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# New future perspectives through constructive conflict: Exploring the future of gas in the Netherlands



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## ABSTRACT

This paper reports on the refinement of constructive conflict methodology (CCM) combining Q methodology and stakeholder dialogue workshops for gas futures for the Netherlands. Since the end of the 1950s, natural gas exploration and exploitation has been a major focus of the Dutch energy policy. Discussions about the future of energy in the Netherlands tend to focus either on pro-gas or pro-renewable energy. Using Q methodology we have constructed more nuanced perspectives on the future of energy in the Netherlands. We used these perspectives in a stakeholder dialogue, in which the participants further detailed the perspectives and discussed future policy options. Analysis of the outcomes of this process teaches us that the Netherlands remain gas-focused, that renewable energy sources are as much a dogma as nuclear power was in the 1960s, and that the prospect of an austere future is a non-debatable issue. From a methodological perspective it can be concluded that the refined methodology contributed to diversity in views, opened up the dominant discourse and led to learning among participating stakeholders.

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## 1. Introduction

Foresight helps organisations to develop strategies that are capable of dealing with a complex and uncertain future. Within the field of futures studies a vast array of methods and approaches has been developed to support foresight. Scenarios form a central concept in this literature; a concept that has different meanings and operationalisations (Börjeson, Höjer, Dreborg, Ekvall, & Finnveden, 2006; Bell, 1997). Börjeson et al. (2006), as well as Vergragt and Quist (2011) distinguish three types of scenarios: predictive (*what will happen?*), explorative (*what could happen?*) and normative scenarios (*what should happen?*). In this paper, we investigate explorative scenarios because they show a range of possible futures, extend the thinking and solution space of stakeholders, and contribute to awareness and learning among stakeholders. Explorative scenarios contribute to the anticipation of unexpected rather than expected futures. Such scenarios are especially useful when an 'official' expected future dominates policy discourse. In our case, we explore the Dutch energy debate that is dominated by a future vision in which the Netherlands remains a major international player in natural gas. Despite the expected depletion of Dutch natural gas stocks by 2030, a national strategy persists in which the Netherlands maintains its central position as a supplier of natural gas.

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The ideas that people have about the future will always be biased or bound by their, values, preferences and current way of thinking. Predictive scenarios, commonly based on scientific models and knowledge and presumed to be value-free (Klopprogge, van der Sluijs, & Petersen, 2011), often neglect the fact that models and knowledge reflect dominant values. Our frames of reference thus shape how we (can) think about the future. Although the future is inherently uncertain and ambiguous, it is not empty but rather influenced by thinking and strategies of today.

Frames are often taken for granted, which means that people may not be aware of how their frames shape their understandings of the future. There is a tendency to reinforce one's frame, as people tend to focus on information that 'fits' within a frame and to neglect deviating information (Runhaar, Runhaar, & Oegema, 2010; Slater, 2005). As a result, it is very difficult for people to 'step beyond' their frame. Frames of reference determine what we see, and thereby, what we do not see.

Not seeing is problematic, as it leads us to ignore areas for improvement. According to Mitroff and Emshoff (1979), organisations fail to consider systematically and explicitly different policy alternatives to their current ways of doing things. Furthermore, organisations tend to become immune (self-sealing) to effective challenges of their preferred policies and their traditional ways of policy-making (which is similar to the concept of groupthink (Janis, 1971)). Also, most internally addressed criticisms and challenges of a particular policy are directed towards the surface or structural characteristics of the policy and not at critiquing and challenging its underlying assumptions (which is in line with approaches such as causal layered analysis (Inayatullah, 1998)).

The challenge for exploring the future is thus to devise explorative scenarios that challenge actors to go beyond their frames of reference and to scrutinize underlying assumptions, or at least become aware of them. In other words, explorative scenario approaches are needed that open up the thinking space (Stirling, 2008). This fits with the aim of policy-oriented foresight, which is to "raise awareness among policy-makers, politicians and the general public about alternative perspectives on future needs and the implications hereof for present-day actions" (Kunseler, Tuinstra, Vasileiadou, & Petersen, 2015; p. 1). Additional challenges in scenario methods have been summarised by Cairns, Wright and Fairbrother (2016), including how to involve busy senior staff and decision makers, how to handle different and marginal perspectives as well as different degrees of participation, and how to relate expert and stakeholder opinions to lay people and citizen opinions.

We address the challenges described above with a methodology for participatory exploratory scenario analysis that we conducted in a research project on the future of gas in the Dutch energy system which was part of a large Dutch public-private research program on gas (EDGaR).<sup>2</sup> We aim to contribute to the toolkit of foresight and policy (analysis) researchers with this methodology that involves and articulates a diversity of perspectives on the future thereby bridging a gap recognized in foresight research (Kunseler et al., 2015). We build on a participatory approach developed by one of the authors, in which *constructive conflict* is the primary design principle (Cuppen, 2010, 2012). Constructive conflict in this context refers to an open exploration and evaluation of competing ideas about the future to learn about uncertainties, potential future states or developments, and anticipatory strategies. We choose to follow an inductive approach and thus start from the diverging ways in which stakeholders think about the future. To assess this diversity empirically, we use Q methodology which has been applied widely in the field of policy and planning to analyse stakeholder perspectives. Our preferred methodology deviates from conventional scenario techniques in which salient external trends are taken as a starting point and the analyst rather than the participants identifies the dimensions (usually two, represented as axes) as a structure for defining scenarios (Gordon, 2013). Methodologically, we aimed to help participants to reflect on their own future perspectives and those of others to develop better strategies. Therefore, we chose for a methodology in which the scenarios emerge from participants' perspectives rather than from pre-defined structures.

Before we detail our methodology (Section 3), we sketch the cultural and institutional context of this analysis, gas in the Netherlands (Section 2). Section 4 presents six different stakeholder perspectives on the role of gas in the future Dutch energy system that emerged when stakeholders further articulated and critically assessed dominant assumptions, and tried to develop strategies for a number of key actors. In Section 5 we discuss our findings and the conclusions we draw from them on the role of constructive conflict for exploring new (energy) futures.

## 2. The last 50 years of natural gas in the Netherlands

Of all the challenges that modern nations face, ensuring a steady supply of energy ranks extremely high. This is understandable, as access to affordable, high quality energy sources is often directly or indirectly related to wealth creation and political acumen (Manners, 1966; Cleveland, Costanza, Hall, & Kaufmann, 1984; Gagnon, 2008; Lambert, Hall, Balogh, Gupta, & Arnold, 2014). Conversely, a lack of access would mean loss of opportunities, loss of welfare, (geopolitical) power, and general economic decline. It is therefore not surprising that nations have historically pursued access to energy (Debeir, Deléage, & Hémerly, 1991). For the last 50 years, the Dutch pursuit has been strongly influenced by its position as large gas producer and exporter.

Since the end of the 1950s – when the vast Slochteren/Groningen gas field was discovered – gas exploration and exploitation have been a major focus of the Dutch energy policy. At the time, nuclear energy promised to be a source of cheap

<sup>2</sup> <http://www.edgar-program.com/>.

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