plan process, in practise, sometimes the value from the discussion part of the process becomes undermined by the value of delivering the KPIs and reporting them upwards. Unfortunately, this might mean that the quality of the reports is lowered.

## **Roles**

According to the theory, in order for the Business Plan process to have a successful outcome, it is crucial that the project is given enough weight in the organization. When VBM was introduced at Hydro, an executive group was put together who managed the implementation process. This group does not exist any longer since it did not have the role of maintaining the system. Almost everyone interviewed seems to emphasize the role of facilitators who can provide the different departments and units with support and guidance in how to use and implement the VBM-tools. Some of the interviewees meant that today, this is the role of PPM. According to the theory however, no matter how capable or dedicated a guiding coalition is, without strong commitment from line leadership it has very difficult to succeed. The Senior Consultant at PPM said that although PPM does provide the sectors with information and support, their role as facilitators is limited to a contact person. It is down to

the line managers to implement the system the rest of the way. We believe that there might be a negative effect of not precisely defining the roles, since there might be room for misunderstandings.

Furthermore, one might question the extent too which PPM should be involved in the Business Plan process at the different departments. One should remember that one of the ideas of VBM is that it should not be a centralised process. It is important that an extensive discussion is initiated at the different sectors in order to ensure that focus is directed in the right way. Too much involvement from PPM could undermine this. Also, the BSC dilemma given in the section above indicates that maybe PPM can only have a more aggregated role since they do not speak the same professional language as some parts of the organization. Considering the example given by Olve, Petri et al about Ericsson, it becomes important to discuss whether PPM who belongs to the Finance Department which is mainly involved in Financial reporting, should have the role of implementing the process.

## **Interfaces**

There is no formal requirement in the Theory that the BSCs should be broken down to the individual employee. This is fully dependent on the type of operation monitored. Considering the large size of hydro and the rich diversity in work tasks that exists in the company, there is no right answer about how far down the BSC should be broken and on what level in the organization the KPIs should be set. This largely depends on which part of Hydro O&E you look at. The general view in Hydro O&E seems to be to break down the BSC and define KPI down to unit levels although not to individual levels. KPIs set on individual level could have a limitation effect on flexibility. Some of the interviewees also questioned having KPIs on unit levels. Both the Principal Engineer and the Contract Negotiator which whom we have spoken to meant that the nature of their work made it very difficult to set good KPIs for their units. This view was also shared by some of the employees who were involved in finance functions. What is similar for these interviewees is that they all seem to work in some sort of stab functions where they work together with other units.

However, both the theory and the VBM documents at Hydro state that the main objectives of the VBM philosophy is to break the corporate goals and strategy down through the whole organization and ensure that the employees are involved through the relevant KPIs.

Considering the interviews with the Principal Engineer and the Contract Negotiator, we can see that this is not entirely the case. This does not necessarily mean that they do not know their part in the value creation chain, it only means that they do not perceive their KPIs to reflect what is important.

According to the Hydro documentation, HLDPs should to some extent be used as a forum to discuss the KPIs. This would thus be a great opportunity to communicate the company's and the sector's overall strategy to the individual employees. However, while some of the people interviewed have realized this link, others do not consider that the KPIs should be communicated during the HLDPs. This indicates that the people involved do not share the same beliefs regarding what is formally stipulated nor how it is actually in practice.

### **Incentives**

There is a perception of the process being inflexible and static since you can't change the KPIs once they are set for the year. There is a risk that what is important might, for some reason, change during this time and that the KPI cannot be adjusted accordingly. The result would be a loss of relevance in the measure and a situation of choice of what to focus on: To get the KPI green on the BSC or to focus on the task that is important? From a theoretical point of view the KPIs are indicators of what is important, hence the task that do create value should be the one to be performed. But this hypothetical situation gets more complicated when the KPIs and the BSC are connected to the bonus system, as is the case in Hydro. The possibility to appeal a KPI's influence on the bonus in a complaint board does to some extent mitigate the rigidity of the KPIs set. On the other hand the magnitude of an event or decision to be accepted by the board hardly makes it any comfort for the lower employees if they feel that KPIs are unachievable as a result of non-influencable events.

The BSC reward design, stated by Kaplan & Norton and Otley, as congruent with the BSC philosophy, suggests that not achieving a KPI in a critical area should imply that no bonus should be received as the balanced performance is what is important. This is not the way the BSC implication works in Hydro Oil & Energy, since a percentage of completion of green KPIs would imply a percentage of the bonus to be received. Instead of being a motivator for the employees to achieve the KPIs that drives value creation the trigger can turn out to be a signal that the KPIs do not really matter. Our opinion, based on the interviews, is that this can

undermine the importance of the KPI and the BSC system. According to some employees the KPIs are more important to achieve when the company is doing well, since this is when it will have implications on the bonus. Contrarily this implies that in bad times the KPIs linked to the bonus system doesn't mean any incremental motivation. If the achievements of the KPIs are what create value for the company and the individual stand nothing to gain from doing so, then the alignment of the VBM system should be questioned. This does support the idea that having a bonus system based on the scorecard does effect the motivation of the employees, and that rightly designed it would constitute a powerful tool.

## **Education**

The high level of rotation of employees and organizational changes might have created the need for reinforcement of the VBM concepts throughout the organization. We believe that in order to reach uniformity and ensure a high level of quality in the use of the Business Plan, more education programs should be provided. Education could create a common language, facilitating communication and create commitment, increasing the quality of the Integrated Planning Process.

## 6. Conclusion

Shareholder value creation is stated as the main goal of the Value Based Management process. Considering this intention of value creation throughout the organization we believe that the VBM ideology is prevailing in Hydro Oil & Energy today. We have seen very clear resemblance of the BSC implemented and the guidelines of normative literature. In the literature there are few specific directives on how to set relevant KPIs, this problem can be seen in Hydro O&E as the managers believe that one of their main challenges is - how to set well stretched and influenceable measures. We have seen that in some places the BSC in Hydro O&E is mainly used for directing focus rather than setting fully influenceable KPIs. Furthermore, there seem to be a trade-off between general KPIs, where the link to performance result throughout the organization becomes watered out, and specific KPIs that might limit flexibility.

A recurrent opinion in the interviews is that some of the selected KPIs are difficult to influence. This perception, of the system as being somewhat static, creates a need in the company to regularly evaluate the selected KPIs. In theory the BSC is regarded as a Dynamic tool where emphasis is on continuously carrying out discussions. This implies the need in Hydro O&E for an ongoing process of evaluating, refining and restating the KPIs by additional dialogue.

Hydro O&E seem to have created an acceptance of the purpose of the VBM process considering that all interviewed who actively work with the process had a profound belief that VBM and BSC are excellent concepts. This indicates that the vision has been well communicated. At the same time our interviews signal that in several positions in the company there exists a need for even more communication, especially on lower levels in the organization. We have seen that although the KPIs might not always be appropriate to set all the way down in the organization they must to some extent involve everyone throughout the whole company in order to create commitment and understanding. Sometimes, the lack of involvement and discussion about the KPIs have in fact created a negative loop where bad communication leads to KPIs that are perceived as irrelevant, which takes away the urge for more communication.

We see that there is a need for a facilitator function in Hydro O&E. Based on the theory and the interviews we believe that this responsibility should not be totally left to the PPM unit. Line managers must be involved since they are more likely to possess the professional language and the local acceptance in order to implement a successful system. However, we would emphasize the need for sufficient education of the line managers so that they are familiar with the VBM concept. The lack of educational programs can counteract the uniformity in the professional language spoken and hence the quality of the measures in the BSC.

As theory suggests, the reward system in Hydro O&E is based on the achievement of the BSC. Though, the need for fulfilment of all KPIs, congruent with the BSC ideology, has been disregarded. The opinion, based on the interviews, is that the trigger used in the prevailing reward system can undermine the employees' focus on the KPIs and the BSC. The result can be a broken alignment of the value creation within the company.

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