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Eating the Fruit of the Poisonous Tree? Ecological Modernisation and Sustainable Consumption in the EU

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**EATING THE FRUIT OF THE POISONOUS TREE?:
ECOLOGICAL MODERNISATION AND SUSTAINABLE CONSUMPTION
IN THE EU**

Anna Couturier and Kannika Thaimai*

ABSTRACT

Environmentalism has become a central concern for European Union (EU) policy makers and citizens alike as the extent of the bio-crisis has become better understood. Projects aimed at reducing the environmental costs of European living, industry, and commerce have grown in number and scope in the last twenty years. Strategies for reform have focused on the ways in which established market forces can be mobilised to create change within European systems of production and consumption. For food products, the EU has undertaken two innovative projects focused on reforming both consumers and producers: the EU Ecolabel and the EU Organic logo. Similar in design yet unique in function, these product-labelling endeavours instrumentalise the normative philosophy of ecological modernisation in the hopes that incentive-based, incremental transformation in the processes of production and consumption can adequately address the challenges of environmental degradation. We find that while some opportunities for reform of the nature of the EU food market is made possible through the EU labelling schemes, the projects have limited impact on the overall food production and consumption practices and, therefore, are not able to institute substantial and much needed ecological reform.

Key Words: *Ecological Modernisation, Consumer Society, Sustainable Consumption, Bio-crisis, EU Ecolabel, EU Organic logo*

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INTRODUCTION

Environmental policies do not exist in a vacuum. From their inception, they are shaped by the social, economic, and political realities that dictate their scope, size, and underlying ideological framework. In turn, these same policies define the very borders of the issues they address. Inherent in every policy is a narrative of what has happened, what is possible, and what must now be done to balance the relationship between society's needs and the environment's hard limits. Like the fruit of the poisonous tree, well-intentioned projects and policies can be tainted in the long-term by destructive principles lying dormant in their philosophical roots.

This working paper analyses the strengths and weaknesses of the European Union's (EU) current environmental strategy through an examination of its economic and philosophical roots. This analysis is then applied to the concrete example of a New Environmental Policy Instrument (NEPI), product labelling. Labelling schemes are unique, market-based strategies for environmental management because, unlike strict production regulation, they are directly influenced by consumer society. By concentrating on managing the relationship between producers, consumers, as well as social norms and standards, labelling makes concrete the marketisation of environmental policy. It follows that the success of labelling relies heavily upon the acceptance of reigning market principles as well as their integration into society. It is our goal that this investigation applies rigorous theoretical analysis to current and meaningful environmental strategy in the hope of finding both opportunities and areas of concern for effective sustainability policies.

Product labelling is, by nature, an interdisciplinary subject; it cannot be considered outside of its economic and social contexts. For our purposes, we define labels generally as an externally regulated piece of information placed on products to inform consumers of the relationship of the product's production to the greater environment of both nature and human society. With this in mind, this paper emphasizes the systems in which environmentally conscious product labelling operates. We explore the tension between economic agendas and environmental reform, the impact of labelling on producers and consumers, and the discrepancies between the ideal and actual implementation of labelling policy.

How is EU environmental policy both constructed *for* and *by* the economic and social framework into which it is introduced? What are the opportunities for and limitations of EU consideration of two different yet intertwined labelling schemes for

commercially consumed agricultural products as a central component of its strategy for sustainable consumption? Finally, what potentials and missed opportunities exist in the incremental-reform approach of the EU labelling schemes on consumer society and long-term environmental reform?

We theorise that EU environmental strategy of sustainable consumption is primarily motivated by market-driven economic concerns and is ultimately limited in its impact. The EU sustainable consumption strategies are primarily driven by neoliberal conceptualizations of the relationship between society and the environment (*ecological modernisation*). They are concerned with potential influence on the ‘consumer society’ (i.e. the intersection of market-based environmental management and the culture of consumption), rather than their impact on the food production chain. The two resulting labelling schemes adopted by the EU have significant and fundamental flaws that lead only to slight changes in consumption culture and the larger Agro-Industrial Complex. In the end, a lack of coherent, life-cycle-oriented, and mandatory food monitoring undermines profound ecological reform and thus, creates limited ecological gains.

Our research builds upon our academic pursuits in the Political Economy of European Integration Masters programme at the *Hochschule für Wirtschaft und Recht Berlin*. The program – and its focus on the inherent and crucial links between economic, social, and political considerations in the pursuit of meaningful problem solving – fundamentally informs the work. Our goal is to raise the same questions that were asked of us during our research: how does the way in which we discuss our relationship with the environment affect the reality of environmental degradation and, more importantly, *can we do better?*

ECOLOGICAL MODERNISATION AND THE ALL-CONSUMING NARRATIVE

Within the market, environmental crisis discourse has pivoted on the question: How can an economic society based on consumption adapt to limited bio-capacity? The market’s answer: sustainable consumption. Sustainable consumption is defined as “the use of goods and services that respond to basic needs and bring a better quality of life, whilst minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations” (United Nations Department of Economic and Social Affairs 1999, pg.

1). This concept reflects an attempt to conceptualise changing ways in which modern capitalist societies frame and respond to their eco-political problems.

The dominant approach in the EU's environmental theorisation, policy and practice is ecological modernisation. The theory suggests that the pathway towards 'hyper-modernity' and 'superindustrialisation' is not only inevitable but generally a desirable strategy to overcome the current environmental crisis (Huber 1985). Mol (2000) further identifies market economies as being fully compatible with and supportive of progress toward environmentally sound production. Accordingly, ecological impacts may be minimised as production systems are rearranged along ecologically rational lines. Industry, as put forward by Mol (*ibid*), is driven by modernisation and becomes more ecologically rational by weighing the costs and benefits of ecological destruction and internalising environmental impacts; a 'win-win' scenario. To allow this to happen, nature needs to be commodified (Jänicke 1985). In addition, as Mol and Sonnenfeld (2000) argue, instead of pursuing a 'command and control' approach and imposing rigid regulations from a centralized bureaucracy, governments steer private actors toward environmentally sound practices. This incentive-based approach aims to create flexibility, while incorporating targeted parties into a participatory process.

Ecological modernisation has received significant attention by policy makers and is seen as an attractive alternative to the pessimistic or "deep green, radical" approaches (Buttel 2000, pg. 63), including Neo-Marxist/political economy, counter-productivity and de-modernisation theories (Buttel 2000, Orsato and Clegg 2005). Due to its "incremental and accommodative character" (Orsato and Clegg 2005, pg. 254), ecological modernisation has gradually been adopted as a normative proposition and political programme. Consequently, it has been translated into government policies and management practices (Baker 2007, Mol 2000, 2002). One of the clearest examples of ecological modernisation's practical implementation are the EU's so-called New Environmental Policy Instruments (NEPIs), which will be explored later on. According to ecological modernists, environmental problems in advanced societies are largely due to wasteful and inefficient production processes; these problems can only be addressed by new technology in a slow and steady incremental reform (*ibid*). The argument implies that if products are 'sustainable', consumers will consume more sustainably. Ecological modernisation's champion, Joseph Huber,

suggests, 'superindustrialisation' "will transform the ugly and dirty caterpillar into an ecological butterfly" (1985, pg. 20).

The growing influence of neoliberal economics and its market-driven solutions to environmental management becomes all the more salient given the rise of an equally important phenomena; the Consumer Society. The roots of the consumer society and conspicuous consumption can be linked back to the basic tenets of capitalism in Adam Smith's *Wealth of Nations*. Smith describes consumption as "the sole end and purpose of all production" (1776, pg. 625). He also recommends "the welfare of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer" (ibid). In consumer society, consumer expenditures reflect society's preoccupations with identity, lifestyle and a social standing based on the conspicuous consumption of status-conferring goods and services (Veblen 1953 [1899]). Individuals consume for specific social ends. Consumption does not merely arise in response to fundamental needs, nor does it proceed in a rational-utilitarian manner (Baudrillard 1998); rather, needs are created by and for consumers.

The social ends and social relations through which commodities are produced are disguised in the commodity through the market. Marx (1974 [1844]) calls this condition within capitalist society: commodity fetishism. Since the social relations of products are not made visible, consumer perception constitutes a fetishisation. Value is granted to a commodity that is not inherent in the material commodity itself but is rather created by the social relations through which it has been produced and consumed (Allen and Kovach 2000).

Nowhere is this more apparent than in the food market. As capitalist food production evolved alongside technological innovations and improved management practices, a complex system of food production evolved. The system produces ever more efficiently and provides consumers with an exceptional variety of food at low prices in industrialised countries (Goodman and Redclift 1991, Miles 1998). From the supply side, the emerging Agro-Industrial Complex forms intricate and ever-changing relationships with the socio-economic and natural environment. The result has been a rise of monopolistic, large-scale food processors and retailers as well as an increased distance from farm to table (Fulponi 2007).

The modern consumer experience with food is far divorced from production, lost in the Agro-Industrial Complex, and shaped by a lack of knowledge of working and producing conditions as well as the composition of ingredients in the product (Adam

1998). Even though the transformation of the food system has brought benefits for consumers, they expect a great deal; quality, safety, variety, convenience and, of course, affordable prices. European consumers further demand production and processing techniques to become more environmentally benign, sustainable, animal-friendly, and compliant with labour and social standards (Fulponi 2007). In the context of sustainable development, Andrew Dobson's notion of ecological citizenship (2003) or Gert Spaargaren and Peter Oosterveer's concept of citizen-consumer and political consumerism (2010) suggest that consumers participate in political decision making processes by putting their environmental and social concerns into practice through purchase power (Seyfang 2007). Recent transformations in consumer expectations and identity are driven in large part by the politicisation of consumption and the environmental and health problems caused by the industrialisation of agriculture.

In the 1990s, the EU began responding to these citizen consumers by pursuing sustainable consumption and production projects. In 2008, the European Commission established a Sustainable Consumption and Production Action Plan as an integral part of its Sustainable Development Strategy, which "reinforces the EU's long-standing commitment to meet the challenges of sustainable development and builds on initiatives and instruments at EU and international level such as the United Nations' Marrakech Process" (European Commission 2012). The Action Plan aims to improve "the energy and environmental performance of products and foster their uptake by consumers" (European Commission 2008, pg. 2). At the centre of the Action Plan is the so-called 'dynamic framework for smarter consumption and better products' (ibid). This framework provides a range of policy measures and standards throughout the internal European market. The approach focuses on products that have significant potential for reducing environmental impacts. The EU's sustainable consumption and production measures, such as eco-management and audit scheme, the energy and eco-label scheme, the eco-design Directive and incentives are characterised by their explicit address of sustainable consumption and production, either directly by targeting individual consumption behaviour or indirectly by changing the framework conditions of consumption (Wolff and Schönherr 2010). Over the past 10 years, these NEPIs have been deployed throughout the EU as a major component of the European market strategy.

THE RIGHT TO KNOW AND THE EU LABELLING SCHEMES

Labelling is one of a handful of NEPIs to gain prominence within the EU agenda. At its roots, the project of labelling is driven by two prerogatives: its social impact and economic function. Unlike other tools of environmental management, environmentally conscious labelling is an altogether recent concept and thus does not carry with it the weight of old economic instruments. Rather, its definition, boundaries, and potential for impact are cobbled together through the interdisciplinary sociological and economic literature in which it has recently been addressed. Practitioners, proponents and critics therefore easily attach opinions to any analysis of this contemporary tool. Within the EU, there exist two separate yet linked labelling schemes; the EU Ecolabel, which focuses on life-cycle environmental impact, and the EU Organic logo, which focuses on high production standards.

THE EU ECOLABEL

Figure 1: EU Ecolabel (official logo)



Source: European Commission, 2012b

The EU Ecolabel, based on the International Organization for Standardization's *Type I* Ecolabels¹, was first introduced in 1992 and is exceptional amongst the various national and international ecolabelling schemes. Like other *Type I* ecolabelling schemes, the EU Eco-label operates on a voluntary basis on the part of producers and distinguishes environmentally friendly products with a distinctive

¹ Type I Ecolabels (ISO 14024) are voluntary ecolabels initiated by third parties and are often governmental (GEN, 1999). Industry associations including unions of producers and consumers can also initiate these labels. The approval process relies on industry-specific certification based on product-specific criteria. The goal of these ecolabels is to establish industry-wide standards for the production and distribution process based on 'cradle-to-grave' assessment – from raw material extraction to a product's discard.

symbol, “the Flower”. Manufacturers, importers, and retailers with eco-friendly brands are eligible to apply for the label for their products. Most importantly, it is the first multinational government-based ecolabelling project and is distinct from national and private programmes. The EU Ecolabel focuses on three main goals that reflect the EU’s stated commitment to the triple-bottom line of environmental management. The labelling scheme aims to:

... decrease the environmental impacts of products throughout their lifecycle, promote the resource efficiency of industrial production, [and] enable consumers to make informed decisions based on a product’s environmental performance (EU Regulation 66/2010 on the EU Ecolabel, EUEB 2010).

This multinational focus has made the EU Ecolabelling scheme a central environmental management tool in the EU’s Sustainable Consumption and Production Action Plan (European Commission 2008). However, the EU Ecolabel has a number of characteristics that distinguishes it from other *Type I* labelling schemes. It enjoys widespread governmental acceptance on the European continent with recognition from the EU, Norway, Lichtenstein, and Iceland. The EU’s oversight allows for third-party screening through ostensibly democratic policy mechanisms. Additionally, the resources available to the EU in both implementation and review allows the EU label to more accurately reflect and assess a product’s relative environmental impact – from initial extraction of the raw materials to final disposal (European Commission 2011). Finally, unlike other *Type I* labelling schemes, the EU Ecolabel has the potential to create industry-wide and *market*-wide production standards due to the influence of the EU as a body of governance. However, it must be noted that this goal of market-wide standards has not been and arguably *cannot* be reached (see Murphy 2001, Williams 2004).

Criteria for specific products travel through a review and approval process and are finally approved by the relevant Member State representatives and the EC². Accepted criteria are considered valid for periods of 3-5 years. Following this period, criteria are tightened to reflect advances in technology and industry capabilities

² The EU Ecolabelling Board (EUEB), headquartered in the European Commission, sets and regulates EU Ecolabel criteria. The board is comprised of competent bodies from all EU Member States as well as representatives from environmental groups, industry and consumer associations, unions, and the private sector. Despite widespread support for the process within the European Commission, the propagation of EU Ecolabels criteria has been a slow process. The EU Ecolabel established criteria for only six products during its first four years. This number rose to eighteen established criteria by the year 2000, yet only forty-one products carried the label (Jordan et al., 2006).

(European Commission 2011). According to the European Commission, the EU Ecolabel has had a significant impact on consumption since its introduction (ibid). The EC states that over 300 companies have successfully subjected their products and services to the EU Ecolabel criteria. The result includes the sale of over 280 million Eco-labelled items and nearly EUR 700 million in post-factory sales in 2004 (ibid). Currently criteria have been approved for 23 different types of industries and services and new criteria are in the approval process. This includes the development of criteria for food products.

As it stands currently, the EU Ecolabel criteria have only been developed for non-perishable products and services. However, this is an issue of considerable controversy within the EU. Much of the drive behind expanding the EU Ecolabel to include foodstuffs stems from the clear importance European consumers place on buying eco-friendly food products, the demand from EU citizens that the EU supports eco-friendly economic initiatives, and the relatively invisibility of the EU Ecolabel (Eurobarometer 2009).

In 2010, Oakdene Hollins Research and Consulting was hired to conduct a feasibility study responding to mounting demands for the EU Ecolabel to include food products, including perishable agricultural goods and commercial animal feed products (Oakdene Hollins Research and Consulting 2010). The report found that while there exists high support amongst European citizens and politicians to expand the EU Ecolabel into commercially consumed agricultural products, the logistics of doing so would be significantly complicated, particularly given the labelling scheme's focus on lifecycle environmental impact. The report noted that the expansion of the EU Ecolabel might lead to confusion for consumers especially given the EU's Organic logo (which will be discussed shortly). The report also suggests that there might already be legal implications for the use of the term "Ecolabel". The terms "eco" and "bio" are legally protected under EU Organic Farming Regulation (European Commission Regulation 2007) and the inclusion of non-organic foodstuffs (and, some argue, the already established labelling of non-perishable products) with the "eco" label may already be legally problematic. In early 2012, the EUEB responded to the feasibility study stating that it would put the expansion question on hold for the time being until further research can be coordinated (Dodd et al. 2012).

THE EU ORGANIC LOGO

Figure 2: EU Organic logo (official logo)



Source: European Commission, 2012c

While the introduction of food into the EU Ecolabelling scheme is fraught with controversy, consumer demand for eco-friendly foodstuffs has not been ignored. In 1992 – at the same time and in coordination with the same EU legislation as the EU Ecolabel – the EU Organic certification scheme was established under the guidance of the European Commission’s Agriculture and Rural Development Directorate-General (European Council Regulation (EEC) No. 2092/91 1991). The EU Organic logo was introduced in 2000 as a direct response to the success of the German national Organic logo and sought to mobilise the public desire for environmentally friendly organic market goods (Oakdene Hollins Research and Consulting 2010). Additionally, the logo was adopted on the EU level to encourage credibility for EU agricultural goods in the high-market of organic consumer goods. The logo includes a wide variety of commercially consumed food categories and covers a large range of implications in the agricultural stage of production. It is also currently deployed in all European countries. Unlike the EU Ecolabel, this *single-issue* label focuses only on production and processing, rather than *life-cycle* environmental impact. It is mandatory for all pre-packaged food advertised as “organic” as of July 1st, 2012 and organised on a voluntary basis for fresh foodstuffs (European Council Regulation 2007).

The development of a labelling scheme specifically aimed at fostering the organic food market within the EU is directly linked to the EU’s ubiquitous and central Common Agricultural Policy which directly emphasises agricultural and environmental sustainability (European Council Regulation 1991). In 1999, the

Council made clear its intentions to express the EU's overarching environmental policy through the encouragement of organic farming and labelling. The Council argued;

The general principle is that where farmers provide services to the environment beyond the reference level of good agricultural practices, these should be adequately remunerated. Certain methods of agricultural production, for example organic farming, integrated production and traditional low-input farming and typical local production, provide a combination of positive environmental, social and economic effects (European Council Regulation 1999).

In 2001, the European Commission integrated organic farming and labelling into the overall EU strategy for environmental management with the presentation of the EU Strategy for Sustainable Development at the Göteborg European Council (European Commission 2001). The strategy specifically named organic farming and labelling of commercially consumed organic goods as a central tool for encouraging sustainable consumption based on quality rather than quantity (ibid).

Most interestingly, the EU Organic logo is expressly tied to the EU's triple-bottom line approach to environmental management. According to the European Commission, the EU Organic logo has three main directives: economic, social, and environmental sustainability. The 2004 EU Commission publication on Environmental Technologies Action Plan describes the benefits of the EU Organic logo, stating that an Organic logo would increase "competitiveness" and encourage "stronger market orientation and more efficient income support" (European Commission 2004). Likewise, the logo responds to consumer demands and provides "encouragement to improve food quality and safety and a better balance of funding towards rural development" (ibid). Finally, the plan stated that the logo would promote environmental sustainability by providing a "clear framework for a more efficient application and development of environmental...standards" (ibid).

According to the EU Organic logo's mission statement, products that bear the organic leaf must reach the following minimum requirements:

- ... at least 95% of the product's ingredients of agricultural origin have been organically produced;
- the product complies with the rules of the official inspection scheme;
- the product has come directly from the producer or preparer in a sealed package;
- the product bears the name of the producer, the preparer or vendor and the name or code of the inspection body (EU Organic logo mission statement 2012).

With the adoption of Council Regulation No. 2092/911, the EU established a working policy on agricultural products aimed at strictly regulating the production requirements for organic farming (IFOAM 2012). The goal was to integrate organic farming regulation into the Common Agricultural Policy adopted by the EU. While product-specific criteria for the EU Organic logo are established within the Agriculture and Rural Development Directorate-General, the inspection and certification of specific producers is carried out on the level of individual Member States. EU regulation on organic farming requires EU Member States to establish and administer a rigid system of inspections and certifications, which are then subject to EU oversight. There has been considerable concern raised over the question of organic imports. Currently, imported agricultural inputs are treated on a case-by-case rule in which non-EU producers are asked to provide equivalent organic certification on faith.

THE BIG PICTURE: EU LABELLING SCHEMES AND ITS IMPLICATIONS

The link between macro-philosophy and concrete EU projects is intrinsically tied to the question of legitimacy. In order for labelling projects to gain legitimacy – in the eyes of consumers, producers, and governments – their underlying assumptions must be accepted. First and foremost, transparency must be accepted as a necessary and positive factor in a functioning democratic system. In the case of the EU Ecolabel and Organic logo, all parties must have faith in the basic tenets of ecological modernisation (Cohen 2006). Namely, the promise of a win-win situation where ecological improvement and techno-economic development coincide (Hajer 1995, Orsato and Clegg 2005).

European citizen/consumers must believe that the environment *can* and *should* be protected through the *management* of the ecosystem. They also must believe that consumers have a major role in this management of the environment through their purchasing power. Additionally, the consumer is encouraged to feel the duty as a citizen to promote the cause of sustainable consumption: “a good consumer is a good citizen” (Hobson 2010, pg.100). Producers (small and large) must believe that opting in to labelling schemes will result in a positive or at least not prohibitively negative impact on their bottom line.

The link between rhetoric and project development and implementation can be clearly traced in the case of the EU’s overarching development strategy and its

individual labelling schemes. Both labelling projects are connected by the Resource Efficiency flagship initiative, which is, in turn, an essential part of the Europe 2020 mandate on the environment (European Commission 2010). The Resource Efficiency Roadmap expresses the macro-rhetoric of the Europe 2020 strategy in terms of the environment, the economy and the development of EU projects, including labelling (Resource Efficiency Roadmap 2011). The document argues that a resource-efficient Europe can only be achieved with “technological improvements, a significant transition in energy, industrial, agricultural and transport systems, and changes in behaviour as producers and consumers” (ibid, pg. 3). It also suggests that the EU should make a considerable effort to better understand “consumer behaviour and provide better information on the environmental footprints of products, including preventing the use of misleading claims, and refining eco-labelling schemes (in 2012)” (ibid). This includes assessing ways to decrease the “environmental impact of food production and consumption patterns” and developing criteria based on sustainability for “key food commodities ... by 2014” (ibid).

Conceptually, the EU labelling schemes straddle political and emotional conceptualizations of environmentally conscious labelling. The European Commission suggests that “[p]roducts bearing [EU environmental labels] must... meet stringent performance criteria, ensuring that consumers *get value for money while also doing the right thing for the environment* [emphasis added]” (European Commission 2006). Note here the stress on the consumer’s experience of consuming EU labelled products. Although the environment is considered, customer satisfaction is underlined.

IS FOOD LABELLING WORTH SAVING?

LABELLING ON THE GROUND: CONSUMERS, PRODUCERS, AND THE EU

For consumers, the negative implications of the EU’s labelling schemes arise from incomplete or misleading information. In short, information does not necessarily equal transparency and can lead to a false sense of security and reform. Some of the harshest criticism of the EU labelling schemes comes from third-party environmental watchdogs, including Foodwatch. According to the organisation, the EU labelling schemes do not “give sufficient guidance to consumers who want to eat organically and protect the climate” (Foodwatch 2008). These include misleading documentation of a product’s origin and incomplete life-cycle reporting (from manufacturing to

disposal). It is important to note here that Foodwatch is not necessarily arguing against the existence of the labelling schemes under EU oversight. Rather, they point to the gaps in information available to consumers as undermining the potential for real environmental reform.

The EU Ecolabel and Organic logo also suffer from the shortcomings of so-called ‘class-based’ efforts. In 2002, Grote hints at the limitations of the organic niche market and its higher retail prices. He writes “the willingness to pay is high in countries which benefit from a relatively higher level of consumer awareness about the environment” (Grote 2002). Indeed, a 2002 report by Björner et al. indicates that the effectiveness of environmentally labelled products does not change between household income levels, but rather by the level of education and marketing information. The result is that environmental labels are most effective with women, university-educated individuals and young consumers (aged 18-25 years) (Grankvist 2002). According to Cliath (2007), this indicates a class-based effort that leaves too many people behind to effect real change. Given that environmentally labelled products are primarily produced for and sold to affluent consumers without consideration of the society as a whole, the projects merely perpetuate free-market solutions for an ‘eco-elite’. “Consumer choices of the eco-elite are only a speed bump on the way to ecological apocalypse,” states Jones, unless our environmentally sustainable economy includes “job-creating, wealth-creating, health-enhancing opportunities for poor people” (cited in Cliath 2007, pg. 414).

The incompleteness of information on a product’s environmental impact and the specific market niche labelling occupies is made all the more interesting when taken in consideration with the findings of a 1999 report on consumption rates of environmentally labelled products. Blend and Ravenswaay found that the “comprehensiveness of environmental claims and the amount of proof were not found to affect purchase probability or the quantity purchased” (1999). Here the limits of consumer activism become glaringly obvious. While European consumers may be aware of the EU labelling schemes as legitimate means for consumer activism, their purchasing decisions are not influenced by the *details* of that legitimacy.

Instead of defetishising food products though the adoption of environmental labels, labelled products may become ‘just’ another positional good (Hirsch 1976) and thus intensify the positional competition (ibid) or competitive consumption (Schor 1998) within consumer society. The individual demand for environmentally

labelled food products, which by nature cannot be shared by all, forces those same individuals to spend an increasing amount of time and/or material resources to attain, or retain, a certain position in the social hierarchy. “More wealth of the kind attainable by all, paradoxically, means an increased scramble for the kind of wealth attainable only by some” (Hirsch 1976, pg. 26).

The discussion of the effectiveness of labelling schemes raises another critical question: does buying environmentally labelled products encourage *less* consumption through buying? Put simply, no. According to Elkington et al., consumers who opt for political consumerism through labelling are able to express their preferences for environmentally conscious products passively. They continue: “By choosing carefully, you can have a positive impact on the environment *without significantly compromising your way of life* [emphasis added]. That’s what being a Green Consumer is all about.” (Elkington et al. 1990, pg. 5). This implies that political consumers are reassured that they *need not* drastically change their lifestyles because the market will inherently amplify their message and automatically create reform. Michaelis echoes this argument stating that the fundamental flaw of consumer-driven labelling schemes is that they ignore consumption scale. He states that the “symbolic attractions of resource-intensive consumption patterns are more powerful than those of sustainable consumption patterns” (Michaelis 2000, pg. 82). Therefore, perpetuating conspicuous consumption. Any attempts to force citizen-consumers to consume less would be against the tenets of EU liberalism, which have developed alongside the historical trajectory of consumption as a social and political project within the EU (Hobson 2010). For European consumers, producers, and policy makers alike, belt-tightening is simply not on the agenda.

The EU labelling projects have significant implications for the balance of small-scale farmers and operationalised major producers. According to Peter Czaga of the Directorate General on the Environment, the European Commission has made considerable efforts to make the certification and licensing process accessible to all producers (Interview with Peter Czaga 2012). However, he admits that the regulatory burdens fall mainly on small-scale producers who may not have the resources available to meet the stringent criteria or pay the licensing fee (nominal though it may be) (ibid). Both the EU Ecolabel and the EU Organic logo have specially tailored resources for small-scale famers involved in environmentally conscious production.

However, there is still a significant advantage for larger producers to shoulder the burden of certification.

During the switch to mandatory EU labelling for organic food products, the EU offered Environmental Compliance Assistance for Small to Medium Enterprises, particularly organic farmers without the resources available to meet the necessary certification requirements (European Union 2012). However, this assistance expired after the July 1st, 2012 deadline for mandatory organic product labelling in the EU. Small to medium enterprises that wish to sell organic products in the EU must now reach the certification requirements set by the European Commission without substantial aid. This raises the concern that major food producers will dominate the future organic food market as small to medium sized producers are priced out of certified organic food production.

The implication of this restricted access to environmentally conscious food markets also reflects imbalance in the Agro-Industrial Complex. Without protections for small to medium sized producers, industrial actors (including manufacturers and increasingly major retailers) are poised to expand their already widespread control of consumer markets. This is especially an issue when price premiums gained by retailers do not reach producers. It follows that certification creates the risk of pushing the extra costs of achieving environmental and social standards up the food chain at the expense of producers while simultaneously eroding their profit margins (Ponte, 2008).

Neither the EU Ecolabel nor the EU Organic logo address the issue of overproduction. That is to say, producers – whether they opt to be certified as environmentally friendly according to EU standards or not – are not encouraged to produce *fewer* products or change their output significantly. Rather, their products are simply channelled into new market niches and the cycle of unchecked growth continues unabated. In terms of environmental management, the EU's labelling schemes certainly have the potential to influence commercial society. However, the potential for impact on the food production chain in terms of intense reform of lifecycle practices appears to be negligible.

As environmental programs, the EU labelling schemes dovetail into the greater strategy for sustainability by addressing economic, social and ecological objectives through the promotion of resource efficiency and environmentally non-damaging production and consumption patterns (Williams 2004). However, the projects –

although similar in design and implementation – have suffered from a severe lack of intra-institutional communication. According to the DG on the Environment, the EU Ecolabel committee frequently coordinates their efforts and information with national-level ecolabels such as the Blue Angel and Nordic Swan *but not* with the DG on Agricultural and Rural Development and the EU Organic logo committee (Interview with Peter Czaga 2012). This seems to be changing as the call for the EU Ecolabel for agriculture products becomes louder. As of 2011, coordination between the two labelling projects has been increased through the Resource Efficiency Roadmap. Representatives from the DG on Agriculture and Rural Development and the DG on the Environment have been involved in the Resource Efficiency Roadmap-mandated Action Plan towards a sustainable bio-based economy by 2020 (2011) and the Eco-Innovation Action Plan (2011).

This coordination (or lack thereof) highlights the two major differences between the complementary EU Ecolabelling scheme and the Organic logo: lifecycle vs. production-oriented assessment and voluntary vs. mandatory certification. On the one hand, the EU Ecolabel's 'cradle-to-grave' or life cycle analysis of a product's environmental impact is significantly more effective in combating environmental degradation than the production-focused EU Organic label. Put simply, lifecycle analysis provides more information on every stage of a product's creation and use while situating it more precisely within its environmental context.

At the same time, the voluntary nature of the EU Ecolabel scheme makes accountability and market-transformation considerably more difficult to achieve than with a mandatory scheme like the EU Organic logo. As voluntary schemes, ecolabelling may unintentionally lower environmental standards by undermining more inflexible and liable food regulation tools. When pressed to explain why the EU Ecolabel lacked strict enforcement, Peter Czaga cited opposition from the agricultural industry and Member States who view the certification process as too restrictive. He noted that the technical limitations of measuring lifecycle environmental impact on agricultural goods also played a role in the slow development of the label's enforcement mechanisms. He stated:

...In order to make the provision of environmental information mandatory, we need to have a good set of data about life cycle analysis and also we need a good set of methodologies for life cycle analysis. So there is a lot of work to be done before we can say that we are very confident about our methodologies, about our

life cycle data so that we can make these things mandatory. ... [Until then] It will not be accepted. (Interview with Peter Czaga 2012)

However, the movement towards mandatory lifecycle product labelling *is* in the works according to Czaga. “It will not be announced this year. But the underlying objective, the long-term objective, is to start working towards such an aim to make it happen” (Interview with Peter Czaga 2012).

Finally, it is important to remember that despite the clout from which EU Ecolabel and Organic logo schemes benefit by being associated with the EU, these schemes are still only two amongst a multitude of national and multinational certification schemes. Despite opportunities for coordination, these certifications compete with one another and can undermine the success and standards of more consequential or comprehensive programs. A growing number of both non-governmental organization watchdog labels and industry labels are less stringent or emphasize only one particular component of improved practices (IFOAM 2012). Confusing terminology, ambiguous labels, similar logos, and broadly stated claims such as “organically produced” and “eco-friendly” often make it difficult to determine which products are based on real changes to social and environmental relationships and which are self-serving self-certifications. The ever-expanding variety of symbols as well as their non-uniform integration into European market places can lead to consumer confusion and loss of trust in the entire process.

SOUND THEORY OR QUICK FIX?: LABELLING AND ECOLOGICAL MODERNISATION

The debate surrounding ecological modernisation as the driving philosophy behind EU policy comes down to a fundamental difference of how the environmental crisis should be handle: through incremental change within the existing system of capitalism or through radical reform of production and consumption relationships. The concept of ecological modernisation arose in response to the debates which, according to Mol and Spaargaren (2000), were dominated by neo-Marxist, de-modernisation, de-industrialisation or counter-productivity theories. The shared belief of these theories is that ecological protection and re-structuring can only be achieved through radical changes in the systems of production and consumption (Mol and Spaargaren 2000, Orsato and Clegg 2005). In practice, it has become evident that the capacity of radical theories and norms to contribute to the re-design of modern capitalist societies along ecologically benign lines has had little impact on

environmental policy setting and management (Orsato and Clegg 2005). Thus, radicalism seems unlikely to lay down the normative basis for public policy because “it demands too great a change in total systems” (ibid, pg. 255). The concept of ecological modernisation seemingly provides an alternative approach due to its incremental character that is simplistic and confident in the efficacy of its science, modes and instruments.

The introduction of the two EU labelling schemes suggests that EU policymakers and the food industry seek to align environmental responsibility with economic considerations in accordance with the principles of ecological modernisation (Cohen 2006). Mol (1999) further argues that the labelling schemes, EU Ecolabel and Organic logo respectively, represent a part of the “normative trajectory for environmental reform in the marketplace”. Seeking eco-efficiency, ‘greening’ agricultural production and the Agro-Industrial Complex as well as engaging economic agents through the involvement of science and technology are key elements to the existence of the labelling schemes. For Williams (2004), labelling schemes represent a manifestation of the theory of ecological modernisation, which results from harmonising social forces of consumer society and ecological sustainability, thus, providing an impetus for sustainable consumption. According to the Agenda 21, recommendations are given to governments in co-operation with industry and other relevant groups to “encourage expansion of environmental labelling and other environmentally related product information programmes designed to assist consumers to make informed choices” (UN Agenda 21 Chapter 4 Paragraph 21).

The basic tenet of ecological modernisation relies on technological innovation and continued industrial development as the best way to address the ecological crises (Mol and Spaargaren 2000). With respect to environmental labelling, it is assumed that labels can help to accelerate diffusion of technological improvements of products (Williams 2004). Their purpose is less to guarantee that an environmental problem will be completely eradicated, but rather to ensure that aggravation caused by current production processes is reduced (Cliath 2007). Environmental labelling, as Williams puts it, represents both “the technological application and the commercial benefits inherent to ecological modernism” (2004, pg. 171). This, indeed, underlines the ‘*win-win*’ or ‘*double dividends*’ scenario postulated by ecological modernisation.

The pragmatic and incremental approach seems to address some types of problems better than others. Both, the Ecolabel and the Organic logo, under the logic

of ecological modernisation, generally deal more successfully with issues of consumption patterns than with consumption levels. However, these are relatively 'low hanging fruits' (Bell 2006) and only concern product substitution within established and closed chains of production.

Within the academic debate on ecological modernisation, several key critics have stepped forward to voice their concerns. These critiques shed invaluable light on the limitations of labelling as a tool of environmental protection. Following the logic of neo-Marxist political, economic production is in fundamental conflict with ecological limits (Schnailberg 1980, O'Connor 1998). In ecological restructuring based on ecological modernisation, crises of capitalism are not actually solved but rather reconfigured into new relations (Li and Hersh 2002). The contradictions remain and create the foundation of new (*and improved!*) crises. Capitalism tries constantly to resolve the crises by reorganising society without actually approaching the root causes (Mahnkopf forthcoming). The EU label projects are emblematic of a passive reconstitution of relationships within the market. Instead of restructuring and reassessing the interplay of society and the environment, the EU labelling projects hide exploitative relationships within the market (Cliath 2006). This includes damaging power imbalances between consumers and producers, large producers and small producers, industry and governance.

Hajer (1995) expands this view, stating that ecological-modernist discourse dilutes the political impulse for environmental reforms by obscuring the degree to which economic expansion, growth of consumption, and capital-intensive technological change undermine the ability to ensure a healthy environment. Here lies perhaps the greatest risk inherent in the EU's undertaking of labelling schemes. By adopting these schemes as critical parts of the larger EU environmental strategy, the EU *undermines its very ability* to address the bio-crisis and deliver on the promises it has made to European citizens on environmental protection.

CONCLUSION: CAN LABELLING BE SAVED FROM ITSELF?

Given the limitations and fundamental long-term flaws inherent in the project of labelling, the question stands: *why save labelling?* Surely, a project that could distract from real and needed intense reform can only perpetuate a negative relationship between society and the environment. However, we firmly believe that labelling can and must be redeemed.

Labelling is a positive step because it marks a decided change in the natures of consumers and producers. Consumers have demonstrated that they are willing to make movements towards reformed living by changing their purchasing behaviour. This opportunity to direct change within the lives of European citizens is not made easily possible through other potential environmental projects (or, for that matter, even social cohesion or economic projects). In this way, the EU can inspire real and fundamental changes through its actions.

Producers are similarly affected. Their participation in labelling programmes implies that they are *listening* to the demands and concerns of European consumers and are willing to make substantial changes to their approach to product creation for both the wellbeing of the market and the environment as a whole. Unlike projects based on punishment, the EU Ecolabel and Organic logo do not separate producer financial health from environmental protection. It also should be noted that producers themselves are also political consumers and the vehicle of labelling allows them to express *their* preferences and concerns. The EU can capitalise on this movement and, as in the case of the shift in the nature of consumers, prompt lasting transformation of producer character.

Despite this cooperation, there still lies an underlying distrust of labelling due to the limitations previously outlined. However, as Williams argues, “any social movement can suffer resistance in the nascent phase” (2004, pg. 19). In order for any EU-led labelling scheme to be effective, institutional changes must be implemented. First, the two labels must be integrated in order to avoid confusion between EU labelled products as well as diffusion of the underlying message. Consumers must be able to recognise and trust a single EU labelling scheme and be certain that the criteria used in the certification process is both strict and accountable. Secondly, the labels must address the two areas of concern from which both labels suffer. Namely, the overarching EU label must be both lifecycle oriented *and* mandatory. It must be noted that there remain risks inherent in the standardisation of agricultural products through certification. These include risks to bio-diversity and continued disadvantages for small-scale agricultural producers who must continue to compete for access to certification as the “price of admission” to EU markets. Production-only oriented certification misses the larger potential and real impact of products within their social and ecological context. It follows that life-cycle analysis, although logistically challenging as the European Commission has pointed out, is the only way to fully

ensure that a product can be contextualised and properly judged to be contributing to sustainable living. Voluntary labelling schemes are inherently flawed because they allow market manipulation and bottom-line concerns to trump the desire for accurate environmental impact reporting. Transparency cannot be optional. Mandatory labelling, although a difficult sell for proponents of the ‘free market’, is the only route for the EU if it is truly committed to promoting democracy through the market.

Additionally, it must be noted that there are other forms of agricultural structuring that can and should be promoted by the EU. These structures exist outside the Agro-Industrial Complex and are able to provide food resources to European citizens that may bypass some of the environmental problems that have already been essentially integrated into the current food chain. These concerns include transport, storage, and processing environmental costs. Community-supported agricultural co-ops and civic agriculture are emblematic of alternative chains of field-to-table food production and consumption³.

And yet, at the EU level, labelling encourages transformation that is much needed in the mainstream food production chain across a wide audience of communities and countries in the long term. With these considerations in mind, it is clear that labelling – although problematic – can be resuscitated from its roots in ecological modernisation.

Environmental reformers have a long and hard road ahead of themselves. Progressive policies must take into account the often difficult and intertwined relationships of the economic, social, and environmental realities facing Europe today. As we have seen, EU environmental projects are not divorced from these same relational interplays. Indeed, they are shaped *for* and *by* their authors and the framework into which they are introduced. Environmentally conscious labelling has created many opportunities for incremental reform in its execution through the two EU labelling schemes. However, as tempting as the fruit of reform-through-labelling may be, there are very real and potentially damaging limitations deep-rooted in the philosophical foundations of the projects.

³ These co-ops and civic agriculture projects have been established in all 27 EU Member States and include the Greek Panhellenic Confederation of Agricultural Co-operative Unions, COOP de France, Irish Co-operative Organisation Society Ltd, and the German Solidarische Landwirtschaft e.V. They are loosely organized through the Euro Coop and Cogeca. For a discussion of these alternative community-based food chains, see Wapner (1995), Hinrichs (2000), Seyfang (2006).

For the time being, the EU must find intermediate alternatives. These future policies must include a commitment to thinking outside the borders of ecological modernisation to provide tangible and workable alternatives that move beyond the current paradigm of environmental management. To ignore the shortcomings of ecological modernisation as a normative philosophy is to sow a crop of projects and policies with long-term damaging consequences. We certainly *can* do better but we need to watch what we eat.

BIBLIOGRAPHY

- Allen, P. and Kovach, M. (2000): The capitalist composition of organic: The potential of markets in fulfilling the promise of organic agriculture, *Agriculture and Human Values*, 17: 221–232.
- Baker, S. (2007): Sustainable development as symbolic commitment: Declaratory politics and the seductive appeal of ecological modernisation in the European Union, *Environmental Politics*, 16(2): 297-317.
- Baudrillard, J. (1998): *The Consumer Society: Myths and Structures*, London: Sage Publications.
- Blend, J. R and Ravenswaay, E. O. van (1999): Consumer Demand for Eco-labelled Apples: Results from Econometric Estimation, Staff Paper 99-17, Department of Agricultural Economics, Michigan State University.
- Buttel, F.H. (2000): Ecological modernization as social theory, *Geoforum*, 31: 57-65.
- Cliath, A. C. (2007): Seeing Shades: Ecological and Socially Just Labelling, *Organization Environment*, 20(4): 413-439.
- Cohen, M. J. (2006): Ecological modernization and its discontents: The American environmental movement's resistance to an innovation-driven future, *Futures*, 38: 528-547.
- Czaga, P. (2012): Semi-conducted interview in preparation of the Master's Thesis. Interviewed by Anna Couturier, Berlin, June 1st, 2012.
- Dobson, A. (2003): *Citizenship and the Environment*, Oxford: Oxford University Press.I;
- Dodd, N., Cordella, M., Wolf, O., Waidløw, J., Stibolt, M., and Erik Hansen (2012): Revision of the European Ecolabel and Green Public Procurement. Preliminary report, Working Document for the 1st AHWG Meeting Criteria for Textile Products [Available at: http://susproc.jrc.ec.europa.eu/textiles/docs/Ecolabel_Textile%20products_IPTS%20preliminary%20report_AHWG1%20final.pdf Accessed: 10.06.2012].
- Eco-Innovation Action Plan (2011): The Eco-innovation Action Plan (Eco-AP) COM(2011) 899 Final [Available at: http://http://ec.europa.eu/environment/etap/inaction/pdfs/1_en_act_part1_v5.pdf Accessed: 10.06.2012].
- Elkington, J., J. Hailes, and J. Makower (1990): *The Green Consumer*, London: Penguin.
- Eurobarometer (2009): Europeans' attitudes towards the issue of sustainable consumption and production - Analytical Report, Flash Eurobarometer 256 – The Gallup Organisation. [Available at: http://ec.europa.eu/public_opinion/flash/fl_256_en.pdf Accessed: 20.07.2012].
- European Commission (2001): EU Strategy for Sustainable Development at the Göteborg European Council, Presidential Conclusions, SN 200/1/01 REV 1 [Available at: http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf Accessed: 10.06.2012].
- European Commission (2004): European Action Plan for Organic Food and Farming, COM (2004) 415 Final [Available at: http://www.europa-nu.nl/id/vi7jgsy594yv/commission_staff_working_document_annex Accessed: 10.05.2012].
- European Commission (2006): *The European Ecolabel*, Promotional Material [Available at: <http://ec.europa.eu/environment/ecolabel/documents/general.pdf> Accessed: 03.06.2012].
- European Commission (2008): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, SEC (2008), COM/2008/0397 [Available at:

lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0397:FIN:EN:HTML Accessed: 16.07.2012].

European Commission (2010): EUROPE 2020 A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 Final [Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF> Accessed: 16.07.2012].

European Commission (2011): EU Ecolabel Work Plan for 2011-2015 [Available at: http://ec.europa.eu/environment/ecolabel/about_ecolabel/pdf/work_plan.pdf Accessed: 09.06.2012].

European Commission (2012): European Sustainable Consumption and Production Policies, Directorate Generale on the Environment [Available at: http://ec.europa.eu/environment/eussd/escp_en.htm Accessed: 13.06.2012].

European Commission (2012b): EU Ecolabel Logo [Available at: <http://ec.europa.eu/environment/ecolabel/images/ecolabel.png> Accessed and Downloaded: 17.07.2012].

European Commission (2012c): EU Organic logo, Directorate on Agriculture and Rural Development. [Available at: http://ec.europa.eu/agriculture/organic/files/eu-policy/logo/logo_jpg.zip Accessed and Downloaded: 17.07.2012].

European Commission Regulation (1999): Council Regulation (EC) No 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations [Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:160:0080:0080:EN:PDF> Accessed: 10.06.2012].

European Commission Regulation (2007): Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91 Final [Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:189:0001:0023:EN:PDF> Accessed: 10.06.2012].

European Union Ecolabelling Board (EUEB) (2010): Rules of Procedure [Available at: http://ec.europa.eu/environment/ecolabel/about_ecolabel/pdf/EUEB_rules_procedure.pdf Accessed: 05.05.2012].

EU Organic logo (2012): Mission Statement, Directorate General on Agriculture and Rural Development [Available at: http://ec.europa.eu/agriculture/organic/eu-policy/logo_en Accessed: 06.06.2012].

Foodwatch (2008): Organic: A Climate Saviour? The foodwatch report on the greenhouse effect of conventional and organic farming in Germany based on the study "The Impact of German Agriculture on the Climate" by the Institute for Ecological Economy Research (IÖW), KLEF Karl Linder Education Foundation [Available at: http://foodwatch.de/foodwatch/content/e6380/e24459/e24474/foodwatch_report_on_the_greenhouse_effect_of_farming_05_2009_ger.pdf Accessed: 10.05.2012].

Fonte, M. (2002): Food Systems, Consumption Models and Risk Perception in Late Modernity, *International Journal of Sociology of Agriculture and Food*, 10(1): 13-21.

Fulponi, L. (2007): The Globalisation of Private Standards and the Agri-food System, In: J.F.M. Swinnen (ed.) *Global Supply Chains Standards and the Poor*, pp. 5-18, London, UK: CAB International.

Global Ecolabelling Network (GEN) (1999): The Ecolabelling Guide "A Guide to Ecolabelling Around the World", October 1999.

- Goodman, D. and Redclift, M. (1991): *Refashioning Nature, Food, Ecology & Culture*, London and New York: Routledge.
- Grankvist, G. (2002): *Determinants of Choice of Eco-Labelled Products*, Dissertation, Department of Psychology, Göteborg University, Sweden.
- Green, K., Harvey, M. and A. McMeekin (2003): Transformations in food consumption and production systems, *Journal of Environmental Policy and Planning*, 5(2): 145-163.
- Grote, U. (2002): *Eco-labelling in Agriculture*, High-level Pan-European Conference on Agriculture and Biodiversity: towards integrating biological and landscape diversity for sustainable agriculture in Europe, Strasbourg, March 4, 2002.
- Hajer, M. A. (1995): *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*, Oxford: Oxford University Press.
- Hinrichs, C. (2000): Embeddedness and local food systems: notes on two types of direct agricultural markets, *Journal of Rural Studies*, 16(3): 295-303.
- Hirsch, F. (1976): *Social Limits to Growth*, Cambridge, MA: Harvard University Press.
- Hobson, K. (2010): Competing Discourses of Sustainable Consumption: Does the 'Rationalisation of Lifestyles' Make Sense?, *Environmental Politics*, 11(2): 95-120.
- Huber, J. (1985): *Die Regenbogengesellschaft, Ökologie und Sozialpolitik*, Frankfurt am Main: Fisher Verlag.
- International Federation of Organic Agriculture Movements (IFOAM) (2008): *Draft Regulation on a Community scheme COM (2008) 401/3*, Brussels, 16 October 2008 [Available at: http://www.ifoam.org/about_ifoam/around_world/eu_group_new/positions/Papers/pdf/Letter_IFOAMEU_COM_ecolabelling_16.10.2008.pdf Accessed: 20.07.2012].
- International Federation of Organic Agriculture Movements (IFOAM) (2012): *IFOAM EU Group letter to the European Commission on Ecolabelling*, Brussels, 27/09/2011 [Available at: http://www.ifoam.org/about_ifoam/around_world/eu_group_new/positions/Papers/pdf/Letter_IFOAMEU_COM_ecolabelling_27.09.2011_Commissioners_Ciolos_and_Potocnik.pdf Accessed: 04.07.2012].
- Jänicke, M. (1985): *Preventive Environmental Policy as Ecological Modernisation and Structural Policy*. Berlin: WZB.
- Jordan, A., Wurzel, R. K.W., Zito, A., and Brückner, L. (2006): *Consumer responsibility-taking and eco-labelling schemes in Europe*, The Centre for Social and Economic Research on the Global Environment, London, UK. [Available at: www.uea.ac.uk/env/cserge/research/fut_governance/Ecolabels.pdf Accessed: 10.06.2012]
- Li, X. and Hersh, J. (2002): Understanding capitalism: Crises and passive revolutions. *Competition & Change* 6(2): 193-212.
- Mahnkopf, B. (Forthcoming): *Wachstumskritik als Kapitalismuskritik*, In Dörre, K., Sauer, D. and Wittke, V. (eds.) *Kapitalismustheorie und Arbeit: Neue Ansätze soziologischer Kritik*, Frankfurt a. Main: Campus Verlag.
- Marx, K. (1974): *Economic and Philosophical Manuscripts*, In L. Coletti (ed.) *Karl Marx: Early Writings*, Harmondsworth: Penguin, First edition 1844.
- Michaelis, L. (2000): *Ethics of Consumption OCEES Working Paper*, Oxford Centre for the Environment, Ethics and Society: Mansfield College, Oxford.

- Mol, A.P.J. (1999): Ecological modernization and the environmental transformation of Europe: Between national variations and common denominators, *J. Environ. Policy Plan*, 1(2):167-181.
- Mol, A.P.J. (2000): Globalization and Environment: Between Apocalypse-Blindness and Ecological Modernisation, In Spaargaren, G., Mol, A.P.J. and Buttel, F.H. (eds.) *Environment and Global Modernity*, pp. 121-145, London: Sage Studies in International Sociology.
- Mol, A.P.J. (2002): Ecological Modernization and the Global Economy, *Global Environmental Politics*, 2(2): 92-115.
- Mol, A.P.J. and Sonnenfeld, D. (eds.) (2000): *Ecological Modernisation around the World: Perspectives and Critical Debates*. London: Frank Cass.
- Mol A.P.J. and Spaargaren, G. (2000): Ecological modernisation theory in debate: A review, *Environmental Politics*, 9(19): 17-49.
- Murphy, J. (2001): From Production to Consumption: Environmental Policy in the European Union, In Maurie J. Cohen and Joseph Murphy (eds.) *Exploring Sustainable Consumption: Environmental Policy and the Social Sciences*, pp. 39-60, Oxford: Elsevier Science Ltd.
- Oakdene Hollins Research and Consulting (2010): EU Ecolabel for food and feed products – feasibility study (ENV.C.1/ETU/2010/0025) Final [Available at: http://ec.europa.eu/environment/ecolabel/documents/Ecolabel_for_food_final_report.pdf Accessed: 06.06.2012].
- Orsato R.J. and Clegg, S.R. (2005): Radical Reformism: Towards Critical Ecological Modernization, *Sustainable Development*, 13: 253-267.
- Ponte, S. (2008): Developing a “Vertical” Dimension to Chronic Poverty Research: Some Lessons from Global Value Chain Analysis, *Chronic Poverty Research Centre Working Paper no. 111*.
- Resource Efficiency Roadmap (2011): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions, Roadmap to a Resource Efficient Europe, Brussels, 20.9.2011, COM(2011) 571 Final [Available at: http://ec.europa.eu/environment/resource_efficiency/pdf/com2011_571.pdf Accessed: 14.06.2012].
- Schnailberg, A. (1980): *The Environment: From Surplus to Scarcity*, Oxford/New York: Oxford University Press.
- Schor, J. (1998): *The Overspent Consumer*, New York: Basic Books.
- Seyfang, G. (2006): Time Banks and the Social Economy: Exploring the UK Policy Context, CSERGE Working Paper EDM 2006-01.
- Seyfang, G. (2007): Shopping for Sustainability: Can Sustainable Consumption Promote Ecological Citizenship?, *Environmental Politics*, 14(2): 290-306.
- Smith, A. (1776): *An Inquiry into the Nature and Causes of the Wealth of Nations*, New York, NY: The Modern Library.
- Spaargaren, G. and Oosterveer, P. (2010): Citizen-Consumers as Agents of Change in Globalizing Modernity: The Case of Sustainable Consumption, *Sustainability*, 2: 1887-1908.
- Spaargaren, G. and Vliet, B. van (2007): Lifestyles, consumption and the environment: The ecological modernization of domestic consumption, *Environmental Politics*, 9(1): 50-76.
- United Nations Economic and Social Council (1999): *Comprehensive Review of Changing Consumption and Production Patterns*, Report of the Secretary-General, New York.

Veblen, T. (1953): *The Theory of the Leisure Class*, New York: Macmillan, First edition, 1899.

Wapner, P. (1995): *Politics Beyond the State: Environmental Activism and World Civic Politics*, *World Politics*, 47(3): 311-340.

Williams, W. (2004): *Eco-labelling: A socio-economic analysis*, Department of Sociology and Business Sociology, Department of Environmental Economics and Management, Vienna University of Economics and Business Administration.

Wolff, P. and Schönherr, N. (2010): *The Impact Evaluation of Sustainable Consumption Policy Instruments*, *J Consum Policy*, 34: 43-66.

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