

The meaning of ‘sustainable development’ in a Dutch water company

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Abstract

Criticism is often heard that the concept ‘sustainable development’ is difficult to operationalize. So what happens during the translation process from the abstract concept into a company’s daily practice? To investigate this research question, ethnographic interviews were held in a Dutch water company. Our goal is to find out what kind of views on ‘sustainability’ they developed. We were also curious which societal actors influenced the company and how. The interviews were analyzed qualitatively with Atlas-ti software. Because the water company is part of a larger multi-utility, the term ‘sustainable development’ is totally interpreted in the framework of their transition from a public utility into a commercial company. Their present strategy has market expansion and financial constraints as its main characteristics. They claim they incorporated ideas behind ‘sustainability’ in their strategy long ago: long term thinking and a whole system approach. The term itself is not received warmly. Internally they prefer other terms, though they use ‘sustainability’ for legitimizing themselves externally. This attitude stems from antagonism between the company and the (national) government. The term ‘sustainability’ is forced on this company by governmental actors, whom they fundamentally distrust. Their technological infrastructure requires real long term thinking, and ‘politics’ apparently does not provide this. If we look at the network, we see that the commercial transition causes the company to economize on its external contacts. There are only two types of societal actors they now have a warm relationship with: shareholders and customers. The provincial government, owning 50% of the shares, is most important. They seem the only societal actor deliberately steering the company towards ‘sustainable’ practices. Due to the liberalization process, the governmental influence will decrease. Of the customers the large industries are most important. Industry has an effect on sustainability as a side effect of its quest for more efficient water affairs. Water boards, municipalities and nature organizations are potential sources for innovative ideas about sustainability, but if they want to achieve something with this water company, they can only play it through the provincial government. Based on these results, we come to the following generalized hypotheses: - sustainable development is not an automatic source of inspiration when interpreted from a commercial framework; - governments are the most important sources of sustainability terminology, because it fits with their integrative tasks; - liberalization of the water sector will lead to externalization of sustainable goals that do not pay off such as nature management.

1. Introduction

Since the publication of the Brundtland report 'Our common future' (WCED, 1987), the term sustainable development has become widely used. Criticism is often heard that it is difficult to operationalize sustainable development. Practitioners as well as academics complain that there are so many definitions and that no one seems to know what sustainability really is.

There is broad agreement that sustainable development requires an integrated approach to environmental, social and economic performance (Krut, 1999). Measuring economic performance is the most mature field, although it is still evolving (Ranganathan, 1999). For example, there is a discussion how well economic performance is equated by financial performance. During the last decade, there have been many initiatives to measure environmental performance, which led to a 'sea of confusing, contradictory, incomplete and incomparable results' (Ranganathan, 1999). There are several initiatives to develop agreement on a core set of indicators, for example the Global Reporting Initiative, and there is a general belief that such standardization of environmental performance is possible in due time. On the social performance indicators much less work has been done. There is scepticism if standardization is possible at all, since 'social performance depends on values, which differ from country to country, and even from person to person' (Ranganathan, 1999). Finally, how information on these performances is to be integrated is entirely unexplored (GRI, 1999).

This stage of development makes it impossible to study sustainability practices with an accepted set of sustainability indicators. At the same time, it is an excellent opportunity to study the process of reality construction around this concept, using social construction theory.

In social construction theory, the idea of one unchangeable truth is abandoned. Instead, it presupposes a whole range of views on reality, depending on the culture and personal interests of the viewer. These views are ever-changing because of social interactions and learning processes. John Shotter formulates it as follows: "We must cease thinking of the 'reality' within which we live as homogeneous, as everywhere the same for everyone... We can begin to think of social reality at large as a turbulent flow of continuous social activity, containing within it two basic kinds of activity:

- i. a set of relatively stable centres of well ordered, self-reproducing activity,
- ii. with these diverse regions or moments of institutionalized order being separated from each other by zones of much more disorderly, unaccountable, chaotic activity.

It is in these unaccountable, marginal regions - on the edge of chaos, away from the orderly centres of social life - that the events of interest to us occur" (Shotter, 1993). For a more elaborate account of why we chose this approach we refer to a paper for the Greening of Industry conference in 1999 (Klostermann, 1999).

In this analysis we are more interested in the diversity to which this process leads than in the convergence into societally accepted 'facts'. The development of a standardized set of indicators for Global Reporting on sustainable development may not even be helpful in this view. It will involve cultural dominance and elimination of social variety. Even though our approach will not lead to direct answers on what we should do next to solve environmental and societal problems, we hope it leads to a reflection on how we humans handle such a complicated concept.

So our research question is: what happens during the translation process of the abstract concept 'sustainable development' into daily practice? How is the concept perceived by

societal actors, and how do they implement these views? How do these perceptions come about, and which societal actors are involved in the process?

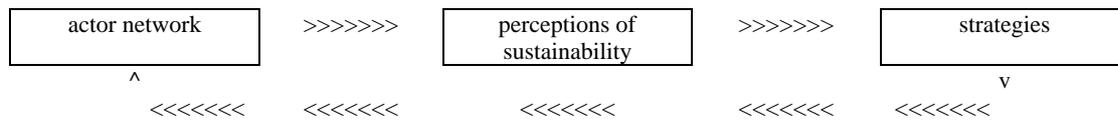


Figure 1: Conceptual model guiding data collection.

We use the model in figure 1 as a guideline to collect data. The model is based on ideas of Bruno Latour (1979), saying that concepts only travel through society through contact between societal actors. Therefore we look at the network of actors around the company, to see who inspires them. It also includes ideas from Carl Weick, that managers' perceptions of their environment are of more importance to their strategy, than the 'real' characteristics of their environment. Finally we assume a feedback loop between strategies and the network, because companies will probably make deliberate choices about their contacts.

In this paper we investigate how a Dutch water company deals with the concept. The water company is chosen based on the assumption that it is a positive case: they have a stake in environmental policy because it leads to a cleaner resource; they are in a stable market, not only because of their monopoly position, but also because water is expected to be in demand far into the future; and they control the whole product chain from resource until consumer. Because of these characteristics, they are expected to have a positive attitude towards 'sustainability' and to be able to make independent strategic choices.

The goal is to study how this company interprets the term. We are also interested in who influences their thinking and how, so some interviews are held in their network. We want to minimize the influence of academic interpretations on the data: no personal views from the researcher, no views from the literature. Therefore ethnographic methods are used for selecting respondents (snowball method), for interviewing (semi-structured, see also Spradley, 1979) and for recording data (taping and typing verbatim). The analysis is based on 7 interviews with five internal respondents (two of them twice) and four interviews with external respondents, two from the provincial government and two from industrial companies. The data recording process resulted in approximately 120 pages of data. These data were analyzed with a grounded theory method, assisted by Atlas-ti qualitative software. In this process quotations are labelled through open coding. The codes have to represent the dominant themes within the company. The coding process involves interpretation by the researcher, but in the choice of labels the language use within the water company is again preferred over other languages. Based on these codes, a story is reconstructed along the following research questions:

- How is the term 'sustainability' used in this company? (paragraph 2)
- To what themes is the term translated? (paragraph 3)
- What is the general strategy of this company and how does 'sustainability' fit into that? (paragraph 4)
- To what kind of practices does this conceptual structure lead? (paragraph 5)
- How have the conceptual structure and the practices been influenced by the network of actors around this company? (paragraph 6)

To give the reader insight in the interpretation process, the story will be richly illustrated with quotations (I: Interviewer, R: Respondent, (...): part of the quotation is left out, ...: short silence (silence): longer silence, [xxx]: names replaced by more neutral terms for anonymity reasons). The quotations that are shown often represent a number of similar remarks by different respondents. The original quotations were in Dutch and they have been translated as literal as possible. The water business unit we focussed on is part of a larger multi-utility company; still, company under study will be referred to as 'the water company'.

The advantage of a qualitative method is that it shows a lot of detail. A multitude of variables is included and integrated by means of a story. The negative side of this is that it may be hard to generalize conclusions to other companies. The method automatically shows context-specificity and historical specificity, rather than leading to 'scientific laws'. Still, in the conclusions in paragraph 7 we'll construct some general hypotheses about what it all means for the implementation of the concept 'sustainable development' into society.

2. How is the term 'sustainability' used in this company?

What do respondents of the company say when asked if they use the term sustainability? The five respondents are consistent in their answer: they use it, but not very often. They agree with the general principles they see as part of the concept:

I: The term sustainability, is it used in this company?

R: Yes, it is sometimes used, yes. Called for and uncalled for, mind you. That is rather... but is sometimes used.

I: When is it called for?

R: Well, when it is done fully upright, let's say it that way, with long term goals, that can also be passed to us by society.

I: And it is uncalled for when this is not the case?

R: Yes (laughing) Yes, or when it is convenient to link up to certain political points of view, or something like that.

The following quotation shows the term is used strategically in external communications:

R: And we also use it, to be honest, in some aspects as a PR element, to say: look, public, we also engage in sustainability. Or as a medium, how do you say that, a vehicle to make clear for example towards subsidizers that a project is worth a subsidy from environmental, sustainability funds.

Inside the company however, respondents prefer to use other terms than sustainability:

R: I do think we are forerunner, only we do not primarily use the term sustainability, I think. Instead we use societal issues like desiccation.

We conclude that there are ambivalent feelings about the term 'sustainability' in this company.

3. To what themes is the term translated?

Our next step is to look what meanings they associate with the concept 'sustainability'. Only interview fragments with a clear link towards the concept 'sustainability' were coded, for example fragments in which they use the word 'sustainable' or 'sustainability' (with Atlas-ti text search), and direct answers to a question about sustainability. Below I will describe the themes that emerged from this analysis.

Use renewables ... within carrying capacity

Respondents within the water company associate sustainability with carrying capacity of the earth, or of systems at lower levels. According to these managers, present practices in their water production business already meet this criterium:

I: What is your vision on sustainability? With what do you associate it?

R: Personally I associate it to some degree with the carrying capacity of the earth, to say it nicely. And then I'm thinking, well, water extractions, we do all that very good already, in a subtle way. To be active so that society is a good place to live in, live in durably.

I: So the water extractions by [your company] are sustainable?

R: Yes, I think they are.

I: So there is no reason to worry about the sustainability of the water company?

R: I don't think so. (...) Look, we always have some influence. If you extract water or purify it. But I think in the whole societal context you have to say that we do not... cause any damage. Or that we influence unsustainably or unbalanced. We extract water from the river. If we didn't, it would be in the sea the next day. Well, so what?

Whole system approach

Within the water company, sustainable development means a 'whole system approach'.

Application of this principle takes place at microlevel:

R: In our activities we'll build a whole system, not a world system, but let's say, if we build something, a system at microlevel, we have..., we want a whole system approach.

Reduction of environmental damage

Within the whole system approach, the goal is to reduce environmental damage:

R: Really sustainable is when you look at the all-in process, as far as possible of course, because in many cases it is not possible, and when you get the feeling that the damage, (...) the use of resources and the emissions into the environment is as small as possible.

The future, the long term

Sustainability is closely related to concern about the future, or a long term perspective:

R: I think sustainability also aims for securing the future, in the sense that there will be enough of everything for future generations, broadly speaking: space, food, safety, and so on.

Nature conservation

In the interviews, aspects of nature are shortly mentioned, but it can be doubted if this is really a theme within the water company. One examples:

R: Biodiversity, I think sustainability is expressed, or let's say, a measurable parameter is biodiversity.

Society has to define sustainability

According to the managers within this company, society should define what the problems are and what solutions are sustainable. The first quotation argues why this is not their company's task:

R: There is ofcourse an enormous debate on CO2 emissions; is it true or not, it... you can... I find it very difficult, it is hard to include it. For the time being you say: well, let's include it then, to reduce CO2 emissions as much as possible. So we do not discuss these things, because you cannot solve them on your own.

People from this company realize there can be different views on reality, and that the easiest way to deal with such differences is to go along with the definition used in 'society':

R: Firstly I'm saying: desiccation is a problem. We do not deny that. We were among the first water companies who said: If society sees it as a problem, then it is a problem. You can argue against it on technical grounds, but society sees it as a problem. So we deal with that problem.

Summarizing: the water company considers it scientifically too demanding to engage in defining which solutions are the most sustainable. Besides, their experience is that arguing with 'society' about sustainability is often fruitless. So they go along with 'society's' definition, and limit themselves to safeguarding their direct interests, for example to demand a subsidy for making changes. It is interesting to find out which societal actors are pointed at in these quotations: see paragraph 6 about the network.

Rational, objective approach

Within the water company they adhere to an objective, LCA-like approach to sustainability, in which all environmental effects of alternative solutions are calculated. They note that many actors do not play by this rule:

R: Wind energy is looked upon as terribly sustainable, isn't it? (...) You're hardly allowed to criticize it, because it is... it is a little more expensive, but OK, that is smoothed away with subsidies. But nobody wants to know what that pole costs in steel and (...) how much is energy needed to build it.

Maybe this problem concerning the integrity of sustainability claims explains why people within the water company prefer other terms above sustainability. Possibly this also relates to bad experiences of the water company with 'political fashions', to be explored in paragraph 5 about sustainable actions.

Pragmatic action

In this company, pragmatic action is preferred over fundamental discussions about sustainability:

R: And there are pragmatics who say: well, let's think about it, maybe it is a good idea. And we have a practical approach, like, for years we let ourselves... doing research and discussing things and fighting each other,

but you can also go and do something. And okay, maybe the effect is not 100%, maybe it is 90%, then at least you have achieved 90%.

Overview of themes

In figure 2 the overarching themes connected with sustainability within the water company are presented. Six of them I classified as ‘physical themes’ and three as ‘process themes’. Although the number of themes is limited, the set has a broad scope. Systems thinking seems to be at the basis of this company’s ‘collective mental map’: the earth is a system that produces renewables, and if these renewables are used below carrying capacity, the system will continue to function. The system also has a capacity to absorb environmental damage, so the effort should not be to eliminate environmental damage, but to reduce it until it is below the carrying capacity. And nature provides an indicator for how well the system is managed.

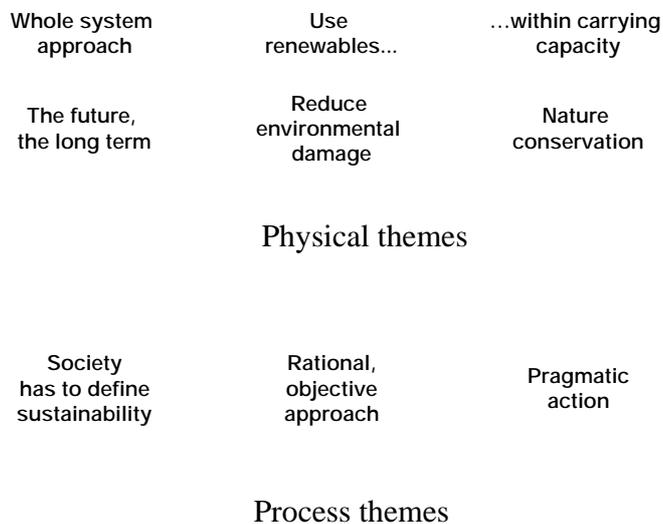


Figure 2: Process themes and physical themes associated with sustainability

A set of broad and interconnected themes like this can inspire a company to fundamentally change its behaviour. How do these ideas affect this company’s strategy and practices?

4. How does ‘sustainability’ fit into this company’s strategy?

For the analysis of the water company’s strategy I used the quotations coded with ‘formulating strategy’. These quotations are mostly the result of asking respondents what the water company’s strategy is. The question how to characterize the water company sometimes also led to descriptions of strategy, and finally some remarks on why they do certain things are included. With this set of quotations I created a backbone story, linking up the elements the same way they did in the quotations. After the backbone was created, I inserted the more specified strategic codes into the story, for example ‘aiming for product differentiation’.

Identity: multi-utility with regional focus

When respondents are asked to characterize their company, they come up with two elements: the fact that they are a multi-utility, and their regional focus:

I: What kind of a company is it?

R: If you mean in terms how we define it, then we are a multi-utility company.

I: Hm.

R: Multi-utility means we are aiming at energy, that is electricity and gas; we are aiming at water, of different kinds; and we are aiming at telecom, (...) we have a subsidiary company in waste, (...) we are also aiming at waste water, and we do those things with a [regional] character on the background, (...) and working from this [regional] home market we will acquire new customers in the market that will develop, because in energy it will become a market and in water it partly will become a market (...) when we loose customers on our home market we want to win customers elsewhere in the country with our multi-utility service. So we are also aiming at competition, competition with others.

In this quotation he describes what the water company is (a regional multi-utility), but also how it is changing right now (because it becomes a market we want to compete outside our region). In this story, self-image, strategy and external development are closely linked elements.

Liberalization

The water company relates strategy with an external development, namely a policy supported by the EU and the Dutch government to liberalize the energy market. Such a policy can be supported or opposed by organizations. It is striking that within the water company only the term 'liberalization' is used, and not 'privatization'. The company literally translates liberalization to 'freedom':

R: By the way, we do have (...) an agreement that we will not be selective until freedom becomes effective, when all customers will be free, that we will not be selective in customers by saying: 'I'll serve the good customer in the town a little faster than the farmers in the rural area, because I want to keep the former after liberalization and the latter does not really matter to me'.

Liberalization is in the implementation stage in the energy market and the water company is reacting with a thorough transition process. For the water market however, the Dutch Minister of Environment Pronk followed a motion of the Dutch Parliament and announced legislation that keeps water supply to households a public task.

Remain independent, regionally based

Many European energy companies chose for upscaling as a response to liberalization, but not the water company:

R: Look, we had lots of companies 10 years ago, small companies, especially at the European scale. That number has been reduced already, because if you want to enter the European market, (...) you have to have a sufficient size

to survive. Well, we did not choose the strategy of upscaling and limiting ourselves to one discipline.

The water company chose to remain a regionally based, independent company:

I: How did this strategy come into being?

R: From the idea to keep a utility company of one's own in the province. Within the home market.

The choice for independency was a wish from the water company's shareholders:

R: The aspect of aiming strategically at [this province] has something to do with... complying with ideas from the shareholders meeting. Because they come from local politics and think locally, and look after local interests or regional interests and put their frame of reference first.

Such a small scale creates problems for the company, because they can make less use of economies of scale. Secondly their image is problematic:

R: Because we cannot compete with the large ones if it's only about electricity supply. That's not possible. But we are saying: we can do more.

I: Yes, yes, yes. What's behind that conclusion of 'we are too small'? (...)

R: That should prove itself, but we are too small, for example in the purchase portfolio of electricity, to buy systems that we can roll back in the prices of such a limited amount of product.

I: Yes, yes, that's advantages of scale.

R: Advantages of scale. And we are also too small, and that is a different one, a psychological one, because everyone says we are too small.

Below we will see how the water company tries to compensate for lack of scale with a quest for efficiency gains in other ways. The image problem is solved in the quotation above by pointing at the relativity of the Dutch utility market compared to a global scale. The following basic perceptions can be extracted:

- we need to comply with European legislation on privatization of the energy market;
- and we need (or want) to comply with the wish of our present shareholders to remain an independent, regional company.

These two goals seem a bit contrary to each other. The first is intended to generate radical changes and create an open, European energy market. The second looks like an effort of public actors to slow down the effects of privatization and keep the old relations between the water company and the regional government intact. How does the water company solve the contradictions inherent to this combination of goals in their strategy?

Function commercially

The drastic changes in the water company's environment causes uncertainty. The strategic response is still being developed, but one element is clear: the company will have to function commercially:

R: The water company (...) is searching (...) with a kind of vision, which is after all shared by a number of people from the management of the company, to make rather quick decisions inspired by that vision, aiming for commercial development, developing activities.

I: Is that the shared vision, commercial development?

R: Yes, that is actually the key word for the shared vision.

This is chosen as a basic strategy because it will secure the company's health under any circumstances, privatization or not:

I: The governments are now the owners and you want to keep it that way by paying them proper dividends, isn't it?

R: Yes.

I: As I feel it that is a bit... I cannot bring it into line with also a wish that it gets privatised. That you still want to stay under the ownership of the government. So how does that work?

R: Well, look, we are, we do not have an explicit wish to stay under governmental ownership, but it doesn't bother us either. The owner, no matter if it is mister X, the stock exchange or the provincial government, as long as the owner steers us only, or mainly, on financial goals.

I: I see.

R: Then it is no different from shares on the stock exchange or no different from a Spanish company owning it, it doesn't matter, but we are steering on financial aspects, but with a good, societally responsible company.

To function commercially means that all projects need to be financially rewarding:

R: we try to reshape the company into a commercially oriented company. And we think we are pretty far. Yes.

I: And in a meeting, do you say to each other ...

R: That we want it?

I: ... this is not commercial enough, or...

R: Oh yes. Yes, that is how it is said, but then it is also quantified, because we provide rentability calculations for a lot of activities. And then it is quantified, because then you can say: well, it does not meet our criterium.

I: And then...

R: And that is under development. It is not an absolutism at the moment (silence) but I think more than half of the projects is now being screened. And so it becomes clear, like: 'that is below the target, we are not going to do it'.

Value, Profit and Warmth

The commercial strategy is further developed into three W's, 'Waarde, Winst en Warmte' (= Value, Profit and Warmth):

I: How would you describe the strategy of [this water company]?

R: From the...? Well, it is strongly market-oriented. (...)

er... the three W's, I don't know if you heard of them yet?

I: No.

R: That caught my ear. Value, profit and warmth. (Waarde, winst en warmte)
Value: value of the organization, also for the shareholders. Profit, well okay, at the end of the year you have to make a profit. So the projects you do have to stand the test of profit. The projects as they are, do they bring in enough return. And warmth, warmth is ofcourse an emotional concept, it's a softer aspect. But you have to deal with customers, you have to deal with the environment for example. It is more or less free to fill it in, but not unimportant.

How value of shares is operationalized is not clear from the data. The value of shares is virtual as long as they are not sold. Maybe share value is not monetarized but only used as a mythical admonition. Profit is operationalized in the company by rejecting projects without

profit. The 'warmth' is literally added value: a means to keep customers happy, and there is warmth towards the water company's largest shareholder. These two aspects of warmth are further explored below under 'Warmth relationship with shareholder' and 'Better service'.

Efficiency improvement

The goal to earn profit is translated further into efficiency improvement:

R: In the past, if you foresaw a loss because of rising wages or larger investments, then you would raise the tariffs. And nowadays that would be impossible, because you cannot raise the tariffs like that anymore, except where it is still a monopoly, but then there is often a regulator, you know, for the electricity grid there is a regulator and for drinking water it will surely come. So now we have to base our tariffs on the market and we have to work more efficiently. So we move towards more and more efficiency. And our profit of 60 million will probably rise this year towards 130.

The water company's low cost strategy is at least partly caused by a low price strategy from their large industrial customers. This is especially experienced in sectors where liberalization is already effective:

R: We did say: since we have all the customers in [this province], we want to defend [this province] as long as possible. So we have the position: you will not enter. We will do our utmost to keep our customers. And there have been attacks on our customers already, in the sense of, er... attractive offers. And then we say, hey, we will match that. So we want to keep our customers.

R: Because of the experience we have in supplying alternative water qualities, we also want to supply the food industry, so that is a growth market for us. And for the customer that means saving costs, because alternative water is a little cheaper.

From these quotations it becomes clear that there are direct relations between liberalization, cost efficiency, and product differentiation from drinking water to other water qualities. Providing other water qualities is probably related to previous investments, because the company already has to transport intermediate qualities for production of drinking water (path dependency). Maybe the low cost strategy is related to a high relevance of large industrial customers relative to small customers? For this we only have circumstantial evidence:

R: Our whole sales is 55 million cubic meters, of which 20 million is industry water and 35 million cubic meters is drinking water.

Growth

The next goal related to the water company's commercial strategy is growth. Although the water company does not aim for a larger scale through mergers with large energy companies, they do so in a more incremental way through growth of annual turnover:

R: And that you can translate back to terms like a certain return, or profit, or a certain amount of growth, that we strive for.

I: Yes, growth? In what kind of...

R: Growth in sales.

I: In sales. Yes. (silence) What are growth markets? Or is that in all aspects?

R: For the water company the growth market is in the industrial segment, industrial water use. And then especially the alternative, offering alternative water qualities or closing the water cycle. That is a growth market in, well, in the Netherlands and Western Europe. And in drinking water supply the growth market is in foreign countries in general.

Summarizing, the company has adopted commercial goals of shareholder value, profit, efficiency and growth because of liberalization of the energy market. The company sees opportunities for growth in product differentiation in its existing markets, and for drinking water in foreign countries.

Further diversification

The company does not try to realize efficiency improvement and growth by merging into giant companies. So how do they try to realize these goals? Mainly by further diversification in their own region:

I: You choose consciously for diversification.

R: Yes.

I: Can you explain why?

R: Well, we do it because a) if we would choose only one product, but now we are talking entirely about strategy, for example energy, then we would surely be too small! (...) So we say: if the shareholders, in our case the [regional] governments, want to keep [the utility company] as a whole, then we will have to become broad on our own home market. That is what we are good at.

Being a multi-utility has advantages for the company: it is more efficient, it helps in making a more coherent strategy and improves the offer to customers. The integration even has environmental and social advantages:

R: And ofcourse because we do multidisciplinary projects... well, plain and simple, if we have to construct a water pipeline, then we already check: maybe an electricity cable is also needed, or a gas pipeline, or whatever. That can be included in the construction works very easily. And so you save earth moving, you save energy, you save inconvenience, and so on.

Product differentiation

The water company is defending its multi-utility character. They acquire utility companies in their region, and within each business they aim for a broad product range:

R: Within these utility services we try to create the highest possible added value. So we say: we try to travel with our product as far as possible. (...) we sell industry water to an industry. They use that water. Then they emit it and we are willing to treat it, the waste water, and if possible recycle it. So I mean in these chains.

Acquiring new utilities and product differentiation seem to be two sub-strategies that support the same goals of annual growth. Closing the water chain is the last piece of a product differentiation strategy that started 20 years ago:

R: I think it was about 20 years ago when we started to promote supply of alternative water to the industry enormously. (...) And about 6 years ago we started doing waste water treatment. We have two sewage treatment units in operations now. (...) And all of that was actually part of a main trend, a main development trend towards tailor-made water and closing water cycles.

Opportunities outside region

It remains a question, if the strategy of a regionally based company will hold in the future. The expansion to other utility sectors within their own, relatively small region is limited. Respondents within the water company recognize that market opportunities are largely to be found outside their region:

R: The concept of [regional] anchorage is ofcourse valued highly in local and regional politics, and also among the public ofcourse. But [regional] anchorage in practice, looking from the heart of the company, means nothing else but doing what we always did, and all new developments, or many new developments, including growth, are precisely outside of [this province].

Better service

The company intends to compete with other companies. Since many of the competitors are much larger companies, our company cannot win in a price-competition. They try to compensate for price & size disadvantages by offering better service and more flexibility to industrial customers:

R: But secondly, next to supplying a product, because that does not differentiate us from others, it is a product that anyone can supply in the same way, and if you are in a market you have to try to be different, so next to supplying a product we want to offer services, paid services for which the customer if he wants, he can use that if he finds it attractive. By the way other companies do that too, but everyone has his own way of providing services. Just supplying the product, well, that is the same for everyone. A kilowatt-hour, a cubic metre gas, soon a cubic metre water.

I: Yes. And that's where the warmth is in then?

R: Yes. Yes, that would be the warmth towards the customer.

Broadening the service often means opening the competition on markets of water supply and sanitation which are formally still monopolies:

R: If you look at the larger picture, then we have a conflict with the water board, or we had it, because it has been straightened out, if we were allowed to treat the waste water of a holiday village yes or no. Does that concern households, the waste water from a holiday village, summer houses by the way, is that the domain of the water board, yes or no? We won it, but it is just a single victory, because they will probably close off that legal opportunity, and the tendency is to say: waste water from households will remain with water boards.

R: The procedure in [the neighbouring province] is still running. What did we do there: we had a company, [name], because it was in the papers at that time, whom we could supply with considerably cheaper water by getting industry water from our pipeline out of the [surface water reservoir] that runs nearby that company. (...) We thought we were allowed to do that and that we did not need a license for it. We are sure we did not need it. Only the Provincial Executives of [the neighbouring province] did not agree.

In the conservative, monopolistic water sector this strategy has caused a series of conflicts which earned the water company the reputation of an aggressive competitor. The discussions and consequences of the water company's competitive strategy will be further explored in paragraph 6 about the network. This paragraph about the water company's strategy will be concluded with the water company's strategies towards two other parts of the network: their shareholders and society as a whole.

Warm relationship with shareholder

The water company has a close relationship with its largest shareholder, the regional government:

I: And how is your relationship with [the provincial government]?

R: Good. Very good. In the first place they are 50% shareholder so we take care that it stays good.

As becomes clear later, this shareholder has a decisive influence on the company's strategy.

Pay dividend to shareholder

In a quotation under the heading 'Function commercially' the water company expresses a wish to be steered mainly on financial criteria. Another part of this 'new contract' is paying a large dividend to shareholders:

R: And we will pay an important part, and that is also a shift within the new regulations, we will pay an important part of the profit to the shareholders. (...) We used to pay one and a half million, Dutch guilders, and now we will, order of magnitude, pay 40 million. That is just the...

I: And who will get that?

R: The municipalities and the province.

Something extra for society

Next to paying dividend, the water company offers their public shareholders to do something extra for society:

R: Now, in our case the province can expect something extra and say: yes, but you have governments as shareholders. We want you to have a proper look at that and a proper look at that and a proper look at that. Something that a stock exchange company probably would not do.

These extra efforts may lower the water company's margin, but not below the company's financial viability:

R: At the same time we say: that has to be at a reasonably commercial basis, because as a shareholder you'll still want a profit. On the other hand, we are not driving a hard bargain. So we are looking for a balance between financial return and what the shareholder would like: to develop something.

Apart from their customers, the water company seems to concentrate on just one societal stakeholder, who also happens to be their largest shareholder. Do they trust in this public shareholder to voice all societal concerns in one integrated package? How does the water

company describe its relation to other societal actors, and does this confirm the water company's selective approach? We'll come back to these questions in paragraph 6 on the network.

Overview of the water company's strategy

In figure 3 an overview of the water company's strategy is presented. Arrows indicate the main lines of reasoning how the strategy fits together. With dashed lines some extra relations between strategic elements are shown. From this, a rather coherent picture emerges. From the data we also get the impression that there exists large agreement among the respondents on the company's course.

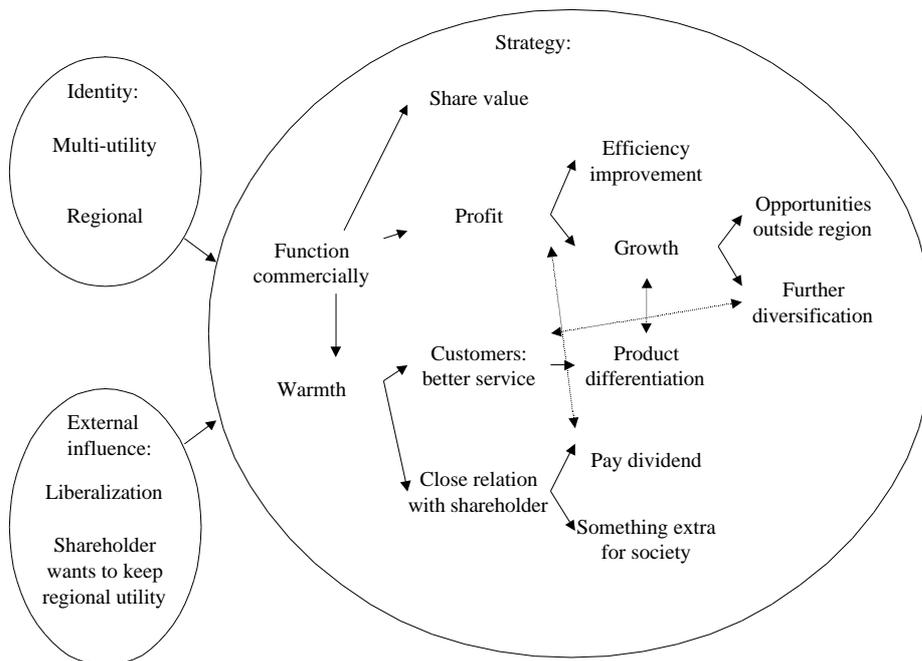


Figure 3: Overview of the company's strategy

5. To what kind of 'sustainable' practices does this strategy lead?

In the analysis of the the water company case, we have made two stories until now: one about perceptions of sustainability, and one about the company's strategy. How do these stories relate to the company's activities?

At this moment we have to remember that the purpose of this research project is not to judge if water companies are doing the right things. Our starting point is that we do not really know what sustainability is, therefore we cannot make a judgement if any action in the name of sustainability is an improvement or a worsening.

In the strategy, sustainability issues emerge in two ways: as commercial oportunites that happen to be sustainable; and as societal pressures for more sustainable practices that are judged with financial criteria.

Operating commercially leads to sustainability

The water company does not struggle with implementation of sustainability, because they use commerciality as their main criterium:

I: Is it a struggle for you to deal with that concept and to design a strategy which also depends on your own economic goals, or...

R: Well, not, not really. Look we don't, don't really struggle with that problem. But you have to look at it this way, we are saying: there is a main goal to use less groundwater, to shift towards surface water. As soon as we see opportunities to do that, and it is profitable, we'll do it. And then we say in all openness: look how well we comply. If the outcome had been that we could not realize it, then we just would have continued until it wasn't allowed anymore. But I would not call that a struggle. Then it simply fits with your general strategy, doesn't it? If we look for solutions in companies and it fits into our, I mean, it is a nice solution, and we can still earn money, then we'll say: well, it fitted within the sustainability goal. But would we have done it if it had cost a lot of money: no.

Switching from groundwater to surface water was a national goal, and this happened to be commercially interesting for the water company. Then the water company also capitalizes it as a moral issue: look how well we are complying to the sustainability goal. (On the other hand they are honest about it during the interviews).

Although nowadays industry water is simply a growth market, at the time the water company entered this new line of business, it was innovative and perceived as risky:

R: I think [our water company] was one of the first, or even the very first that differentiated in the supply of several types of water. Drinking water and industry water and later we also had agricultural water... supplied it to the customers also. That was all within the framework of sustainability, that we did not waste a high water product like water of drinking water quality, that we did not waste it to all water needs. Because industry, it often needs water, it does not have to be of very high pathological quality. So back then we already dared, although the costs to produce it were lower than drinking water, but it is a little against normal market principles. You replace possibility of supplying the water of high quality but maybe also with a higher margin, with a cheaper product with which you earn less. Well, I think that shift, that is almost... I think about 40% now. So that has been a rather daring and also a rather good approach within the framework of sustainability.

The term 'sustainable development' was ofcourse not in use when these choices were made 20 years ago, but it is likely they did consider the environmental aspects.

In year reports we find figures about the water company's recent water sales (figure 4), showing that most of the growth is coming from industry water. Drinking water sales seem to stabilize.

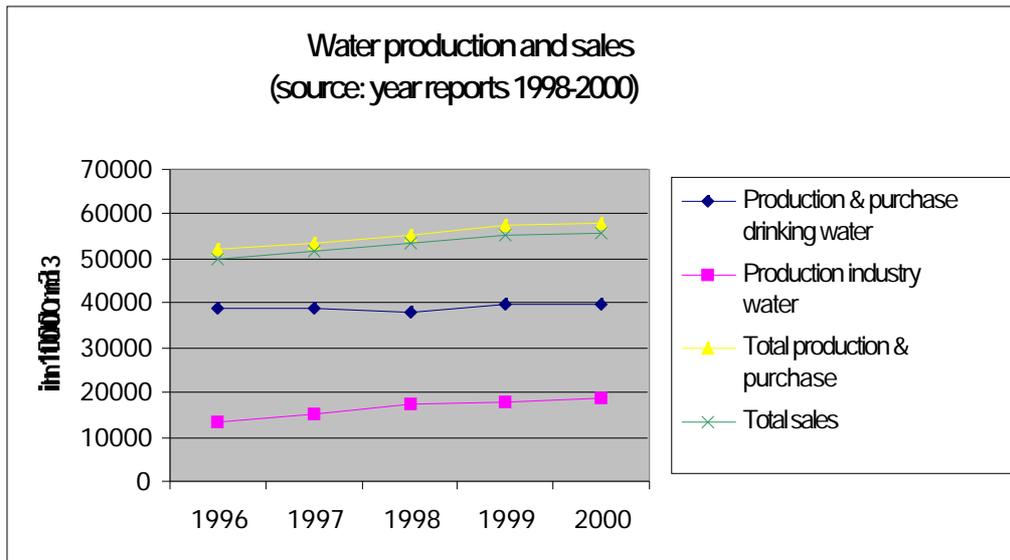


Figure 4: The company's water production and sales between 1996 and 2000

There are also opportunities for market growth by getting involved in new activities such as waste water treatment and water recycling technology. The water company's strategy is to provide the best service as a competitive advantage and this means improving the whole water system of a customer. This generates cost savings for the customer and market growth for the water company. The outcome of these new services can also be more sustainable:

R: If you look behind the meter and you see that the company is evaporating the water for example, then you have a different aspect, a different quality. Will be more appropriate then if they use the water for food production for example. (...) then you provide an extra service to that customer. You can save water for example. And that is a service to the customer but it's not, I think, inspired by the concept of sustainability. It's a bit ambivalent, you know. I mean, it's nice if production lines increase, that's the ambivalent part of it. You look at the figures and then you say: hey, there is growth, since two years we have grown 2%. Should that make you happy from the sustainability perspective or not? From the business perspective you say: yes, it's a good achievement. More sales, that is usually good.

As this respondent already signals, the ultimate goal is sales growth, and sustainability gains more or less coincide with that. There is no structural quest for a more sustainable overall outcome.

Sustainability under financial constraints

We have seen one way of dealing with sustainability: the water company argues that their new commercial solutions are more sustainable. This does not mean that sustainability is just talk for the water company. They do take sustainability issues into account in internal decision making processes:

R: Well, we are a company that wants to behave responsibly towards the environment. That's written down in our goals. And that means that we are sustainable in our use of raw materials, but also auxiliary materials.

But the decisions are made in a context of financial constraints. In the past, the water company was protected by a monopoly regime and tariffs could rise if investments were necessary. After liberalization, the water company has to compete for large customers with low prices. The water company promised in 1995 not to increase prices for the next 5 years. Because of this they cannot comply with many sustainability demands from society:

R: And another controversial topic in my eyes is, that in the water world in general one does not watch the costs. Because people say: oh, one cent per cubic metre, no one will notice the difference, but it does bring in a lot of money. (...) And we say: no, one cent per cubic metre, three, four times a cent per cubic metre is three cents or four cents. And we have price agreements with our customers, that there will be no rises, other than the inflation factor. So we are not going to, if someone, nationally or locally, wants something and says: it's only one cent per cubic metre... No, we're not going to do that, why should we. And what's more, we'd rather reduce it with that cent, on the cost side I mean.

I: Yes, because in the year report I saw that you've had the same prices for five years, but that would be corrected for the inflation factor then?

R: Well, I even think for water it has been exactly the same for the past 3 or 4 years.

So the water company keeps its prices constant, or even lowers them, and so they cannot afford to lose money on the cost side. As we already saw under the heading 'function commercially', for most new projects rentability is calculated before a decision is made. Sustainability decisions have to meet this criterion as well. Acting commercially is not a problem, one respondent says, he objects against people who make idealistic claims in a commercial context and hide their self-interest:

R: If Shell gets involved in solar energy, then they have, they think they will earn money with it, eventually, one way or another. That is not a problem in itself. But, but people should not claim they are doing it out of principles and everything, that too, that is part of it too, but someone will always think ahead, about earning money, and so do we.

The water company wants to behave responsibly towards the environment. This expresses itself mainly in prudent behaviour towards the 'grey' environment, because that implies efficiency gains for the company:

R: Well, actually we often choose implicitly for sustainable goals. We want installations that are durable for example, we choose pipe materials which are durable. We choose company cars with low emissions.

The same effect of efficiency coinciding with sustainable goals already was described above, concerning the integration of multi-utility activities (see under heading 'Further diversification').

For nature conservation the consequence of a commercial strategy is that the water company will bargain to get something in return:

R: [our water company] is running a couple of rather large, relatively large nature oriented projects in water extraction areas, or has been running them. Those decisions, including the decisions about spending money, always coincided with another interest, namely enlarging the water extractions. So enlarging the interest of [the water company]'s

primary product. I don't think we would have spent such high amounts of money on nature development if that aspect had not been there.

I: But are the water extractions in that same area?

R: Yes. Yes.

I: So they are infiltration areas?

R: Yes.

R: The government (...) they want to recover [a dune area]. We cooperate, costs us money too. That does not bother us, as long as it means that we're allowed to extract water from [another dune area] in the future. So we do it, it sounds banal, it's always an exchange. And not like: we think it's good because of our principles, and no one has to pay.

From these quotations we can deduce why the water company spends money on nature management: because there is a trade-off that they can continue water production in the dunes. In the last sentence we see that the respondent experiences decisions that rise prices as unethical.

In the quotations above, negotiations between the provincial government and the water company were successful and action has been taken. In another case however, the problem has not been solved. The water company wins large quantities of natural groundwater from an area in the neighbouring province. The area suffers from desiccation and the discussion how to solve this has not ended yet:

R: The idea is to bring that water back [into the area], for example with a pipeline, that's what [our company] is good at, to transport water through pipelines so that is our core business, we know very well how to do it. We will put the water in a pipeline, bring it back on this or that spot [in that area] so you can raise water levels in those pools again. Well, and then we'll want in exchange 50% of what we bring back, from deeper layers, so it's not an infiltration-extraction system, its bringing in water, and winning extra from a different layer. Then everybody is happy. Desiccation is solved for a great part. But then they say: it's not sust... it is alien water, and because you pump it up there it's not sustainable. Unbelievable!

The water company proposes a technical solution for the desiccated area that not only improves nature, but also enlarges the amount of water they can extract from the area. To the water company's disappointment, their solution is not appreciated, because it is 'too technical'. This points to differences in how these actors define 'sustainability':

R: But then there are those hardliners or the rigid ones, who'd prefer to see no human influence in the area at all. And there are pragmatics who say: well, let's think about it, maybe it is a good idea.

In a case like this, the water company would prefer to take action, rather than discuss fundamental views on reality. In another case, such a pragmatic solution for damaged nature was found after negotiations who was to pay for what:

R: we are doing a wet dune valley recovery project there. We do it really because there is a subsidy of 90% available for it. And so it costs [our company] only 10.000, or 10%, I think that amounts to 50.000 Dutch guilders.

I: I see. So the financial aspect is always evaluated then?

R: Yes.

I: But why invest those 50.000, because that will probably not yield anything for [your company]?

R: No, but that's spending money on a kind of PR-value. The area is a special area, attracts a lot of attention, is under a lot of pressure from nature organizations, among others, nature oriented organizations. And well, more or less because of that pressure which... well, continued for several years, we eventually said: Okay, if it gets subsidized for 90%, we are willing to do that project. Apparently the nature interests are high because the 90% subsidy is coming.

From this quotation it becomes clear that the water company does not argue that they take care of nature because they see it as their job. They want everybody to understand that it is not their job. They say: we do it under a lot of pressure from outside, and only if these outside actors pay for it. The importance of the issue is measured by society willingness to pay. How the pressure from outside works will become more clear in the next paragraph.

From this story the following model emerges for decision making about sustainability issues:

Possibility A: The sustainable alternative can be sold on the market, or will be sold in the future. This includes financially more efficient alternatives.

Possibility B: Is a customer prepared to pay extra for a more sustainable alternative? Fine, but it is a niche market.

Possibility C: If there are no customers willing to pay, then the government should provide a subsidy. This will show if the governmental sentiments are for real. The water company refuses to add it to the tariff.

Possibility D: Customers nor government are willing to pay: then the water company will not do it. If they'd comply they could not survive on the market.

Now we'll have a look how the decision model works out for each of the action possibilities found in the interviews (table 1). This table shows that the strategy is indeed followed consistently in all the specific choices.

Table 1: overview of sustainable actions and how the water company deals with them.

<i>Code</i>	<i>Example quotation</i>	<i>Outcome</i>
reduce waste & emissions	"for example getting rid of your waste sludge from pumping stations. It used to be dumped on a pile next to the pumping station. Nowadays we remove it and reuse it all. So it... and also towards less energy use, less chemicals use, that's also because of economic goals, but also because of sustainability goals."	The water company prefers solutions that combine sustainability and financial efficiency, for example waste recycling and reduced resources use.
save energy	"if it is about small things we are very prudent, low-energy bulbs and stuff like that. But then it's also about cost savings. Low-energy bulbs are written off over 15 years, well, that's how long the installations last, so we allow that."	Saving energy is financially efficient.
green energy	"40.000 people subscribed for green electricity and we are happy about that. It's a success. (...) We don't know if the government is still willing to pay so much subsidy for it in four years from now, but we'll see about that by then. (...) It actually is a collective swindle and we participate in it."	Green energy is stimulated by governmental subsidy so the water company cooperates, but has doubts about this financial construction on the long term.
choose materials	"Material use when pumping stations are built, a little, not really exhaustively"	Sustainable material use: sometimes applied.
protect nature	"we invest in water extraction, not in nature. It's always about a water extraction interest. We invest so we can continue water extraction there, and sometimes that means nature development."	Nature is taken care of if societal actors 'force' the water company, and then the company looks for a positive bargain.
prevent desiccation	"if society thinks [this area in the neighbouring province] is desiccated, then that's the way it is. (...) we are willing to cooperate in projects preventing it. (...) The position that we would have to quit water extraction is ofcourse going too far for us."	The water company accepts there is a problem and offers technical solution under condition that extraction can continue.
reallocate water production	"we've already surrendered licenses and wells. And we try to adapt water extractions as much as possible to (...) prevent negative effects, (...) while ofcourse keeping, well, you'll still need water, so something will have to come out of it."	The water company is willing to adapt, as long as water extraction is possible.
promote water saving	"But there is also a tendency, at least that's what we think, that people are more easygoing about comfort in the house, for example the shower, it increases. Youth more than older people, so we do not notice any reduction in drinking water use."	The water company does not think water saving by households is an essential trend
develop household water	"Examples are ofcourse household water projects. Which are not paying back in money and maybe not in environment either, but I did not look into that."	The water company only develops household water if it pays off and until now that is in only one case.
use surface water	"We extract water from the river. If we didn't, it would be in the sea the next day. Well, so what."	When surface water is used there is no reason to worry about sustainability.

6. How have perceptions and practices been influenced by the network?

I analyzed the network with different approaches:

- A. number of quotations per actor
- B. direct statements about who are important (codes 'influence')
- C. codes 'cooperate'

A. number of quotations per actor

Table 2 shows the results after coding all internal interviews with all external actors.

Table 2: Seventeen external actors mentioned by the respondents.

Nr	Codes	Quot
1	AC-province	36
2	AC-industry/business	23
3	AC-shareholders	18
4	AC-energy sector	18
5	AC-Ministry Environment	15
6	AC-municipalities	13
7	AC-consultants	11
8	AC-water boards	11
9	AC-consumers	10
10	AC-NGO's nature & environment	8
11	AC-agriculture	7
12	AC-VEWIN water association	7
13	AC-Ministry Economic Affairs	3
14	AC-Ministry Water Works	3
15	AC-RIWA Rhine association	3
16	AC-housing association	1
17	AC-Parliament	1
Tot		199

From this list we can conclude that the provincial government is the most important external actor for the water company, especially if we consider that 'shareholders' also implies the provincial government together with municipalities. Industry/business customers are next on the list, which already became clear in paragraph 4. Apart from the Ministry of Environment, national actors are relatively low on the list, and the European Union is absent.

B. direct statements about who are important

Now we'll have a look which actors are identified by the respondents as influential. We'll do this first via the code 'influence strategy' and then with the code 'influence sustainability of strategy'. We'll start with a quotation that sums up several influential organizations:

I: But which organisations are influencing [your company] the most?
R: Well... customers, politics, ministries, personnel, actually all stakeholder groups. (...)
I: Are there any organisations that stand out?
R: Well, politics, the province, stands out.

The provincial government is most influential, which is related to being the largest shareholder:

I: How important is the province in that? I mean the province...

R: Well, they are important as largest shareholder. They are important, yes, 50% shareholder. Are in fact the owners. In their role of owner they are important. In their role of political body as well.

The other half of the shares are owned by municipalities. Among these other shareholders, there are no dominant municipalities:

I: does [the largest municipality] for example have more influence in the province?

R: I don't think so. The town [name]? Well, I don't think so. Yes, they will listen a bit more to larger towns than to a small village like [name]. But not observable for me.

Figures on shareholding make clear why none of the municipalities has significant extra influence. They own between 0,9 and 5,8% of the shares, so no one stands out of the crowd, other than the the provincial government holding 50% of the shares. The figures do not tell exactly how many shares are owned by the neighbouring province providing the water resources to our water company, only that it is below 3,5%.

The second important influence comes from customers:

R: Now you have to keep the customers and then you can earn something from them. And if you are too expensive you'll loose them.

For the water company, large customers are relatively important:

R: 85% of our electricity is going to two large users and 15% to those 400.000 small users. If we look at gas, then all of our sales is going to small users, because among the large ones there is no gas anymore. In water it's fifty-fifty and in telecom activities it is mostly small use.

The water company tries to make influence from industrial customers more formal by introducing industrial representatives into their Board of Directors:

R: And the Directors are now aimed at: 'there will be a market.'

I: But that is, since when have they been in it, those nine?

R: Er... last June.

I: I see. And how many people from industry are in it now?

R: Er, that depends (...) But if you say: who actually works within industry, then of those nine there are... five.

I: That's a lot. And do you notice a difference?

R: There is a shift, certainly, certainly. But it's only since June of last year, but there is a shift towards more company oriented and less society oriented goals.

About the influence of nature organizations, the following statement is found:

R: we have a site now where we are in charge, with government rules and indeed several organizations pushing us to do it in a certain way. But you are the owner and in the end you do with that property, you can still do, to a certain extent, within limits, what you want. At the moment you transfer it, then maybe others can provide better care for that piece of nature, but at the moment they say: yes, but now water extraction is subordinate to the nature interest, then you are loosing it.

So the water company feels pressure from nature organizations to organize their nature management in a certain way. Although the water company is not deaf to them, they ensure to stay in power so that they can give water extraction priority.

Finally a statement about the Ministry of Environment, whose influence was felt more in the past than nowadays:

R: The national government ofcourse tried several times to get a grip on planning through legislation. (...) For example in the Water supply act, at a certain time they included basic plans in chapter 4, that you had to submit plans for the future. That is still effective by the way but is much less used. (...) And then they said for example: don't develop something yourself, you have to make use of [an existing surface water reservoir], for example.

So with code 'influence strategy' the following list is produced:

provincial government shareholders (province + municipalities) industry/ business nature organizations Ministry of Environment
--

C. Codes cooperate

In the interviews only two types of organizations are mentioned with whom cooperation is possible: colleague water companies and water boards. Most of these relations are rather cool. The closest relationship is with a neighbouring water company: they set up a joint venture to approach the industrial water market.

I: But you have an alliance with [two other water companies]?

R: Yes.

I: But...

R: But that is rather passive, I must say. Especially towards [one company] it is extremely passive. Cooperation with [the other company] is more aggressive, though mainly focussed on industry water, so that's, its a sectoral alliance. And not from the heart. So you're not sleeping with each other, but you do something together on a saturday morning.

With water boards the water company tried to cooperate in several projects, for example in combining laboratories. But water boards feel threatened by the water company's competitive attitude and cooperation initiatives have not worked out sofar:

R: With the [waterboard in the neighbouring province], managing water quality, we have some difficulties along other lines. Because we intend to compete with them in the area of waste water treatment. They see us as a threat there and keep us outside their door. And so they influence the atmosphere and the environment in a rather negative way for us. That's what it comes down to.

I: Yes. And with [the water boards in your own province]?

R: There are two of them, one of them is called [name] (...) There the understanding, relation is business-like, but cool. (short laugh) Because we fought a heavy competitive battle with them a couple of times, again in the area of waste water treatment. And now the idea for example to upscale,

combine laboratory activities (...) [and] each party could save one million. Well, for those reasons it is not realized.

And now the water company stopped trying:

R: We try to cooperate. It's not working. And that's because of their own... we are a threat to them, that's what the water boards think.

I: Hm. (silence)

R: That's at least how they experience it.

I: Yes.

R: If we really are a threat is something different, but that's how they experience it. And if they experience it like that, then they avoid all contact.

I: Yes. So what do you do?

R: Nothing for a while. We are not going to invest time in things that, let's say, only get bogged down and don't seem to work out. We know enough other things we can do.

We conclude that there are no important sources of inspiration for the water company among colleague water companies or water boards.

How do network partners influence the water company's strategy?

The shareholders have a significant influence on the water company, for example 10 years ago by deciding over a merger of the former water company and energy company of this province into the present multi-utility company:

I: How did that strategy come into being?

R: From the idea to keep a utility company of one's own in the province. Within the home market.

I: And who thought that out?

R: Managers, board of directors, about 15 years ago, or shareholders.

Among these shareholders the interest is shifting from societal goals toward financial goals:

R: In the past societal goals played a role for the shareholders, they were considered of paramount importance, but with the shift, maybe also towards a more materialistic world, they think more and more about money.

The water company prefers the situation in which the shareholders steer them mainly on financial criteria:

I: The governments are now the owners and you want to keep it that way by paying them proper dividends, isn't it?

R: Yes.

I: As I feel it that is a bit... I cannot bring it into line with also a wish that it gets privatised. That you still want to stay under the ownership of the government. So how does that work?

R: Well, look, we are, we do not have an explicit wish to stay under governmental ownership, but it doesn't bother us either. The owner, no matter if it is mister X, the stock exchange or the provincial government, as long as the owner steers us only, or mainly, on financial goals.

I: I see.

R: Then it is no different from shares on the stock exchange or no different from a Spanish company owning it, it doesn't matter, but we are steering on financial aspects, but with a good, societally responsible company. And in our case the province can expect something extra and say:

yes, but you have governments as shareholders. We want you to have a proper look at that and a proper look at that and a proper look at that. Something that a stock exchange company probably would not do.

So liberalization did not cause a sharp transition from societal goals to financial goals, but a gradual shift in the balance towards more financial benefits for the governmental shareholders. The shareholders still influence the water company to implement certain societal goals. Although the respondent above states that he does not care who owns the shares, another respondent does not seem to like the idea of governments selling their shares:

R: [Our director] is still communicating to the outside world: why would we sell it? If the company makes enough profit, then it keeps its value for the shareholders. Internally there is a certain worry ofcourse, like: what's going to happen? Will the billions or hundreds of millions, how much would it be, lure the shareholders or not?

Although the provincial shareholder seems dominant relative to municipal shareholders in the story until now, the question is if these shareholders make the balance of selling/not selling more precarious than if the provincial government was a 100% owner.

Liberalization of the energy sector is initiated by the European Union, and implemented ahead of EU deadlines by the Dutch Ministry of Economic Affairs:

R: Well, for electricity it's already in full gear. In 2003 it will be effective for the last category, the small users. They can choose from whom they buy. And gas, it's happening in the same way.

Liberalization of the water business, however, has been blocked by the Ministry of Environment (supported by the Dutch Parliament):

R: But for water [the Minister of Environment] decided, that water supply, that's so important for public health and... you just have to keep it under public control.

The water company has a suspicious attitude towards governmental policy, probably fueled by earlier experiences with waste management projects, where the Ministry of Environment backed off and the water company suffered the consequences:

R: In the beginning we established a workplace for dismantling office equipment, computers and copiers. (...) When the shredding prohibition failed to come, we had to put a lot of extra money into it and we quit. (...) We have, we did a pilot with subsidy from [a governmental organization] (...), to vaporize sludge from waste water treatment plants. Technically a perfect system, only it costs 900 guilders per ton. And that was meant for when it would not be allowed anymore to dump it; and as long as it's allowed to dump it, you're not getting any business out of it. And so I said: put that project to an end.

The water company is influenced by governmental bodies from the national level, but they do not trust them as far as environmental measures are concerned and they try to minimize governmental influence. In the next quotation the respondent tells us where the real power in society resides:

R: We say: there *will* be a market in water, no matter what policy the government comes up with, because companies won't let the government decide

what's allowed and what not, they'll look for solutions for their own product and it will be solutions that the government can never oppose to because they are better, more sustainable, than if you work from a monopoly situation.

This company apparently prefers influence from (large) customers over governmental influence.

Views on sustainability in the water company's network

How is the term sustainable development used in the water company's network? And is this comparable to the water company's use of the term? The information we have is from two types of organizations that appear to be the most influential ones: the provincial government and industry. Firstly, the provincial government, where the term is used very often:

R: Actually, almost every problem gets interspersed with that kind of terms of sustainability. But to translate it to: what are you going to do exactly, that's more difficult.

The provincial government uses the term to analyze problems and to discuss them with other societal actors. The second important category in the water company's network is industry. In one of the companies where an interview was held, the term is used:

R: Yes, we use the term 'sustainable solution' rather often, and next to that the term 'structural'. What we want to avoid is that we have to do it all again. (...) It is used when we want to start something, or when we are looking for a solution. Then we evaluate alternatives, and which one comes closest to being self-sustainable or being easy to maintain.

In the second company they give the term a prominent place in lectures but the term is hardly used in internal communications:

I: Do you use the term, let's say in this building, when you talk to each other?

R: Sustainability? (...) Well, not really, no. Not really, no. We are only confronted with the consequences, er., no. (...)

I: I was at the Holiday course (...) Someone from [your company] gave a lecture there and ...

R: Yes, yes, [name].

I: Yes. And I think the first word of the lecture was sustainability. (...) So is that different then [at the corporate level] than here? The use of the term sustainability?

R: Well, look, sustainability, let's say, the term is familiar to me. But if you say, are you dealing with it on a daily basis? Well, no, I'm not. That's the answer to that question: no, actually not. (...) I think sustainability is used called for and uncalled for in all kinds of... there is hardly a seminar nowadays where it isn't mentioned. But if you really look at what they mean, then I'm thinking: well, it is becoming a bit a fashionable word, you know. I mean, it sounds good ofcourse, sustainable, recoverable, you include nature, it includes humans. But what is it exactly?

If we compare these uses, the water company view is most similar to the second industrial respondent. The water company seems to react to the frequent use by the provincial government by picking up the term in its daily language, and using it with scepticism similar

to the industrial company. The next question is, whether we also find similarity in the meanings associated with ‘sustainability’.

The themes presented in figure 5 come from the researched water company and two types of actors from their network: governmental actors (in this case a political leader and an official from the regional government) and business actors (two multinational companies). In the overlapping sections, shared themes are shown. Process themes from the water company are not included because the picture would get too crowded, and from the network actors no process themes were obtained (possibly due to lack of data saturation).

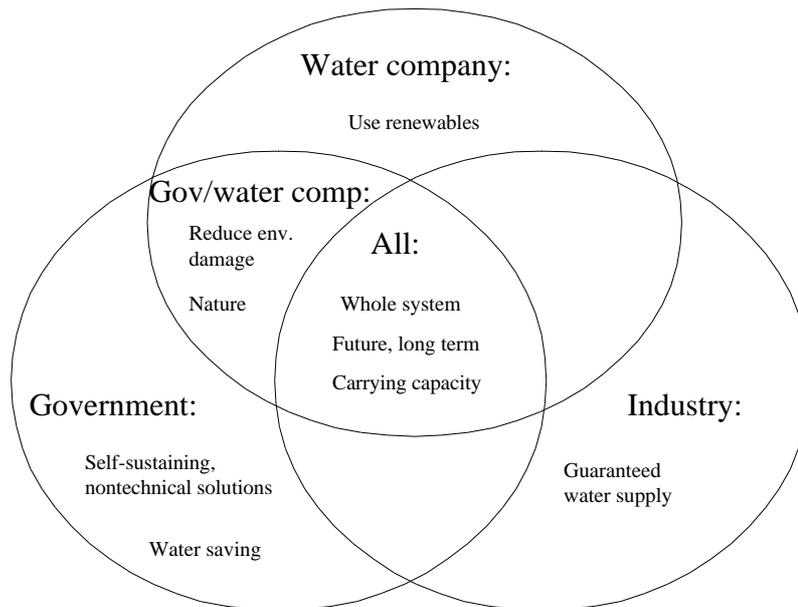


Figure 5: Sustainability themes from the water company, government and industry.

Themes they all mention are whole system approach, future/long term and carrying capacity. An interesting question for future research is if these are dominant themes in other water companies and associated networks too, and if they maybe represent a widely used ‘shared mental map’.

The water company seems to share more ‘altruistic’ themes nature and reduction of environmental damage with the regional government, indicating that the government has influenced them to adopt these themes. Governmental themes that are not shared by the water company are self-sustaining, non-technical solutions and water saving. It seems logical that a technically oriented company does not feel attracted to ‘self-sustaining, non-technical solutions’.

The fact that water saving is not mentioned in the interviews within the water company is also intriguing. Within the regional government and the regional NGO’s it is not forgotten:

R: but also saving water. In the direction of consumers, you can do it in different ways, with education, with choice of appliances, educating your customers, a shop. Well, I think [the company] did a number of things in that area. It depends from which angle you look at it, because if you look

at the [regional association for the environment], which is also monitoring [the company], they think it's not enough.

I: What is not enough?

R: [The company] should put some extra effort in it.

I: I see.

R: And they should be more active in water saving.

So do respondents from the water company avoid the subject for strategic reasons, or do they believe that water saving is an irrelevant issue?

The themes use of renewables and economic prosperity look like they are unique for the water company, but this is probably due to lack of data. Use of renewables plays an important role at the level of the national government, especially in the energy field, and that is why the water company has adopted it.

How the network influences the water company towards sustainable activities

How do governments influence the company to pick up sustainability issues? Hottest topic for our multi-utility company is sustainable energy, which is regulated by the Ministry of Economic Affairs:

R: We have a, a government order to realize a certain amount of sustainable energy; 3% in the year 2000 (...) We reached it too, that target. There is a discussion going on right now if it should be, in the year 2010, 10% or less as I understand it, but we'll simply wait for that. We are not going to say: 'let's do it', if the agreement with the government is not certain and if we don't see that others are bound to that agreement too.

The water company respondents tend to refer to this type of actors with 'the government', so without indicating specific bodies such as Ministries, national or regional levels, etc. We can often only deduce from the policy subjects which governments they are talking about. At the same time we must realize that these governments are not entirely separate entities: they cooperate, they negotiate with each other about policies and are all steered by the same parliament:

R: And then there are members of Parliament who yell: green energy should be cheaper. It *isn't* cheaper if you look at it realistically, only you make it cheaper through subsidies.

Next to stimulating production of sustainable energy, the government also stimulates consumption of sustainable energy with ecotax measures. The water company respondents have strong doubts about this 'artificially created market':

R: The taxes are so low now, that our green energy has the same price as the other energy. So everyone starts buying green energy. (...) And actually that is, in my opinion, an artificially created market. (...) That governmental subsidy comes from... you can balance it with the yield of sales tax of other energy. But if it's the same price and everybody shifts, then the part that is taxed will be smaller and smaller. And then the government will say: well, I can't pay for that anymore. So I think it cannot continue, the way it is happening now.

This already happened in the case of Cogeneration of Heat and Power:

R: If you are in the department of Cogeneration of Heat and Power for example, we operate a hundred small Heat and Power Cogeneration installations at market gardens, hospitals and they were stimulated by the government, you got a subsidy for them. (...) But the government withdraws its subsidy and says: 'it's become a market'. If it becomes a market, you get a much lower pay-back tariff for delivering to the grid than you used to. (...) That makes it less profitable. That means we have to say to the department: 'Well, we'll have to concentrate on different things'. (...) And in that discussion you get people who say: 'yes but that's ridiculous, Heat and Power Cogeneration is killed by politics.'

Until now we found two ways of influencing the company: by setting sustainability targets and by providing subsidies. The provincial government influences the water company by controlling extraction licenses. They decide how much water water companies (and industries) can extract and also negotiate how the natural surroundings of an extraction site should be managed:

R: The government does that, there are working groups, we are involved in them, they want to recover [a dune area]. We cooperate, costs us money too. That does not bother us, as long as it means that we're allowed to extract water from [another dune area] in the future.

The provincial government formes a coalition with nature organizations:

R: That's the nature managing organizations, er... [name] and [name], which actually would like to have the area to themselves, and so they yell that the area is suffering under [our company]'s regime. And it's the nature people, the biologists of the province, officials, who ofcourse are members of those organizations too and can pull all kinds of strings.

Because of the combined pressure, the water company adapts its nature management:

R: The area is a special area, attracts a lot of attention, is under a lot of pressure from nature organizations, among others, nature oriented organizations. And well, more or less because of that pressure which... well, continued for several years, we eventually said: Okay, if it gets subsidized for 90%, we are willing to do that project.

Because of practical experiences with nature management, the water company's attitude has become more positive:

R: There used to be a conflict or a tension about the dunes, but during the past ten years it really has stabilized. We have a kind of compromise situation nowadays. (...) So the environmental movement became more pragmatic too. (...) If there is an issue then a consultation is built around it. (...) And it all happens in a very positive atmosphere. Contrary to ten, fifteen years ago, you know.

I: I see.

R: Back then it was a real battle.

I: Yes, yes.

R: That's also because the companies, the environmental movement has changed, but the companies have changed as well. We have a keener eye for it nowadays.

Within the neighbouring province, the desiccation problems are comparable, but no solution is found:

R: We developed a project, consisting of bringing back run-off water [into the desiccated area], as compensation water (...) It was presented, two years ago, to [the neighbouring province], to provincial officials. With the question: please react on that. They were afraid to do it. Imagine that it would be a good idea! And consequently we used that, the non-reaction, we used it tactically: 'Listen, we come up with ideas and all you say is that extractions have to be reduced, never... look at our ideas first.' They did not do that for two years and that was a comfortable position. (laughs shortly) And then we said, well, if you don't want to react, then the Provincial Executive should react on it.

Although negotiations with their 'own' provincial government have also taken several years, it looks like the neighbouring province is achieving even less. Their licensing power alone appears not to be enough to convince the company to reduce water extractions. The difference between these provinces is a 50% versus a negligible percentage of shares, and a warm versus a problematic relationship between them and the water company.

7. Conclusions

This was a long and quite detailed story. Now it is time to draw some case-specific conclusions. Then we'll try to construct hypotheses with a more general value about what it means to implement the concept 'sustainable development' into society.

Case specific conclusions

The water company we studied is part of a multi-utility, including energy, waste management and telecom businesses. In this company we see that the concept 'sustainable development' is entirely interpreted in the framework of their transition to a market-oriented company. They are forced to make this transition because of European and Dutch legislation. However, they are eager to make it and see mainly positive aspects, which is illustrated by their use of the term 'liberalization' or even 'freedom' instead of the term 'privatization'. Partners in this coalition are the European government, the Dutch Ministry of Economic Affairs, large industrial utility customers and the provincial government. Alignment of the company with these actors is probably due to cultural beliefs that existed in this company before liberalization was legally arranged. This in turn may be related to the relative importance of large industrial customers compared to small customers in their home market.

'Sustainable development' is seen as another transition imposed on the company by a coalition of the Ministry of Environment, the Dutch Parliament, NGO's for nature and environment, again the Ministry of Economy (for energy issues) and the provincial government. General concepts they connect with sustainability, such as long term thinking, whole system approach and carrying capacity are valued by the company. They even claim their business has always worked along these principles. In academic literature the triad economic, environmental and social sustainability is used. If we compare the company's themes, they only seem to involve environmental sustainability.

However, the term 'sustainable development' is not received warmly, because they associate it with political whims. And that is how they use the term themselves: to legitimize their activities towards actors who are sensitive to this terminology.

Sustainability is incorporated in company practices in the following way:

- opportunities inspired by sustainability thinking which are also commercially attractive, are fully exploited. The most important example is development of industry water. These activities are only labelled as 'sustainable' towards actors who seem sensitive to this type of argument; for the industrial customers terms like 'cheaper' and 'efficient' are often sufficient.
- they try to behave responsibly towards the environment. The provincial government is allowed to bargain over environmental improvements, which in practice mostly concerns nature management in infiltration areas. These activities may lower the company's margin, as long as the balance remains positive for the company.
- the company makes use of subsidies to realize sustainable activities, such as wind energy and cogeneration of heat and power. A subsidy can also convince them to do a nature restoration project in a former extraction area. But in general, they do not believe in these financial structures and will cut off these activities as soon as subsidies are withdrawn.
- the company refuses to engage in activities that are positive for the environment, if they have a negative financial result.

The role of the provincial government is interesting in this case. Historically, the bonds between the company and this government were tight, because the province initiated and owned the utility company for many decades. Now that liberalization legislation is gradually becoming effective, the province reluctantly lets go of its steering power. The company itself encourages them to do so, because they see strategic freedom as essential to their survival. There is still a warm relationship between company and province, expressed by paying a high dividend and by incorporation of 'societal' goals into company practices, though always under the condition that activities are in the end financially viable. All in all, the provincial government seems the most influential governmental actor concerning ideas about sustainability. This influence is likely to decrease further in the liberalized future.

Water boards, municipalities and nature organizations are potential sources for innovative ideas about sustainability. The relationship between the water company and most of the water boards in this region is cool, because of competing activities on the waste water market. As governmental bodies, water boards are not used to competition and they sooner interpret it as aggressive than as fair. They hold off cooperative initiatives by the water company and this inhibits cross-over of ideas. Municipalities hardly have an influence. Some of them wish to implement a second supply system for household water, but the water company in most cases refuses because it is too expensive. Nature organizations do have an influence, because they play it through the provincial government. Nature is important to the provincial government, and in their conceptualization of good nature management they incorporate the expert knowledge of nature organizations. The water company experiences this coalition as a 'societal pressure' they have to comply with.

General hypotheses

Together with extrapolating towards general hypotheses I want to reflect on the methods used here. What does the qualitative approach add and where does it limit us?

The method shows us that there are a number of levels on which the concept of 'sustainability' is interpreted: identifying governmental bodies as a source of a 'fashionable', not appreciated term; using it in daily language anyway because it is almost unavoidable

when talking about green energy; recognizing the deeper meanings behind the term and agreeing with those meanings; and recognizing the strategic value of the term and using it deliberately in certain external communications. We would never have found this complexity with a more structured, quantitative method. If we had made a list of academic concepts and definitions associated with sustainability, they would have scored eagerly and second thoughts would have remained invisible.

Because the data are in the form of stories, they show a lot of process aspects. With quantitative approaches, the beginning and the end of a process are made visible in a number of variables, but what happened in between remains to be guessed at. From the story above we learn that the ideas from the Brundtland report certainly do not spread through society because people read the book and do what it says. The concept enters a society that is already crawling with meanings, actors, activities and coalitions. In a more or less mouth-to-mouth process, some actors pick up the term 'sustainability' because it seems to fit with the goals they already had. They interpret it further within their own frameworks and try to influence other actors with it.

The research also shows the process along which the concept 'sustainability' does or does not materialize into practice. Most of the company's practices are guided by the company's own view on reality. Next to that, powerful external actors influence practices, but not via influencing the company's perceptions first. They have power to influence practices directly, and the company accepts that, as long as the power structure is in place. This influencing power takes the form of laws (groundwater licenses), money (subsidies and tax measures) or long-lasting 'societal pressure'.

Our previous assumption that the water sector has many characteristics that are in line with the sustainability concept, is confirmed by these data. This concerns themes like long term thinking, carrying capacity and whole system approach. Otherwise, it is not possible to generalize the results of this company to the Dutch water sector. From the data we get the impression that our company is a dissident. This is possibly related to the fact that with one other company, they are the only ones who are part of a multi-utility.

In the story, we get a glimpse of two storylines: a 'market' storyline and a 'government' storyline. In follow up research we may be able to dig out these storylines further, and this may be generalizable to the level of Dutch society. The story of this company may also be in part generalizable towards commercial companies. The hypothesis then is that sustainable development is not an automatic source of inspiration when interpreted from a commercial framework.

Another hypothesis based on these results is that governments are the most important sources of sustainability terminology. The most important sustainability problem of this water company is over-exploitation of groundwater to the extent that it damages nature. In the Dutch situation the only actor who can counteract this is the provincial government, not only because they have groundwater licensing power, but also because of their shareholdership. Nature NGO's only have an influence because governments believe what they say and impose these goals onto the water company.

Finally we hypothesize that liberalization of the energy sector has brought a dynamic of its own into the utility sectors that has begun to reduce governmental control in an irreversible way. Liberalization of the water sector would probably lead to externalization of nature

management. This externalization process cannot easily be counteracted by regulation, because this will probably result in an antagonistic relationship instead of pragmatic bargaining. Economic instruments such as subsidies and taxes will lead to superficial compliance to governmental goals, which fall apart as soon as the economic instrument is withdrawn.

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