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Negotiated environmental agreements in promoting material efficiency in industry – first steps in Finland

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ABSTRACT

The aim of this article is to analyse the challenges and opportunities in applying a sector specific negotiated agreement for promoting waste prevention and material efficiency in Finnish industry. The study was conducted mainly through structured interviews targeted at the main stakeholders. By using an existing agreement on energy efficiency as the initial model, a concept for a material efficiency agreement was developed in an iterative process by balancing the expectations and doubts expressed in the stakeholders' views.

As a result, the proposed concept represents a platform of dialog between the relevant Ministries and industrial organisations for setting sector specific targets for material efficiency, waste recycling and waste prevention. The targets could also include some qualitative issues concerning material efficiency in the value chain and cover several actors in the life cycle of targeted industrial products. A vision of the interaction between the negotiated agreement and other policy instruments is presented.

1. Introduction

Waste prevention is an issue that for more than a decade has evaded an effective policy approach in Finland despite ample repetition of this goal in strategic documents. Hukkinen, based on his interviews with decision makers and experts on Finnish waste management in 1992 [1], pointed out that the goal conflict between short-term operational goals and long-term sustainability goals prevent the waste policy administration and waste management organisations from seriously pursuing waste prevention. His advice was to organisationally separate the waste management duties from the promotion of waste prevention [1, p. 70]. Saarikoski [2] conducted interviews of stakeholders in the Finnish waste policy debate in 2000–2001 and concluded that the struggle between "burn it or prevent it" was actually a conflict between different discourses, "storylines" or "frames". Her analysis is that the debaters – at the extremes represented by environmental NGOs and the waste management establishment – talk past each other, because the former stakeholder is actually arguing within a frame of sustainable resource use and the latter is debating within a frame of a pragmatic and acute problem of waste disposal. Saarikoski proposes that a third line of thinking, termed the "green markets frame", could offer a field for finding common ground between NGOs, the industrial establishment and administration. The storyline of eco-efficiency is accepted by all stakeholders.

The author of this article was faced with exactly the same conflict of frames in the process of preparing[1] the latest National Waste Plan (NWP) for Finland 2008–2016 [3]. The promotion of energy recovery from waste was, and is, vehemently opposed by the NGO representatives, because it is "in conflict with the priority of waste prevention" [4]. The NGO opposition has had a major influence in the waste management scene in Finland, because they have quite systematically blocked incinerator permits by taking these to court on appeal.

In a previous article Lilja [5] argued that waste prevention (WPr) is a policy goal that is best approached from the perspective of improving material efficiency (MEf). Many policy instruments proposed for WPr also fit, and can be politically justified more effectively, within the frame of resource policy rather than waste policy.

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The following acronyms are used in the text as abbreviations of concepts in English or in some cases of names of Finnish organisations:

BAT	Best Available Techniques
BREF	Reference Documents on Best Available Techniques
DMC	direct material consumption
EEf	energy efficiency
EK	confederation of Finnish industries
EU	European union
FEI	Finnish Environment Institute (SYKE)
GDP	gross domestic product
IPP	integrated product policy
IPPC	integrated pollution prevention and control
KTM	Finnish Ministry of Trade and Industry
MEf	material efficiency
MIPS	material input per service unit
MoE	Ministry of Environment of Finland
MOTIVA	the affiliated Government agency for energy efficiency and renewable energy
NGO	non-governmental organisation
NEA	negotiated environmental agreement
NWP	National Waste Plan
R&D	research and development
SCP	sustainable consumption and production
SEA	strategic environmental assessment
SLL	Finnish nature conservation league
SMEs	small and medium size enterprises
SWOT	strengths, weaknesses, opportunities and threats – analysis
TEM	Finnish Ministry for Employment and the Economy (formerly KTM)
TMR	total material requirement
WFD	waste framework directive
WPP	Waste Prevention Plan
WPr	waste prevention
YTV	Helsinki Metropolitan Area Council

This approach to WPr was adopted in the preparation of the new National Waste Plan 2008–2016 for Finland. The plan was approved by the Finnish Government in April 2008 [6]. The Waste Plan also incorporates the first National Waste *Prevention* Plan required by the proposed EU Waste Strategy [7]. The Waste Prevention Plan was formulated as an action plan for promoting the material efficiency of products, production, construction and consumption [6, pp. 18–24]. The policy instruments were designed to match and amend the already officially approved national programme for sustainable consumption and production (SCP) [8]. One of the policy instruments proposed by both the NWP and the national SCP programme was the use of negotiated environmental agreements (NEAs).

The aim of this article is to argue that an NEA on material efficiency could offer an instrument that would support the process of constructing a mutually shared policy frame for promoting waste prevention in the industrial sector.

2. Negotiated agreements as policy instruments

The concept of an NEA between the government and business units or organisations has been actively surveyed and developed during the latest decade, e.g. [9–12]. In a survey conducted in 1996 more than 300 NEAs were reported in European countries [13]. Most of the agreements did not include sanctions or specific quantitative goals, rather they were mostly used in a supporting function for promoting the implementation of new legislation or in a bridging or transition function before new legislation has been formulated. The adoption of new NEAs slowed down around the turn of the century while the legal basis of NEAs was strengthened. They have been most popular in the fields of waste management and climate policy [14]. The NEAs reached in the waste management sector have been useful in promoting recycling, but they have not been that effective in promoting waste prevention [15].

NEAs with a focus on waste minimisation have been implemented in Great Britain [16] and outside the EU, for example in USA [17] and Australia [18]. In the Netherlands, environmental covenants have been prominent elements of environmental policy in 1990s [19]. The new so called long-term agreements include ambitious targets for energy efficiency, but also include other aspects of resource efficiency [20].

In Finland, the NEA instrument has had very limited use in environmental policy, with the exception of energy efficiency agreements [21–23]. In waste management the concept was tested in 1995 for the promotion of recycling of packaging waste. The agreement was an *ad hoc* bridging phase for the implementation of EU requirements as Finland was preparing for EU membership, which occurred in 1995. The agreement was soon replaced by a regulation that ratified the corresponding EU directive [21, p. 69].

The conclusions in the academic literature on NEAs seem to range from a deep rooted scepticism to a frame where voluntary approaches are seen as the fundamental solution to sustainable production. Hukkinen [1, p. 69] ends up with the pessimistic assessment that including ecology in corporatist negotiations and agreements is impossible due to the very logic of corporatism. This is because the decision makers conceptualise environmental issues in terms of pragmatic operational assumptions instead of long-term sustainability. Bizer and Jülich [24] conclude that NEAs have a significant potential to fail if they are intended to replace command-and-control or economic incentives. These authors regard non-individual agreements as neither cost-effective nor efficient in setting incentives for technological improvements. They, as well as several other authors, emphasize that an NEA would work only in the presence of credible threat of a punishment, a "big stick".

In the mid-field, many authors agree that several conditions must be in place to allow an NEA to play an effective role in a policy mix. Cunningham and Clinch [25] list the generic recipe for successful NEAs. Among others they recommend clear targets, reliable monitoring mechanisms and third party involvement. ten Brink [11] summarised the strengths and weaknesses of NEAs as a policy instrument. Bressers and De Bruijn [26] verified the positive correlation between the success of NEAs with four key parameters in the policy context. These are a tradition and climate of consensus seeking and trust, policy makers show a willingness to create the sense of inevitability ("the stick behind the door"), the existence of a legitimate organisation representing the targeted sector and the potential of a competitive advantage for participating companies in the market. All major disagreements should be solved during the negotiating process, the covenant should hold concrete, quantitative goals and responsibilities, and ample attention allocated for monitoring and evaluation. The authors also suggest that there is a certain time window in the policy cycle of an environmental issue when an NEA is best applicable. As the solutions become quite obvious, they can be included in environmental permits as standard requirements [26, p. 252].

Glasbergen [27] sees the system of negotiated agreements in the Netherlands as more than an extension of rulemaking. It can serve