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Doctoral Research Workshop

The German Closed Substance Cycle and Waste Management Act: Opportunities and consequences for public authorities and communities

A German Experiment: Begin of Closed Substance Cycle Waste Management

The German Closed Substance Cycle and Waste Management Act (CSCWMA; German: Gesetz zur Förderung der Kreislaufwirtschaft und der Sicherung der umweltverträglichen Beseitigung von Abfällen¹), enforced on October 7th 1996, was expected to change the entire national waste concept. The CSCWMA was regarded as an effort of the Federal Government to implement the concept of sustainable development mainly in the business sphere² but also – rather unnoticed - into the public sector organizations. The statutory basis assigned a totally new concept to the term “waste”. The EC’s broader definition of waste (“waste for disposal” and “waste of recovery”) was introduced into German legislation. By setting new priorities the Act aimed at substituting simple waste disposal for close substance cycles. The hierarchy „avoidance before recovery before environmentally-sound disposal“ focuses on the obligation to avoid and reduce waste, to reuse and recycle material as well as commodities; it reflects the „precautionary principle“. By legally codifying product stewardship, the former separation of responsibilities (i.e. production responsibility by industry and waste disposal responsibility by communities and local authorities) was foreordained to be superseded by introducing the „polluter-pays principle“. The expectation was raised that the waste disposal monopoly of communities would cease to exist; on the contrary the CSCWMA - by statute - favored de-regulation and privatization of the waste infrastructure.

Now two years after enactment, taking stock provisionally, the following items need to be investigated in more detail:

- **What are the consequences of the CSCWMA for communities and their local waste management concepts? What kind of problems and chances arise concerning the specific role of the decentralized public authorities and administrative bodies in the current implementation and enforcement process of the CSCWMA?**
- Does the current national legal framework of regulations, subsidiary regulations and interrelated ordinances correspond with the reality-constituting „waste management law practice“?
- What are the consequences and compliance problems of the complex relationships between governmental waste management policy, the prioritized voluntary commitments by industry over (present and future) statutory regulations and the endorsed regulations procedures to public authorities? Does the CSCWM-framework support organizational directions-finding and learning processes in order to put sustainable development into practice?

Furthermore:

- The status quo of CSC implementation in industry should be analyzed by studying to what extent environmental performance goals, e.g. the attainment of the „polluter-pays-principle“, have been achieved.

- What are the effects of the act concerning consumption patterns and consumer's product responsibility, embodied in the law, with regard to the concept of feeding back unavoidable residues into the CSC?

The Problem and a Search for Solutions

In this context only the first three modules are of importance, in particular the third one which concentrates on key actors and their resources. Reconstructing the legislation process in a first step in two loosely coupled stages, in an initial stage of law making and in a next stage of the "use" of the CSCWMA, an interesting reproduction perspective can be examined: *a dynamic interplay of supra-organizational structures, such as the CSCWMA, and the actors' actions, involved in the implementation, interpretation and reproduction process of the Act.*

Locating the CSCM in its organizational, political and social context by attempting to bring about a synthesis between the 'structural' and the 'process' perspectives, concepts of Giddens's theory of structuration can be applied: The theory which deals with the relationship between 'agency' and 'structure' is drawn upon to illustrate the reproduction and/or transformation of 'structure' in complex pattern of social and organizational interaction. According to Giddens (1997, p. 5): "...the duality of structure refers to the essential recursiveness of social life as constituted in social practices: structure is both medium and outcome of the reproduction of practices. Structure enters simultaneously into the constitution of the agent and social practices, and 'exists' in generating moments of this constitution."

The *conventional view focuses* on the economic analysis of law, e.g. on the economic prognosis, the efficiency, and the effectiveness of instrumental legislation³. Thus, the legal framework of modern environmental regulations as well as the increasing number of inconsistencies are often somehow taken for granted while analyzing the consequences for companies and public organizations. Treating these codified and enforced rules of the CSCWMA as external constraints and as a datum for non-state actors, only compliance with the command-based Act has to be checked. This traditional approach of economic analysis of law is not only problematic but also highly misleading because economic and public actors always have a certain interest and degree of power as well as the capacity to influence the reality-constituting law practice - here - of the close substance cycle and waste management.

Therefore an *alternative perspective*⁴ is needed that offers an explanation with respect to how actors draw upon and reproduce rules and resources in the organizational interaction process. "Formulated rules – those that are given verbal expression as canons of law, bureaucratic rules, rules of games and so on – are thus codified interpretations of rules rather than rules as such." (Giddens 1984, S. 21). Communities and local authorities have a twin role as knowledgeable agents; disposing waste and administering regulations and ordinances of waste management simultaneously. This provides them with the capacity, interest and partly the formal authority to 'intervene' and 'make a difference' to the implementation process (*dialectic of control in social systems*), thus again producing 'unintended consequences' (Giddens 1984; S. 16). However, social practices such as the 'use and learning process' of the CSCWMA as reality-constituting law practice of the close substance cycle and waste management have to be analyzed more closely from a Structuralist point of view.

CSCWMA: Codified interpretations of rules?

Many opportunities for and impediments to the CSCWM implementation and reproduction processes are imbedded in the judicial structure and codified content of the act, systematizing two policy elements: a command-based and a cooperative approach. On the one hand the current system of top-down and command-based policy is perceptible, e.g. by emphasizing legal compliance, by setting demanding terms and obligation like „low-waste industrial production processes“ and quality standards for thermal waste treatment. The Act contains different, partly explicit provisions obliging public authorities to monitor and check the compliance, and therefore it is among the strongly sanctioned rules of social rules. On the other hand this top-down approach is complemented with a more cooperative, self-regulative one. This so-called „public-private system“, which is based on the „principle of cooperation“, should lead to a more adaptive, dynamic and performance-based regulation process view. In the juridical literature the latter approach is described, varying slightly in meaning, e.g. as „cooperative, self-regulative and/or reflexive law“. Rather seldom it is referred to as a “learning (environmental) law” (Ritter 1992, Roßnagel 1997⁵), even though the transfer of some ideas of organizational learning, innovation and communication management to legislation is attractive and necessary in this context⁶. Usually the issue of cooperative regulation is approached from an instrumental policy perspective, e.g. deregulation of public control, new administrative procedures, disincentive and incentive mechanism, and organizational frameworks such as the “Duales System Deutschland (DSD)”. In order to ensure the enforceability of the CSCWMA, flexible and mutual regulatory mechanism are installed by statute, i.e. „uncertainty“ concerning level and scope of future ordinances side by side with priority to self-commitments by industry in the sphere of waste avoidance. Voluntary willingness of industry is linked with various degrees of „governmental threat“ of further statutory and subsidiary regulations. Still the CSCWMA reflects the dilemma of ‘putting sustainable development’ into practice, and the problems of compromises and gaps as well as unintended consequences. The law is still very indeterminate and ‘rudimentary’ which reflects the problem that sustainable development would require very severe restrictions in society. The experimental character of the law also indicates that continuous learning processes and reflexive feedback cycles are ‘somehow’, but not systematically installed, e.g. not only by monitoring performance gaps between future requirements of closed substance cycle and waste management and the current state of affairs but also by its rudimentary statutory and subsidiary regulations. These new rules of the game “waste management” have also increased an interest in new public management strategies in order to navigate organizational changes and to increase the organization’s problem solving capability.

A reproduction perspective: Communal problem-solving strategies

This legal constructions result and already resulted in several severe consequences for economic and public actors. First, the new reversed hierarchy of waste recovery and disposal responsibilities emerges and will emerge severe consequences to owners and generators of waste, e.g. new supervision regulations “The Ordinance on Waste Management Concepts and Waste Life-cycle Analysis” will be phased in the 1st January 1999. Second, there is a realistic chance and first indicators, that the infrastructure of public organizations and services - i.e. communal waste management and municipal waste disposal facilities - will be turned upside-down by the „polluter-pays principle“. At least there is a shift away from the mere provision of public services in the organizational field of waste management. And third, the law creates

a totally new interplay between the main groups of actors. Nevertheless, monitoring the compliance with the CSCWMA goals and the formulated rules over the next years, an analysis will reveal further parts of the reproduction relations and unintended consequences of the ‘waste concept in use’.

The regulations, with their system of interrelated ordinances are

- a step towards a dualistic separation of waste management structures as well as functions – a new “dual system of CSCWM”. Whether this produces and reproduces shared responsibility has to be discussed more closely and depends on the rules and resources the key actors draw upon in the reproduction process of the CSCWMA.
- partly affirmed to be administered by communities and local authorities. This means the regulations mutually form and are being formed by the same organizational field. Impediments and bias to structural changes are inevitable.
- providing a wide range of opportunities for responding to waste issues privately, cooperatively or municipally, especially via new associations. Communal waste management will play a central and critical role in the transition process - the action patterns range from hindrance strategies to a proactive restructuring process.
- to abandon the former bureaucratic-supervision regulations, to deregulate communal procedures and to establish circular CS structures particularly regional recovery networks etc.

Identifying central barriers to the fulfillment of the act and within the act in short (e.g. product responsibility, duty of waste recovery, duty of waste disposal, duty of providing institutional transparency), a further step is to reflect upon three communal problem-solving strategies which can be observed in the reality-constituting law practice of the communities and local authorities.⁷ At the same time those strategies could also characterize steps of an transformation process in time towards the CSCWMA goals.

- The establishment of a public close substance cycle and waste management system
- The CSCWM Public Private Partnership
- The privatization of communal waste management

Whether those public waste management strategies (1) are to support the establishment of CSC and effective material flow management systems, (2) are to ‘fulfill’ legal and environmental requirements of the CSCWMA and/or (3) are to improve effectiveness of the public sector depend on the specific situations the communities are in.

Communal transformation processes towards environmental improvement will demand organizational changes, new forms of cooperation and transparency, communal risk management, public participation on environmental decision-making and a whole set of new public services etc. Public waste management strategies are likewise to reflect dualistic CSCWMA-structures: a top-down down approach, e.g. public control and supervision, and a cooperative bottom-up process, which can be combined with goals of the Local Agenda 21.

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- ¹ Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Beseitigung von Abfällen (Kreislaufwirtschafts- und Abfallgesetz – KrW-/AbfG) vom 27. September 1994 (BGBl. I S. 2705), geändert am 12. September 1996 (BGBl. I S. 1354). In: Peters, H.-J.; Pinter, J. (1997): Schwerpunkt Kreislaufwirtschafts- und Abfallrecht. Textsammlung. 1997
 - ² For possible entrepreneurial consequences of the CSWMA see Matten, D. (1996): Enforcing Sustainable Development by Legislation: Entrepreneurial Consequences of the New German Waste Management Act. In: Sustainable Development 1996, p. 130-137
 - ³ Recent German works on law analysis e.g. Heidenmüller, H. (1998): Effizienz als Rechtsprinzip. Tübingen 1998. Exeptions in that field are some works with jurisprudential, institutional and/or sociological and economic perspectives such as Gawel, E. (1996): Institutionentheorie und Umweltökonomik - Forschungsgegenstand und Perspektiven. In: Zeitschrift für angewandte Umweltforschung 1996, Sonderheft 8, S. 11-25, Hutter, M. (1989): Die Produktion von Recht. Tübingen 1989, in particular Ortmann, G.; Zimmer, M. (1998): Strategisches Management, Recht und Politik. Hamburg et al. 1998 and Schneidewind, U. (1998): Die Unternehmung als strukturpolitischer Akteur. Marburg 1998
 - ⁴ For the following Giddens, A. (1984): The Constitution of Society. Oxford 1984.
 - ⁵ See very early Ritter, E.-H. (1979): Der kooperative Staat. In: Neue Zeitschrift für Verwaltungsrecht 1979, H. 6, S. 929-938 or Ritter, E.-H. (1992): Von den Schwierigkeiten des Rechts mit der Ökologie. In: Die Öffentliche Verwaltung 1992, S. 641-649 and later Roßnagel, A. (1997): Lernfähiges Europa - am Beispiel des europäischen Umweltrechts. In: Neue Zeitschrift für Verwaltungsrecht 1997, S. 122-127, Roßnagel, A.; Neuser, U. (1996) (Hrsg.): Reformperspektiven im Umweltrecht. 1996. For a systematization see Trute, H.-H. (1996): Das Verwaltungsrecht zwischen gesellschaftlicher Selbstregulierung und staatlicher Steuerung. In: Deutsches Verwaltungsblatt 1996, S. 950-961.
 - ⁶ In the policy literature policy change and learning have already emerged, see e.g. Bennett, C.J.; Howlett, M. (1992): The lessons of learning: reconciling theories of policy learning and policy change. In: Policy Sciences 25, 1992, p. 275-294.
 - ⁷ Literature concerning the CSCWMA and Communities see e.g. Beckmann, M.; Kersting, A. (1997): Von der öffentlichen Daseinsvorsorge zur privaten Kreislaufwirtschaft. In: Betriebs-Berater 1997, S. 161-169, Gaßner, H.; Versmann, A. (1996) (Hrsg.): Neuordnung kommunaler Aufgaben im Kreislaufwirtschafts- und Abfallgesetz. Berlin 1996, Gessenich, S. (1998): Das Kreislaufwirtschafts- und Abfallgesetz. Taunusstein 1998, Kahl, W. (1995): Die Privatisierung der Entsorgungsträger nach dem Kreislaufwirtschafts- und Abfallgesetz. In: Deutsches Verwaltungsblatt 1997, S. 1327-1336, Schink, A. (1995): Auswirkungen des Kreislaufwirtschafts- und Abfallgesetzes auf die Entsorgungsstrukturen. In: Die Öffentliche Verwaltung 1995, S. 881-891, Schink, A. (1996b): Von den Schwierigkeiten der Kommunen mit dem Kreislaufwirtschafts- und Abfallgesetz. In: Zeitschrift für Gemeinwesen 1996, S. 97-125, Schink, A. (1997): Kommunalverfassungsrechtliche Grenzen und Möglichkeiten für die Teilnahme der kommunalen Gebietskörperschaften an der Kreislaufwirtschaft. In: UMWELT- UND PLANUNGSRECHT 1997, S. 201-211 and Schink, A. (1997): Öffentliche und private Entsorgung. In: Neue Zeitschrift für Verwaltungsrecht 1997, S. 435-442.