Introduction

The daily loss and waste of edible food represent one of the most evident failures of the European food system – evidence that the European Union and its citizens belong to what has been called the throwaway society.\(^1\) Ninety million tons of food is thrown away in the European Union (EU) each year, almost a third of it by consumers.\(^2\) At the same time, EUROSTAT reported that 8.1% of the EU-28 population – the equivalent of 43 million – did not have continuous access to quality meals and were considered to live in "severe material deprivation" in 2015. In addition, 23.7% of the EU population was at risk of poverty and social exclusion.\(^3\) The topic currently represents one of the top priority for the EU and Member States engaged in transitioning toward more sustainable economies, but two recent studies by the European Court of Auditors\(^4\) and the Food Use for Social Innovation by Optimising Waste Prevention Strategies (FUSIONS)\(^5\) recognize that very little improvement has been obtained throughout the region. The discrepancy between ambitions and achievements is at the core of this contribution, which looks at food loss and waste through the lenses of co-regulation and the need for more effective mechanisms of governance.

Food loss and waste is, first and foremost, a matter of unequal allocation of power, rights and resources. It is an intricated issue, geographically and socially dispersed, often transnational and where the social, environmental and the economic interact and that is

\(^1\) Frank Trentmann, *Empire of Things: How We Became a World of Consumers, from the Fifteenth Century to the Twenty-First* (Allen Lane 2016) 623.

\(^2\) European Commission, ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions, Roadmap to a Resource Efficient Europe’ COM (2011) 0571 final, 17. This amounts to a quantity of 180kg per citizen.

\(^3\) The share of those severely materially deprived varied significantly among EU Member States (2.6 % in the Netherlands, 2.2 % in Finland, 2.0 % in Luxembourg, and only 0.7 % of the population was severely deprived in Sweden, but the deprivation rate was of 22.2 % in Greece, 22.7 % in Romania and peaked at 34.2 % in Bulgaria). See ‘People at Risk of Poverty or Social Exclusion’ *(Eurostat, December 2016)* <http://ec.europa.eu/eurostat/statistics-explained/index.php/People_at_risk_of_poverty_or_social_exclusion> accessed 14 March 2018.

\(^4\) European Court of Auditors, ‘Combating Food Waste: An Opportunity for the EU to Improve the Resource-Efficiency of the Food Supply Chain’ (European Court of Auditors 2016) 34.

defined by multiple actors operating at different scales. It is also culturally determined, as demonstrated by the difference between the current Western society that throws away a third of the food that is purchased and the pre-World War II society where only 3% of the food was thrown away by households. It is, however, much more too. When food is thrown away, it is important to consider the dissipation and inefficient allocation of labour, energy, land, water, capital and all the other inputs that were needed to produce and make food available. Finally, rotten food releases methane and can frustrate any attempt to improve the sustainability of the food chain from farm to fork.

If the current data on food loss and waste illustrate multiple failures of the EU food system, they also prove that the action against food loss and waste is thus a matter of governance and regulation: but what governance and what regulation? Without a clear culprit and a widely dispersed and diverse food system, a hierarchical approach would thus be faced with severe obstacles and inefficiencies. The reason to introduce flexible and horizontal forms of governance is thus clear. Yet, not all forms of non-hierarchical governance work in the same way and are equally effective. We thus believe that it is important to critically assess the way in which the EU action against food loss and waste is substantively and procedurally structured to learn about the limits and opportunities behind decision-making and enforcement patterns. Food loss and waste become a useful laboratory to discover the functioning and mis-functioning of EU new regulatory approaches in the context of complex challenges and global targets.

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7 Trentmann (n 1) 649.


9 We recognize the existence of a broad set of literature on new-governance and specific areas of EU intervention, e.g. labour law, pension regulation and protection of the environment. We believe that the complexity of food loss and waste (which is not only about the environment or not only about social issues) offers an extra element of interest in this area of academic and political discussion. In the area of labour law, see e.g. Diamong Ashiagbor, the European Employment Strategy: Labour Market Regulation and New
This article takes as its point of departure the multiple urgencies triggered by the increase in food waste and recognizes that the reduction of food loss and waste represents one of the growing priorities for the EU, especially given the Sustainable Development Goals (SDGs) and the Agenda 2030. Through an analysis of the EU regulatory framework, the role of multi-stakeholderism and the concrete example of two national legislations on food loss and waste, we question whether the current mechanism of governance is structured in a way that fosters intra-EU and EU-Member States cooperation, regulatory dialogue and the implementation of effective and non-contradictory solutions that make the realization of the Agenda 2030 possible. Are the EU and its Member States co-constructing a holistic and systemic approach to food loss and waste that reflects the existence of a common goal and is aware of the multiple ways in which law and regulation may obstacle its achievement or, on the contrary, are they reproducing a fragmented and sectorial approach to the problem that favours quick-fix interventions rather than its systemic redressal?

To provide the context of our analysis and answer these questions, we have decided to divide this article in four sections. We begin with a brief introduction of the problem of food loss and waste in the framework of transnational food chains: as we discuss, different geographies have different characteristics, the peculiarity of which cannot be overlooked (Section I). Then, section II moves from the global to the regional and presents the state of food loss and waste in Europe as a pressing issue that cuts across borders and levels of governance, impacting the economy, the environment and the life of citizens. Section III sketches the main aspects of the European framework around food loss and waste and discusses how substantive (III.a) and procedural (III.b) choices may limit its effectiveness and overall value. Finally, section IV offers a concrete example of the possible struggle


In particular, we look at SDG 12.3, according to which “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”. ‘Sustainable Consumption and Production’ (<http://www.un.org/sustainabledevelopment/>)
between the model of governance and national interventions by discussing the recent legislative experiences of France and Italy through the lenses of the 2017 EU Guidelines on Food Donation. It emerges that – despite the claims of institutional dialogue, co-regulation and flexible experimentalist cooperation – the two national experiences are rather autonomous trajectories and potential reflectors of vertical and horizontal regulatory and political tensions. In our conclusions, we reflect on food waste through the lenses of new forms of governance, policy coherence and the SGDs and highlight the limits and weaknesses of a framework that is apparently built around the principles of horizontality and coordination but is still highly fragmented and incapable of finding an efficient way to achieve common goals through decentralization.

I – Food Loss and Waste in the Global Food Chains: Multi-Territorial and Multi-Layered Regulatory Challenges

That the global food system results in 600 million adults being medically obese\(^{12}\) and around the same time in 800 million people being undernourished,\(^{13}\) reveals, \textit{per se}, the flaws and paradoxes of how food is globally allocated. That starvation, hunger and malnutrition happen at the same time of food loss and waste is even more incoherent. More food is produced every year than is needed by the world population but almost a third of it is globally wasted.\(^{14}\) Evidence is thus clear: “food insecurity is often more a question of access […] than a supply problem”\(^{15}\) and if we think about hunger and the lack of adequate access to quality food we have consider that “starvation is the characteristic of some people not having enough food to eat. It is not the characteristic of there being not enough food.”\(^{16}\)

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14 Nicola Lucifero, ‘Food Loss and Waste in the EU Law between Sustainability of Well-Being and the Implications on Food System and on Environment’ (2016) 8 Agriculture and Agricultural Science Procedia 282, 283.
The construction of a food chain that throws food away rather than distributing it is not the only paradox of the contemporary system. Its externalities go beyond the loss of nutrition and calories that could improve people’s lives. For example, several studies point at the environmental implications of food waste, given that the production of methane resulting from food rotting in landfill is estimated to represent 22% of the global greenhouse gases emission. In addition, the loss and waste of food also means the dissipation of the water, energy, capital, labour, land and other inputs that were used to produce it and (in some cases) transport it throughout the world. According to the FAO:

“Without accounting for GHG emissions from land use change, the carbon footprint of food produced and not eaten is estimated to 3.3 Gtonnes of CO2 equivalent: as such, food wastage ranks as the third top emitter after USA and China. Globally, the blue water footprint (i.e. the consumption of surface and groundwater resources) of food wastage is about 250 km3, which is equivalent to the annual water discharge of the Volga river, or three times the volume of Lake Geneva. Finally, produced but uneaten food vainly occupies almost 1.4 billion hectares of land; this represents close to 30 percent of the world’s agricultural land area. While it is difficult to estimate impacts on biodiversity at a global level, food wastage unduly compounds the negative externalities that monocropping and agriculture expansion into wild areas create on biodiversity loss, including mammals, birds, fish and amphibians.”

In the sole case of the United States – a food system that is comparable to that of Europe – Gunders estimates that 80% of the freshwater is used in getting the food ‘from farm to fork’ and that 40% of the food the country produces is wasted. Almost 32% of the water used

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18 Gustavsson, Cederberg and Sonesson, ibid, 1.
in the US food chain ends up being wasted, without considering the ‘virtual water’ that is used to produce food outside the USA that is then imported and not consumed.\textsuperscript{21}

Causes are not univocal and vary depending on whether we are talking about low-income or high-income countries.\textsuperscript{22} If we look at low-income countries, the fact that food is not consumed is mainly the result of a lack of organisation or infrastructure at the production level.\textsuperscript{23} It is thus a matter of loss rather than waste. In high-income nations, on the contrary, the high level of non-consumption is linked to production and financial choices: production requirements, marketing techniques, consumers' behaviours and socio-economic factors such as low wages and cultural lifestyles are often responsible for edible food being thrown away.\textsuperscript{24} Therefore, in the Global North - and in the EU – the problem is waste. In both cases, if we talk about exotic products and transnational food chains, we may also consider the role that overproduction, long distances and strict qualitative standards play in increasing the amount of food that is produced and not consumed by humans.\textsuperscript{25}

In the context of an increasingly internationalised of food chains, the multiple causes and disperse impact of food loss and waste trigger regulatory challenges that cut across borders and territories. Firstly, the food that is wasted locally may have been produced far away, thus dissipating resources that belong to other geographies. Similarly, the environmental and social consequences of throwing food away go beyond the location where bins are filled. Furthermore, despite food waste being mainly a matter of mis-use and mis-allocation

\textsuperscript{21} The fact that food lost or waste in a country may be linked to the depletion of natural resources located elsewhere in the world is one of the effects of the transnational nature of food chains. However, as discussed in the conclusions of this paper, national solutions based on the limited territorial framework of the state appear incapable of redressing it and its inequality. Forms of international cooperation and transnational agreements would be needed. The notion of ‘virtual water’ was first developed by Tony Allan and then elaborated by Arjen Y. Hoekstra. A similar argument is advanced by Olivier De Schutter with regards to the so called ‘carbon leakage’, i.e. the fact that goods produced in the Global North are the outcome of greenhouse gases emissions released in the Global South and that therefore are not accounted for when it comes to assessing the States' adherence to anti-climate change commitments. See Arjen Y. Hoekstra (2015) The water footprint: the relation between human consumption and water use, in M. Antonelli and F. Greco (eds) \textit{The Water We Eat}, Springer Water, 37; Olivier de Schutter, \textit{Trade in the Service of Sustainable Development: Linking Trade to Labour Rights and Environmental Standards} (Hart Publishing 2015).

\textsuperscript{22} Lucifero (n 14) 283.

\textsuperscript{23} ibid 284.

\textsuperscript{24} ibid 285.

\textsuperscript{25} ibid 284–285.
of resources that have been extracted to produce food (water, labour, land, clean air, fertility, etc.), it is also an issue of inter-generational justice, international conflicts and long-term ecological and social sustainability.

In response to the relevance of the problem and the intertwined constraints, a wide array of solutions has been suggested, ranging from centralised regulatory interventions to fully privatised solutions. Bottom-up entrepreneurial solutions have gained strong traction among policy makers and boards of directors. Promoters of private solutions to food waste claim that business innovations can create new markets for food that would otherwise be thrown away and still extract profit from the economic value and the resources that were used to produce it. Other corporations are moved by social and environmental concerns, often as part of their social responsibility campaigns. Finally, a small group of projects is animated by the desire of creating an alternative and just food system by exposing the unacceptability of a market that starves people.

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26 On the supplier side of the spectrum, European retailers are particularly active in addressing and leveraging food waste as a green marketing strategy. For example, the supermarket chain Tesco has recently launched a line of frozen fruits—such as pomegranate, beetroot, watermelon and coconut—with the argument that it not only helps customers with fruits which are difficult to prepare, but it also helps reduce household waste as people can defrost only the quantity they need. This and similar interventions are led by what global chain scholars would call the 'lead firms' in their food chains and are characterised by the aim to combining market efficiency and ethics. However, they seldom lead to a change in contracting practices, aesthetic standards, forms or processes of production. Moreover, the cost of the disposed food is already included in the final consumer price of those products that are sold, while the burden of reaching out to those in need (along with the cost of the socio-economic externalities of cheap food) is completely left on the shoulders of the charitable organisations. For these reasons, a recent analysis conducted in the framework of the Food Collaboration Research has revealed that they are often ineffective. See Michael Barker, ‘New Tesco Frozen Line Tackles Food Waste’ (*Fresh Produce Journal*, 28 February 2017) <http://www.fruitnet.com/fpj/article/171493/new-tesco-frozen-produce-line-tackles-food-waste> accessed 14 March 2018.

27 Among the pioneers of the first group of interventions there is Adam Smith, who founded The Real Junk Food Project (TRJFP) in the United Kingdom with the intention to utilise food that otherwise would have been wasted. See ‘The Real Junk Food Project – Let’s Really Feed the World’ (The Real Junk Food Project) <https://therealjunkfoodproject.org/> accessed 14 March 2018; also discussed in Julie Mansuy, ‘Food Waste: The Actions of Public and Private Actors Globally’ (Social Science Research Network 2016) SSRN Scholarly Paper ID 2903253 <https://papers.ssrn.com/abstract=2903253> accessed 14 March 2018; see also Frances Perraudin, ‘Food Waste Charity May Be Prosecuted over Out-of-Date Produce’ the Guardian (6 June 2017) <http://www.theguardian.com/environment/2017/jun/06/food-waste-charity-may-be-prosecuted-over-out-of-date-produce> accessed 14 March 2018: Interestingly, the UK branch of the Real Junk Food Project was recently informed by the West Yorkshire Trading Standards Services (WYTSS) that its operations may not be in compliance with the Police and Criminal Evidence Act 1984, as well as Food Safety and Hygiene Regulations 2013 and therefore may be forced to close and be fined. As discussed below, States’ regulation and the imposition of strict parameters in terms of hygiene and expiration date may significantly limit the avoidance of loss and its redistribution.
After a first period characterized by market-based and bottom-up initiatives, in the aftermath of the Paris agreement on Climate Change and the issuance of the Sustainable Development Goals there has been an increase in interest by public authorities and regulators. At the European level, both the EU institutions and national authorities have decided to take food loss and waste seriously. As we discuss in this paper, the number of public initiatives, recommendations and political debate has multiplied.\textsuperscript{28} However, most of the public measures are new and uncertain, not fully capable of dealing with the complexity of coordinating and regulating multiple actors operating at different levels in several jurisdictions. The promotion and implementation of effective interventions thus requires an understanding of the systemic and interconnected nature of the problem and coordination that cuts across the whole food system, levels of governance and territorial boundaries.

The European Parliament realised it in a resolution dated 16 May 2017, where it stated that the political and regulatory desire of tackling food waste is confronted with the complexity of food chains, the partiality of the measure, the multiplicity of negative externalities and the fact that successful regulatory intervention in one legal order may not reach the source of the problem.\textsuperscript{29} Short-term interventions and quick fixes, the Parliament concluded, may cause unexpected consequences in terms of production, distribution, and consumption that should not be overlooked by the regulator.\textsuperscript{30} In line with the Parliament, we believe that an efficient engagement with loss and waste requires a multi-territorial and a multi-layered approach that can be best achieved by a coordinated interaction between the EU and the Member States rather than by the classic ‘Community Method’.\textsuperscript{31} Such approach must be based on precise targets, democratic and transparent regulatory dialogue, and an effective system of annual multi-layered monitoring, annual reporting and

\textsuperscript{28} Lucifero (n 14) 283.
\textsuperscript{30} Ibid.
accountability. Otherwise, contradictions and conflicts may spark and affect the validity of each solution.

In the next section, we reconstruct the recent history of the EU interventions against food loss and waste and map the current regulatory framework. The intention is to inform the reader about the way in which the loss and waste of food – originally considered as another form of waste under the umbrella of the Waste Directive – are still struggling with obtaining separate space of recognition and ad-hoc regulatory interventions that understand the uniqueness and complexity of food and food systems. Whether the existing approach is conceptualized and structured in a way that is effective and capable of coordinating efforts and mitigate tensions is then discussed in Sections III and tested in Section IV with the use of concrete examples.

II – The War on Waste in the EU: Mapping the Regulatory Framework

With geographical and contextual differences, there is little doubt that Europe and Europeans are embedded in a throwaway society.\(^{32}\) Around 90 million tonnes of food are wasted in the EU each year: this equates to 180kg of wasted food per person,\(^{33}\) 170 tonnes of CO\(_2\) emissions, 26 million tonnes of resources and represents an associated cost of around €143 billion in terms of non-utilised resources and environmental impact.\(^{34}\) At the same time, in 2014 there were 55 million people, or 9.6% of the EU-28 population, who were unable to afford a quality meal every second day. In 2015, 118.8 million people, or 23.7% of the EU-28 population, were at risk of poverty and social exclusion.\(^{35}\)

Despite the seriousness of the data,\(^{36}\) specific policies and an ad hoc regulatory framework have been discussed at the EU level only in the last few years.\(^{37}\) For long time, the loss and waste of edible material were absent from the political and legislative horizon of the

\(^{32}\) Trentmann (n 1) 623.
\(^{33}\) European Commission, (n 2) 17.
\(^{34}\) Stenmarck and others (n 5).
\(^{35}\) Eurostat (n 3).
\(^{36}\) European Court of Auditors (n 4) 52.
\(^{37}\) ibid 9.
European Union. Food loss and waste were a matter for health and safety regulation and fell under the general notion of waste. With regards to the former, the discipline is still central to the interaction between the EU, Member States and food operators (See Section IV). With regards to the latter, neither the 1999 Landfill Directive nor the 2008 EU Waste Framework Directive paid specific attention to the uniqueness and peculiarity of food. The former banned landfill of untreated waste and set targets of biodegradable municipal waste to be enforced by individual States under the control of the European Commission. The latter introduced the idea of the waste hierarchy that represents one of the pillars of the European waste regime\textsuperscript{38} and set binding and ambitious targets to be achieved in 2020, but no specific reference was made to food waste.

The impression is that the food and financial crises that peaked in 2008-2010 and the wave of European austerity completely changed the scenario. With the surge in price and the increase in food insecurity, the stability and resilience of the global food systems were seriously questioned both by citizens and policy makers. Discussions that were taking place at the local level eventually reached the European and national legislators and led to question – among other aspects - the incongruency of the coexistence of waste and food poverty. It is in that specific moment of history that a series of discussions arose at the EU level, revealing a growing interest towards the reduction of waste and losses and the fight against hunger.

The first enemy to be identified were ‘wonky products’. In 2007 the Commission decided to get rid of aesthetic standards for twenty-six products\textsuperscript{39} and in 2008 the Commissioner for Agriculture and Rural Development supported an extension of the measure claiming that “[i]t makes no sense to throw perfectly good products away, just because they are the

\textsuperscript{38} The Directive 2008/98/EC identified three different targets: 75\% in 2006, 50\% in 2009 and 35\% in 2016. However, the reduction of biodegradable waste (i.e. mainly food) going to landfill is progressing at varying speeds. The slow pace of compliance is mainly linked to the significant increase in the generation of municipal waste. For this reason, the European Commission made a legislative proposal introducing new waste-management targets. In particular, it should be of 10\% of biodegradable waste in 2030.

‘wrong’ size and shape.\footnote{ibid.} Then, it was the time of circular economy and resource efficiency. The 2011 Roadmap to a Resource Efficient Europe Communication of the European Commission recognised the environmental and social impact of the food system and introduced the milestone of “20% reduction in the food chain's resource inputs”\footnote{European Commission, (n 2) 17. Section 5.1 of the Communication states that “The Commission will: Further assess how best to limit waste throughout the food supply chain, and consider ways to lower the environmental impact of food production and consumption patterns (Communication on sustainable food, by 2013); Develop a methodology for sustainability criteria for key food commodities (by 2014) [...]. Member States are invited to: Address food wastage in their National Waste Prevention Programs (2013).”} and the European Commission ‘Living Well, Within the Limits of Our Planet’ action programme recognised the strong links between the construction of a resource-efficient and carbon neutral economy, the reduction of food waste and the use of biomass in a sustainable way.\footnote{However, the Decision is also clear in the importance of turning waste into a resource – a point that we discuss below. See, European Commission and Environment Directorate-General, Living Well, Within the Limits of Our Planet: 7th EAP - The New General Union Environment Action Programme to 2020. (EUR-OP 2014).}

Progressively, the loss and waste of food became a self-standing political priority that involved multiple European institutions and had to do with reducing the occupation of land, establishing a circular economy and tackling food security.\footnote{European Court of Auditors (n 4) 10.} In its 2012 resolution, the EU Parliament called for further engagement at all levels of the EU and other EU bodies intervened in the arena.\footnote{European Parliament, ‘Resolution of 19 January 2012 on how to avoid food wastage: strategies for a more efficient food chain in the EU (2011/2175(INI))’ (2012/2175(INI)).} In support, the European Economic and Social Committee issued an opinion in March 2013 on ‘Civil society's contribution to a strategy for prevention and reduction of food losses and food waste,’\footnote{Mr Somville, ‘Opinion of the European Economic and Social Committee on ‘Civil Society’s Contribution to a Strategy for Prevention and Reduction of Food Losses and Food Waste” (2013) Official Journal of the European Union OJ C161/46, 46.} the European Economic and Social Committee produced Comparative Study on EU Member States’ legislation and practices on food donation\footnote{Clementine O’Connor, Manuela Gheoldus and Olivier Jan, ‘Comparative Study on EU Member States’ Legislation and Practices on Food Donation’ (European Economic and Social Committee 2014) <https://www.eesc.europa.eu/resources/docs/comparative-study-on-eu-member-states-legislation-and-practices-on-food-donation_finalreport_010714.pdf> accessed 15 March 2018.} and the Commission released a communication entitled ‘Towards a circular economy: A zero waste programme for Europe’ with the proposal for a food waste
hierarchy.\textsuperscript{47} In 2015 alone, there were the Written Declaration 0061/2015 of 14 October on the donation of unsold consumable food to charities,\textsuperscript{48} the EU Parliament resolution on resource efficiency\textsuperscript{49} and the discussion on the Bologna Charter Against Food Waste.\textsuperscript{50} The Commission eventually published the 2017 EU Guidelines on Food Donations,\textsuperscript{51} and the European Parliament adopted a Resolution on ‘Reducing Food Waste and Improving Food Safety’.\textsuperscript{52}

On the one hand, the multiplication of initiatives and the various interventions can be read as a positive sign of political interest and urgency. On the other hand, they may intensify the risk of incongruencies, incompatibilities and asymmetries. Therefore, it is important not to be satisfied with the quantity of interventions but rather engage with the conceptual construction of the framework and its implementation, so to assess if the notions of policy integration and coherence are taken into consideration and fostered. To provide some preliminary findings, the next two subsections unpack the normative and procedural elements of the EU framework and critically assess the choices that have been made.

III. Common Objectives without a Coordinated Strategy: Substantive and Procedural Limits of the EU Fight Against Food Loss and Waste

The previous section has offered elements that prove that fight against food loss and waste in the EU has received increasing political attention and has been at the centre of multiple regulatory interventions. In the complex combination of actors, instruments and substance


\textsuperscript{52} European Parliament (n 29).
that characterizes the current system of governance, the Commission plays a central role in the definition of the substantive and procedural steps taken at the European level. More precisely, the area falls within the competence of DG SANTE, which received the task to:

a) “elaborate a common EU methodology to measure food waste consistently in cooperation with Member States and stakeholders;

b) Create a new platform (EU Platform on Food Losses and Food Waste) involving both Member States and actors in the food chain in order to help define measures needed to achieve the food waste SDG, facilitate inter-sector co-operation, and share best practice and results achieved;

c) Take measures to clarify EU legislation related to waste, food and feed and facilitate food donation and the use of former foodstuffs and by-products from the food chain for feed production, without compromising food and feed safety;

d) Examine ways to improve the use of date marking by actors in the food chain and its understanding by consumers, in particular "best before" labelling.”

The choice for an Open Method of Coordination is evident: guidelines, indicators, common methodology, multi-stakeholderism and the adaptation of existing EU law to improve the effectiveness of the regional actions are pieces of the puzzle that is co-constructed by the EU and the Member States and that should trigger learning processes, coordination and convergence around common interests. In the presence of political will and a governance framework, the conclusions of the 2016 Special Report of the European Court of Auditors entitled ‘Combating Food Waste: an opportunity for the EU to improve the resource-efficiency of the food supply chain’ may be surprising. They reveal that the European Commission had failed to live up to its commitments and to achieve the proposed goals.

Similarly, the 2016 study by the Food Use for Social Innovation by Optimising Waste

53 For an overall typology of the different modes of EU regulation, we refer to Christoph Knill and Andrea Lenschow, ‘Modes of Regulation in the Governance of the European Union: Towards a Comprehensive Evaluation’ (2003) 7 European Integration online Papers (EIoP).
56 European Court of Auditors (n 4) 19.
Prevention Strategies (FUSIONS) on the European food waste levels offered the picture of a continent were food waste is not decreasing.\textsuperscript{57}

Surely, it is hard to identify one responsible for the waste of around thirty percent of the edible food in Europe. Culture, habits and profit-maximizing behaviours certainly play a central role. However, the premises and implementation of the governance mechanism cannot be overlooked. At a time where the system is under construction and crucial decisions are made, we look at the substantive and procedural choices that lay the foundations of the current EU governing system to identify areas that require attention and suggest ways in which open coordination and flexible governance can achieve systemic transformations.

III.a Substantive Limits of the EU Action Against Food Loss and Waste

To properly locate the EU action against food loss and waste it is important to understand the underlying paradigm that infuses the overall framework. A useful tool in this process is represented by the Parliament resolution of 16 May 2017 on ‘Initiative on resource efficiency: reducing food waste, improving food safety’.\textsuperscript{58} In the document, the Parliament makes it clear that food waste enters into the EU framework through the perspective of market efficiency. For the Parliament, “food is a precious commodity”, “the prevention and reduction of food waste provides economic benefits” and “less food waste would mean more efficient land use, better water resource management, and positive consequences for the whole agricultural sector worldwide, and would boost the fight against undernourishment in the developing world”.\textsuperscript{59}

Although an efficiency approach is not problematic \textit{per se}, such political and legal choice has two main consequences: a) it suggests that it is possible to extract value from surplus food (before it becomes waste or loss) and therefore actions should concentrate on redistributing excesses rather than avoiding their generation; b) the efficiency-based

\textsuperscript{57} Stenmarck and others (n 5).
\textsuperscript{58} European Parliament, ‘Resolution of 16 May 2017 on initiative on resource efficiency: reducing food waste, improving food safety (2016/2223(INI))’ (n 26).
\textsuperscript{59} Ibid.
approach resonates better with the role of the state as provider of incentives or as facilitator of market-based allocation of resources, reducing the role to be played by mandatory interventions and the possibility to force the internalization of environmental externalities. On this last point, Article 8 of the Waste Directive offers the possibility for Member States to take legislative or non-legislative measures to ensure an ‘extended producer responsibility’ (EPR), i.e. to adopt “an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle”.60 This means that the negative impacts in terms of environment, logistics, etc., are not distributed by the market on the basis of its internal logic but allocated to the person or entity responsible for placing the unused good into the market.61 Three EU Directives implement the principle,62 but no EU document or statement related to food waste endorses it. This, we believe, provides a further evidence of the decentralisation and flexibility of responses that informs the conceptualization of food waste and the definition of the regulatory framework.

More significant problems arise when the horizontal dialogue and learning are confronted with the lack of a common definition and common measuring mechanisms, a problem that was spotted both by the European Commission and is addressed in the latest draft of the EU Waste Directive.63 The lack of a common vocabulary and of common methods for

63 The first two are identified as priorities in the last draft of the EU Waste Directive. According to its content, the Commission “may adopt implementing acts to establish indicators to measure the overall progress in the implementation of waste prevention measures.” Despite the provision, it is our opinion that definitions would be not enough without clear and binding targets. In their absence, the Commission would
assessing the problem illustrate the underlying difference in approaches among Member States and reinforces the fact that the notion of “[w]aste is relative, a matter of culture and shifting meanings.” However, it also highlights the complexity of adopting new forms of governance to transnational and interconnected problems that are linked to common goals and international commitments like those of the Agenda 2030. In this context, an effective method of coordination requires a clear idea of what is food loss and waste and how to account for it. Only then, with quantitative and qualitative indicators and benchmarks, it would be possible to compare solutions and actions that are delocalised, tailor-made and bottom-up, learn from them and imagine possible transnational connections.

The EU Action against food waste and the recent documents released by the European Commission suggest that the definition and the measuring methods will be co-constructed by all parties so to be recognised and fully embraced at the European level. Although this is in line with the need to take into account the diversity of needs and situations, it is also important to be pragmatic and conscious that blurred and vague definitions may be completely ineffective and that a unique vocabulary and clear comparability are at the basis of institutional dialogue, allocation of financial and organisational responsibility and the identification of the most effective forms of intervention. An example is the definition of waste hierarchy contained in Article 4 of the Waste Directive, which is incapable of appreciating the unique nature of food. According to the Directive: “the following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy: (a) prevention; (b) preparing for re-use; (c) recycling; (d) other recovery, e.g. energy recovery; and (e) disposal.” However, the pyramid is highly generic and does not provide specific indications with regards to the way in which food had to be considered differently from other forms of waste, including the prioritisation of human use over animal feed and the possible clash with the reprocessing

not be in the condition to operate an efficient comparative analysis and to provide effective and valuable indicators. Ibid 18

64 Trentmann (n 1) 627.

65 European Commission (n 54); Tim Gumbel, Delegation for the Commission to establish a common methodology to measure food waste – legal provisions and planning of word, Expert Group on Food Loss and Food Waste, European Commission, 16 March 2018.

66 Ibid.

edible food into non-food products. Food loss and waste is a complex and dispersed phenomenon that affects any section of the food chain and is the product of a multiplicity of factors (including regulation and socio-economic conditions). Moreover, food is different from any other form of waste because of the unique connections with humans, non-humans and the planet. Any definition should thus take into consideration these aspects and avoid vagueness that would compound ineffectiveness and inconsistence.

In any case, the adoption of uniform and effective vocabulary (both in terms of definition and measurement) may not be enough in the absence of specific targets. Currently, any reduction in food loss and waste (however accounted for) falls within the broader goals of the Waste Directive. Beside the general commitment of SDG 12.3, the EU, Member States and local authorities do not have, therefore, specific goals to follow nor milestone to achieve with regards to food waste. The introduction of targets was at the centre of intense debate in the EU Platform for Food Loss and Waste and has been recently discussed in joint meetings of the Export Group on Food Losses and Food Waste and the Technical Advisory Committee on Waste. As we discuss below, the current proposal that by 31 December 2023 the Commission will “consider the feasibility of setting up a Union-wide food waste reduction target to be met by 2030” misses the centrality of binding targets in the context of common and interconnected goals, but also the urgency of the matter and the risk that the situation would deteriorate significantly before 2023. The existence of a time gap and the absence of targets risks intensifying the existing (and inevitable) diversity in States’ approaches, favour free riding, put significant pressure on Member States after

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68 European Parliament, (n 29). In response, amendment 3c to Directive 2008/98/EC proposes the introduction of article 4a, entitled ‘Food waste hierarchy’, which would state: “1. The following specific food waste hierarchy shall apply in order of priority in food waste prevention and management legislation and policy: (a) source prevention; (b) edible food rescue, prioritising human use over animal feed and the reprocessing into non-food products; (c) organic recycling; (d) energy recovery; (e) disposal. 2. Member States shall provide incentives for the prevention of food waste, such as setting up voluntary agreements, facilitating food donation or, where appropriate, taking financial or fiscal measures.”. See European Parliament, ‘Amendments adopted by the European Parliament on 14 March 2017 on the proposal for a directive of the European Parliament and of the Council amending Directive 2008/98/EC on waste (COM(2015)595 – C8-0382/2015 – 2015/0275(COD))’ P8_TA (2017) 0070. It is interesting to notice that the French Loi 138-2016 on food waste introduces a food waste hierarchy. See Loi n° 2016-138 du 11 février 2016 relative à la lutte contre le gaspillage alimentaire, Art. L. 541-15-4.

69 Bartosz Zambrzyscki, Delegated act on food waste measurement – discussion on 3rd draft and comments received, European Commission, 9 July 2018.

2023 (if meaningful targets are set) and frustrate the EU’s commitment to realise the sustainable development goals and regionally contribute to the achievement of the Agenda 2030. More importantly, it dismisses that the EU has already agreed to the SDG target to “halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses” by 2030.

Finally, one of the reasons behind the lack of success of the current EU approach to food loss and waste lays in the tension between the aspiration to reduce food loss and waste and the stringent limits of “food safety as a red line which should not be crossed.”71 The EU Action against food waste recognized it and identified as priority for the Commission that of taking “measures to clarify EU legislation related to waste, food and feed and facilitate food donation and the use of former foodstuffs and by-products from the food chain for feed production, without compromising food and feed safety.”72 To fulfil its task, in 2017 the Commission published the EU Guidelines on Food Donation. As the comparative analysis in Section IV clearly illustrates, the interpretation of the hygiene and food safety regulations offered by the Commission clashes with the goal to facilitate food donations. Despite the positive examples and best practices that were promoted by Member States, the Guidelines consolidate the pattern of cleanliness and sterilisation that Trentmann has associated with the construction of the modern city73 and E.P. Thompson to the establishment of contemporary capitalism.74 If the stringent requirements of health and safety can never be “jeopardized by actions to prevent/reduce food waste,”75 there are only limited opportunities to dispose of already produced food in order to reduce hunger, GHG emission, and the inefficient use of resources. The use of horizontal coordination in the

72 European Commission (n 54).
73 Trentmann (n 1) 630–631.
context of a highly hierarchical discipline appears, as we discuss below, particularly problematic.

From a substantive point of view, the current European framework presents gaps and features that reduce its effectiveness and create frictions with the actions undertaken on the ground. Firstly, the efficiency approach to food surplus (possible lost or waste) appears incapable of tackling the root causes of the problem and to favour flexibility that hardly fits with the urgency of the problem and the existence of long-term common goals. Secondly, the lack of a common and comprehensive definition, the absence of measuring framework and the choice to postpone the possible adoption of Union-wide targets may degenerate into incommensurability, free riding and failure to comply with the content of the Agenda 2030. Finally, the adoption of an approach that privileges the concerns and requirements of food safety may intensify the tension between opposing goals and reduce the possibility of a systemic approach that goes beyond the fragmented structure of European governance. If substantive choices may be partially responsible of the current lack of success, the procedural mechanisms that have been established at the European level should be equally scrutinised.

**III.b Multi-stakeholderism and the Challenges of a Flexible Approach to the SDGs**

The European Commission, Council and Parliament were supposed to approve a revised version of the General Directive on Waste by the end of 2017 in the context of the EU circular economy and the SDGs strategy. Almost six months later, the final Directive is still pending, mainly because of an intense parliamentary debate and the pressure exercised by civil society organisations interested in the introduction of binding requirements for food waste prevention and reduction. The latest version of the Directive, in fact, touches on the substance of food waste only marginally, mainly to address the point of a common methodology and minimum quality requirements that have been discussed above. However, it contains several procedural elements that promote a system based on decentralisation, coordination, and identification of the Member States as the main actors in the prevention and reduction of food waste.
In the multi-territorial and complex framework of the EU action, the Directive suggests that European institutions should only play the role of data collectors and facilitators of the exchange of best practices. As stated in the preamble, the responsibility to achieve the SDGs falls on each Member State, each one with the obligation to “establish specific food waste prevention measures and [...] measure progress in food waste reduction.” In line with the vision of the Open Method of Coordination (OMC), Member States and private actors are required to develop ideas and solutions while the EU provides the space where they can dialogue and engage in the process of co-generation of effective solutions.

The Working Group on Food Losses and Food Waste (2012), the Commission Expert Group on Food Losses and Food Waste (2014) and the EU Platform on Food Losses and Food Waste (2016) represent the three attempts to formalise this space of dialogue and coordination. From the analysis of their composition and their operations, it appears that they vary significantly in terms of composition and objectives and that their characteristics (who is in the room, how are decisions taken, does this lead to policy, etc.) have an impact on the role that they can play in co-constructioning the system of EU governance.

The Working Group was established under the advisory Group of the Food Chain and Animal and Plant Health as a multi-stakeholder venue for farmers, food industry, retailers, consumers, food banks and other non-governmental organisations to discuss donations, date labelling, food safety and social innovation. The Expert Group was created in 2014 by DG SANCO under the scope of the General Food Law Regulation and has a very different

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77 ibid 9.
78 The use of multi-stakeholder platforms to engage and solve complex issues has been increasingly diffused. This is true at the local level as much as at the level of international and regional organisations like the European Union. However, the technical and neutral image of the tool often hides issues of power, participation, representation, visibility, equity, sustainability, rights and obligations that define the scope and effectiveness of the mechanism. For a critical assessment of multi-stakeholderism in the area of global food governance, see Nora McKeon, ‘Are Equity and Sustainability a Likely Outcome When Foxes and Chickens Share the Same Coop? Critiquing the Concept of Multistakeholder Governance of Food Security’ (2017) 14 Globalizations 379
composition: it is integrated by one permanent representative per Member State and is opened to third parties, upon invitation only. While the scope is very similar to that of the Working Group (simplification and promotion of better use of date marking; facilitation of food redistribution; technological and social innovation; awareness and research to strengthen the evidence base), the core members are, in contrast, the Member States.

A more interesting case is represented by the ‘EU Platform on Food Losses & Food Waste’, a multi-stakeholder experience which, not only brings together the EU Member States and European private sector representatives, but also the EU Committee of Regions (CoR), the European Economic and Social Committee (EESC), the Food and Agriculture Organisation (FAO), the Organisation for Economic Co-operation and Development (OECD), and the United Nations Environment Programme (UNEP). Since 2016, the platform operates as a multi-disciplinary and multi-stakeholder body with “the overall mission […] to support the Commission, Member States and all actors in the food value chain in achieving the SDG 12.3 food loss and waste reduction targets without compromising food safety, feed safety and/or animal health”.

Along with the realisation of the international importance of food losses and waste, the idea of the Platform originated from the desire to better understand the transnational complexity of food chains and the necessity to coordinate across sectors and different levels of the food system. According to its Terms of Reference, the Platform aids the Commission, “supports all actors in identifying and implementing appropriate actions to take at national,

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81 At the moment there are thirty-seven private actors represented, divided between NGOs, academia and trade and business associations (including the International Air Transportation Association). The total amount of member of the Platform is fixed at seventy.


regional and local levels”, and “facilitates sharing of information, learning and best practice related to food waste prevention”.\textsuperscript{84}

Compared to the other two experiences, the EU Platform on Food Losses and Food Waste has four significant additions: the “implementation and application of EU legislation related to waste, food and feed to ensure the highest value use of food resources”; the “definitions and measurement framework for food waste”; the “monitoring of food waste levels and progress made by all actors towards the achievement of SDG 12.3”; and the provision of “advice and expertise to the Commission and Member States in order to improve the coherent implementation and application of EU legislation”.\textsuperscript{85} Moreover, three sub-groups have been created (on food donations, measurement of food waste, and ‘action and implementation’) and a fourth on date marking is planned for the imminent future. Considering the Platform’s composition and aspirations, we are aware that direct participatory observation would offer a unique insight on the role that multi-levelled coordination, multi-stakeholderism and public-private dialogue may have in defining holistic solutions to the problem. In the absence of it, we have based our considerations on the minutes of its most recent meetings.

On paper, the Platform appears a ‘true space’ for political dialogue and confrontation, with some of the discussions going to the core of subsidiarity and the role that the European Union should be playing in the definition of a regional and multi-level policy. To offer an example, we focussed on the third meeting of the Platform as a terrain of confrontation on the content and reduction goals of the EU Waste Framework Directive discussed above.

According to the minutes, some of the private organisations were adamant in asking the introduction of EU-wide food waste reduction targets in the Waste Framework Directive with some Member States declaring themselves in favour of including such targets.\textsuperscript{86} For the proponents of this position - including Slow Food, Health Care Without Harm, the

\textsuperscript{84} ibid 2.  
\textsuperscript{85} ibid.  
\textsuperscript{86} European Commission, (n 71) 4.
Member of the European Parliament Borzan, and the Austrian government - “Member States or sectors of the food supply chain would not feel obliged to implement measurement of food waste in the absence of specific targets”.

They vehemently opposed the that a general framework was enough and asked for a strong role of the European institutions that take into consideration the complexity of the food system, the urgency of the issue and the need for a co-ordination that goes beyond the definition of a common vocabulary and common methods of measurements. On the contrary, private organisations like Stop Wasting Food and the Italian government advanced the proposal of small steps and the identification of less ambitious goals, adopting a position that favoured the identification of the EU as a space for sharing information rather than the captain holding the wheel.

The final position of the DG SANTE Commissioner Andriukaitis was to oppose the introduction of mandatory targets and favour a soft-role for the EU. In his rejection of mandatory target, the Commissioner stated that “it would be difficult to impose specific targets to Member States due to their diverse situations and capabilities” and that it is “the responsibility of Member States to define a roadmap to achieve the SDG on food waste and to set their own concrete targets as needed.”

Although this statement reflects the current state of the membership and is in line with the idea of an open method of coordination that does not create ranking but favour learning and exchanges, the statement is of particular interest both with regards to the implications of not adopting a Union-wide mandatory target and its justifications and conceptualization. Because we have already discussed the consequences of not adopting a common target in the context of the SDGs and the interdependency of the challenge, we would like to spend few words on the underlying assumptions of the Commissioner’s statement.

Firstly, the use of the notion of ‘difficulty and diversity’ to avoid the introduction of a common target seems to suggest that the role of the EU is to favour integration and coordination only where there is a level playing field and pre-existing homogeneity.

87 ibid.
88 ibid.
However, tailored targets and *ad hoc* objectives can certainly coexist with a broad Union-goal, especially in the context of common indicators, methodologies and definitions. The fact that the General Waste Directive contains clear guidelines and mandatory targets is just one example that such approach is possible, including in the context of food loss and waste. Secondly, when the Commissioner identifies Member States as those in charge of leading the transition and minimizes the role of the EU, he overlooks the link between the generation of food loss and waste and other areas of regulation such as free trade, competition, health and safety, competition law and agricultural subsidies (all orchestrated at the EU level). Thirdly, we must consider the statement through the minutes of a 2016 meeting of the EU Platform, where participants expressed their common intention to transform the EU in “the region leading global efforts to fight food waste with active national food waste prevention programmes in place in all countries and involving all key stakeholders.” If the Commissioner’s approach was to be followed, now or in 2023, it would question the role and legitimacy of multi-stakeholder platforms as a source of learning, dialogue and co-regulation. Finally, the idea that it is ‘difficult’ to have an EU common policy because of the existence of differences among the MSs, conflicts with the EU responsibility to achieve the SDGs and the role of coordination mechanisms as instruments that can effectively satisfy common goals.

The Commissioner’s perspective leaves more than few doubts in terms of the effectiveness of the form of governance that he has in mind both with regards to the adoption of an effective strategy against food loss and waste and implementation of the Agenda 2030. This is not only a matter of relationship with non-EU countries but a question of strategic approach to sustainable development and a matter of legitimacy and trust. When the European Commission stated that one of the two streams of the EU’s answer to the 2030 Agenda would include mainstreaming of the SDGs in the European policy framework and

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89 European Court of Auditors (n 4) 15.
91 On institutional legitimacy and transnational challenges see, e.g., Timothy Cadman, Climate Change and Global Policy Regimes (Palgrave MacMillan 2013).
current Commission priorities, it could only mean that regulations and structure of governance would have been adapted to these goals and that a clear commitment would have been made at the regional level. Otherwise, it would only be propaganda.92

If the fight against food waste is a laboratory for the construction and adoption of a European integrated approach to the SDGs and the Agenda 2030, the current scenario creates some intellectual and practical discomfort. There is little doubt that general waste and food waste are areas with significant discrepancies between Member States and where coordination is essential to achieve regional goals and that multi-stakeholder platforms and flexible coordination are possible solutions to overcome nationalist thinking and the fragmented actions of several Directorate Generals. The European Commission's decision to create a new space for dialogue and multi-disciplinary confrontation must thus be welcome and supported. However, the adoption of questionable premises and the establishment of a procedural mechanism that is incapable of assessing the inherent limitations of a fragmented and state-based approach must be questioned.

In the next section, we use the concrete examples of Italy and France’s solutions to food loss and waste to prove that the construction and implementation of an effective and coordinated action against food loss and waste and the transition towards sustainable solutions require a clear understanding of the current incoherence and incompleteness. We compare the content and procedures introduced by the two legislations with the 2017 Guidelines on Food Donations and through this juxtaposition illustrate the risk of tensions and clashes that lies behind the substantive and procedural choices made at the EU level and discussed so far.

IV. Coordination or Conflict: The EU-MSs Interaction and the French and Italian Food Waste Legislation

Point c) of the EU Action Against Food Waste required that DG SANTE should “[t]ake measures to clarify EU legislation related to waste, food and feed and facilitate food donation and the use of former foodstuffs and by-products from the food chain for feed production, without compromising food and feed safety.” In compliance with this task, the EU Guidelines on food donation were published in 2017. The thirty-eight page document is part of the EU action plan and aims to “clarify relevant provisions in EU legislation and help to lift barriers to food redistribution within the current EU regulatory framework”. In the context of our analysis, the guidelines offer a unique opportunity to engage with the substantive and procedural approaches adopted by the EU institutions (and the Commission in particular) and assess the way in which they coordinate with national solutions adopted by Member States. Based on co-regulation, multi-stakeholderism and horizontal dialogue, the Guidelines expose a conflict with the aim and procedural choice made by the two national legislators and suggest that they may not be the product of an effective and reflexive process of mutual learning and coordination.

With the aim to facilitate the application of the theoretical framework presented above to the concrete case of the Guidelines, this section: a) sketches the main aspects of the guidelines; b) introduces the French legislation on food waste; c) presents the main elements of the Italian legislation against food loss and waste; d) concludes that a rigorous application of the 2017 guidelines and of the current EU legal framework may frustrate national actions and slow the achievement of SDG 12.3 rather than facilitate it.

a) The 2017 Guidelines and the ‘True’ Interpretation of the EU Legal Framework
The Guidelines on distribution of food operate in the legal framework constructed around the General Food Law (EC 178/2002), the so-called hygiene package (Regulations (EC) No 85/2004, 853/2004 and 85/2004) and the provisions of food information to consumers (Regulation No 1169/2011). Their main purpose is to define what food surplus can be

93 European Commission (n 54).
95 ibid 5.
donated and distributed and therefore avoid waste. In line with the attribution of competences, Section 1.2, *Purpose*, defines the scope of the Guidelines as:

“necessarily focus[ssing] on those issues which need to be addressed at EU level, and hence seek to complement but not duplicate those established in the Member States. Guidelines developed at national and/or sectorial level […] play an important role in ensuring food safety, traceability and clarifying the roles and responsibilities of various actors involved in the recovery and redistribution of surplus food.”

On the one hand, the Guidelines contain the Commission’s interpretation of the existing EU framework and the indication to Member States of the space of autonomy that they have in regulating food donation: they cannot alter the mandatory content but only define the details of areas such as liabilities of food business operators, elaboration of good practices and provision of fiscal incentives. On the other hand, the Guidelines were discussed and commented by the participants to the EU Platform on Food Losses and Waste: as such, they can be considered the first product of the current system of co-regulation.

Given the absence of a clear EU mandate on food waste and given the stringent nature of the General Food Law, the Guidelines illustrate the double role for the EU: creator of an open space for horizontal dialogue and enforcer of the hierarchical rigour of food health and safety. Such duality is not irrelevant from the point of view of new governance and open methods of coordination. Contradicting the freedom and autonomy that are at the heart of the current system of governance, the Guidelines adopt a very stringent interpretation of the EU food health and safety framework that may significantly reduce the impact of national interventions and leave the EU in a legislative and political deadlock where it aims to an overall reduction of food loss and waste, promotes distribution as a means to achieve it, does not impose binding targets and significantly reduces opportunities to redistribute surplus food.

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96 European Commission, (n 94) 5.
For sure, we strongly believe that recipients of food donations must have the same right as any other consumer to eat food that is safe, nutritional, of quality and apt for human consumption. Similarly, we support the introduction of stringent limits to donations and the of an extended producer responsibility as more appropriate measures to tackle the root causes of the problem (see the Conclusions). Yet, the Guidelines appear particularly severe with the establishment of solid networks of food donations when they claim that “organisations which receive food surplus – be they redistribution (ROs) or charity organisations (COs) – are to be considered as food business operators under the General Food Law.” 97 Because every party involved in food donation is a food business operator, they all have to store and refrigerate foods appropriately to maintain the cold chain, respect the prohibition of redistributing foods past the ‘use by’ date, apply food hygiene practices, have an auto-control system in place, refuse products for donation which could present a risk for the final consumer (including product too close to the ‘use by’ date) and respect the general traceability requirements (Art. 18 of the General Food Law).

With specific regards to the traceability requirements, organisations taking part in the redistribution of food surplus need to keep records for a period between 2 to 5 years (depending on national implementation) of where they source foods from and, if they provide foods to other businesses, and must document to whom the food has been distributed. For example, the supplier of donated food should keep at least the following information: name, address of supplier, and identification of products supplied; name, address of customer, and identification of products delivered; date and, where necessary, time of transaction/delivery; volume, where appropriate, or quantity. The receiver, e.g. a charity, should not keep the information about their customers, but about their suppliers and the supplied food.

The Guidelines also adopt a prescriptive approach to food information and state that “it is critical to ensure that the end beneficiaries have access to the same information as that which is required and provided when they purchase food in-store.” 98 This concerns

97 ibid.
98 European Commission (n 94) 22.
information such as the name of the food, the list of ingredients, the date of minimum durability, any special storage conditions, a nutrition declaration and the list of allergens.\textsuperscript{99}

In addition, mis-labelled food which cannot access the market must bear “additional clarification and/or measures will need to be taken in order to ensure that the end beneficiary receives all the mandatory information required”\textsuperscript{100} and “food information must appear in a language easily understood by consumers of the Member States where a food is marketed,” i.e. use the official language of the country where the food is donated.\textsuperscript{101}

Finally, the Guidelines also considers hospitality, catering and food service sectors, including public canteens and restaurants. On this point, they seem to leave a certain degree of autonomy to the Member States, but also stress that products should not be open and the packaging should not be damaged. Already cooked and not-packaged foods become particularly hard to donate, which contrasts with several bottom-up and city-led initiatives that have sprouted in the last years.\textsuperscript{102} To avoid any doubt, the Guidelines are clear that no Member States can maintain or adopt legal provisions that would exonerate any food business operator from these obligations.

From farm to fork, actors of the food system may feel discouraged by the Guidelines and their stringent approach that increases costs of distribution. Charities, food banks and private sector operators, whose participation is central to most of the ongoing efforts to avoid the waste of surplus food, may decide not to run the risk of facing responsibility for a breach of the Regulations and choose the cheap solution of throwing food away rather than investing in alternative solutions. In addition, the rigid interpretation of the Food Regulation provided in the Guidelines may have repercussions on the relationship with Member States’ autonomies and their engagement with food distribution. At a moment where the EU context is characterised by diverse situations and capabilities and where

\textsuperscript{99} Articles 9(1) and 44 of Regulation 1169/2011.
\textsuperscript{100} ibid 25.
\textsuperscript{101} In a regional context where food surplus and waste are often generated in different geographies from where malnutrition and food poverty are present, the requirement to re-label pre-packaged food in order to distribute it elsewhere may prevent the establishment of a real European system of food redistribution and paradoxically favor access not on the basis of needs but on the basis of the amount of food surplus that is generated in that specific context.
\textsuperscript{102} See for example ‘The Real Junk Food Project – Let’s Really Feed the World’ (n 27).
national authorities have been exploring distribution as the main solution to the problem of food waste, the Guidelines do not seem to foster integration, reflexivity and coordination, but rather force a specific approach to food waste reduction (redistribution but with the highest levels of transparency and information) that collides with the flexible and coordinate nature of the governance framework. To offer a clear example of the potential clashes and the need to improve the current EU approach, the 2017 Guidelines are now used to assess the food waste and loss legislations adopted by France and Italy in 2016.

b) France and Italy as the Frontrunners in the National Fight against Food Loss and Waste

France was the first country in the world, and therefore the EU, to adopt a national law against food loss and waste. After a very successful online petition that asked to make it illegal for supermarkets to throw away unsold food, the National Assembly issued the *Loi 2006-138* of 11 February 2016 and introduced specific obligations and sanctions.\textsuperscript{103} Italy was the second European country to approve a law that specifically tackles the issue of food waste, Generally known as ‘*Legge Gadda*’,\textsuperscript{104} both in direct response to the French example and as a continuation of the dialogue that began with EXPO 2015 and the law on the protection, respect and fulfilment of the right to food of the Lombardia Region.\textsuperscript{105} Although similar in their spirit, the two laws differ in mechanisms and objectives. Moreover, they may both in tension with the EU Guidelines.\textsuperscript{106}

Both laws were supported by the diffused repugnance against excesses at the time of food poverty and they the share the idea that food distribution represents an efficient and coherent remedy against the unacceptability of waste. However, they diverge on the role of regulation and of public intervention. On the one hand, the *Loi 138-2006* is the regulatory transposition of the citizens’ desire to hold those who are responsible for the

\textsuperscript{103} Loi n° 2016-138 du 11 février 2016 (n 76).

\textsuperscript{104} Legge 19 agosto 2016 n 166, Disposizioni concernenti la donazione e la distribuzione di prodotti alimentari e farmaceutici a fini di solidarietà sociale e per la limitazione degli sprechi.

\textsuperscript{105} EXPO 2015 was dedicated to the theme of food and provided local authorities with the opportunity to engage with the difficulties, paradoxes and complexity of the global food system. It also represented a political opportunity to be seized, which partly explains the enactment of the law by the Lombardia Region and the *Gadda Law*.

generation of food waste accountable\textsuperscript{107} and specifically targets retailers with a sales surface area of at least 400 square meters who are now required to sign contracts with charities to distribute their unsold food or face fines of up to €3,750.\textsuperscript{108} On the other hand, the \textit{Legge Gadda} law is constructed around the idea that legal bureaucracy represents an obstacle to donations and that the State is not a disciplining entity but a facilitator of social transformation.\textsuperscript{109} Instead of sanctions, the Italian legislator decided to intervene in areas like food safety requirements and labelling and food safety and to utilise national fiscal authority to provide incentives in favour of those food operators who decide to redistribute food.

In general terms, both laws raise severe concerns. Firstly, because distribution of surplus food is presented an efficient win-win-win solution for the state, the private sector and the hungry people. For the schemes to work, surplus food continues to be produced, the state reduces the cost of feeding its citizens and the latter do not go to bed hungry. Consequently, both laws are silent on the inherent over-production of the industrial food system, the purchasing strategies of retailers, the strict aesthetic parameters, the use of aggressive sale technics, the lack of cooking facilities or access to energy, and the fact providing temporary remedies to food poverty may divert the attention from their underlying causes and from the importance of a holistic approach to marginalisation. In Italy and in France, a holistic problem is treated with punctual solutions and it does not seem compatible with the international obligation to protect, respect and fulfil the right to food of people.

From the perspective adopted in this contribution, it is important to highlight that the two laws were issued at the time when the European Union had already begun thinking about food waste, but the Guidelines on Food Donation had not been yet published. The laws

\textsuperscript{108} ibid, Art. L. 541-15-6 III.
could thus not be coordinated with the Guidelines, but they were mentioned in the preliminary works that led to the Commission’s document and could have offered opportunities for reflection and learning. Despite this time lag, the confrontation between the two legislations and the broad EU framework provides the opportunity for a series of considerations regarding the relevance that national solutions had in drafting the Guidelines and informing the EU context and the coexistence between horizontality and verticality. The result is that the two laws, triggered by public petitions and the desire to offer an immediate response to an urgent issue, clash with the Guidelines and illustrate the limits of the unclear EU system of governance discussed above. If the aim is to generate spaces for autonomy, dialogue and co-ordination, the case of France and Italy show the risk of confusion, conflict and incoherence.

c) Governance of Food Waste in the EU: Wicked Problem or Experimentalism?

Candel et al. claim that EU’s governance of food security may represent a wicked problem, i.e. a problem that is impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognise. The examples at hand suggest that a similar statement could probably be made with reference to the reduction of food loss and waste. On the one hand, data demonstrates that the amount of food that is wasted in Europe is not diminishing and that more must be done. On the other hand, the 2017 Guidelines on Food Donation interpret the General Food Law in a way that minimizes the possibility for food donations and are in clear opposition with some of the main solutions adopted by Member States. Without binding targets, common measuring or forms of monitoring and sanctioning, most of the public authorities (national and local) that decided to challenge food loss and waste have promoted market-based solutions such as distribution and charity-based networks of donations. Because they are easy to implement

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110 The term ‘wicked problem’ originates from social policy planning and was first utilized in 1973 by Rittel and Webber. Few years later, in 1976, the notion was brought into management studies by Churchman, who coined its contemporary sense of problems that are not understood until after the formulation of the solution and that cannot be addressed in a standardized way but are all unique. Since then, it has expanded its scope and has been applied in several areas of social sciences. See, e.g. Horst WJ Rittel and Melvin M Webber, ‘Dilemmas in a General Theory of Planning’ (1973) 4 Policy Sciences 155; C West Churchman, ‘Guest Editorial: Wicked Problems’ (1967) 14 Management Science B141.

and reduce the pressure on the public, they have sprouted everywhere in the EU and are presented as politically and socially successful. However, some of these solutions may be contrary to mandatory EU health and safety regulation as interpreted in the Guidelines.

The Italian Legge Gadda is illustrative because it specifically targets areas such as food safety, information, responsibilities for donations and most of the other requirements that are considered in the 2017 Guidelines. For example, Article 3.4 softens the requirements for labelling when food is donated, unless the irregularity concerns the expiration date, the ingredients or the presence of allergens;112 Article 4.1 introduces an exception in terms of expiration dates and cession of food: even if the food has passed its minimum term of preservation,113 the actors operating in the food chain can transfer it to beneficiaries who will then utilise it to feed the animals or to produce energy;114 Article 13 states that ‘public entities and not-for-profit private entities’ that distribute food for free must be subject to the same regulation as final consumers for what concerns the conditions of preservation, transport, stocking and use of food, i.e. introduces a thick separation between the moment when food surplus is produced and the costs (financial and in terms of responsibility) of dealing with it.

In the absence of the EU General Food Law and of the Guidelines, the absence of mandatory targets and definitions would thus be overcome by the financial benefit for participants to the scheme and by the reduced costs associated with the reformed system of responsibilities, labelling and obligations. Supported by the state, food operators would look at their costs (including reputational), coordinate and decide how to intervene. On the contrary, when the Legge Gadda is read through the lenses of EU General Food Law, the lack of a binding EU targets to reduce food loss and waste, the absence of monitoring systems and of any sanctions for the failure to comply appear incapable of triggering the same process. This is particularly the case if the cost of breaching the EU General Food Regulation are higher than the incentive to distribute.

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112 Legge 19 agosto 2016 n 166 (Legge Gadda) (n 112) Article 3.4.
113 Defined by Article 2.f of the Legge Gadda (ibid) as the date until which food maintains its specific nutritional qualities if properly preserved.
114 Ibid, Art 4, Modalita' di Cessione delle Eccedenze Alimentari ('Modalities to transfer food excess’ - translation by the authors).
The reasoning conducted so far reveals that the construction of an efficient, coordinated and bottom-up action against food loss and waste is inherently connected with the overarching EU framework and whether EU laws open or foreclose spaces of intervention. Given the multiplicity of regulations that concern food and the fight against food loss and waste, no effective measure can be taken without considering them all. Given that the respect of health and safety standards is not to be questioned (although a more elastic interpretation of the EU General Food Law for food donations could be possible), the EU policy against food loss and waste appears improperly served by a purely horizontal system of governance that relies on the implementation and constant redefinition of broadly framed goals appear inappropriate. In addition to the substantive and procedural gaps discussed in Section III, a context that is inevitably characterized by mandatory rules and top-down constraints requires some ‘shadow of hierarchy’\(^\text{115}\) that makes the fight against food loss and waste something more than a voluntary commitment.

The distance between the current scenario and an effective system of co-regulation is not abyssal, but a bridge must be built. Once an appropriate common vocabulary, a quantitative and qualitative uniform method of measurement and binding targets in line with the SDGs are collectively defined, new spaces of regulatory and legislative dialogue would be open at the local level to foster innovation and experimental solutions. At that point, all the EU regulations that contribute to the generation of food loss and waste should be scrutinized. First, the health and safety standards, which the EU legislator may decide to relax according to the Italian experience, so to favour food donations and redistribution through small and informal networks. However, it may also decide not to lower its health and safety standards and require Member States to think of solutions within the existing parameters of hygiene. In both scenarios, it will be crucial for the regulator to understand the inherent limits of distribution and to focus on the whole food chain so to address responsibilities and alternatives to the generation of excess food at the level of production, transformation

\(^{115}\) Legislative or executive decisions that help dealing “effectively with the problems they are supposed to solve. See, Adrienne Héritier and Dirk Lehmkuhl, The Shadow of Hierarchy and New Modes of Governance (2008) 28 Journal of Public Policy 1, 1-17.
and consumption. Extended-producers responsibility may be a quick and acceptable solution, although the internalization of externalities and the allocation of new costs should take into consideration the unequal distribution of power that characterizes most of the contemporary food chains and the risk that large player could simply buy their right to produce waste.

Conclusions

After the ratification of the SDGs, the European Commission and other European institutions have identified the fight against food loss and waste as one of their political and regulatory priority. In the last few years, the European framework has been populated with a new multi-stakeholder platform, guidelines on food donation and proposals for reformed regulations and directives. The EU action against food loss and waste can thus be approached a laboratory of European experimentalist governance in a context characterised by the combination of open-ended goals, horizontal coordination, peer-reviewing, a common Agenda 2030 and the inflexibility of the health and safety regulations.

Given the vastness of the theme, this article has engaged with two points that best represent the way in which the urgency and complexity of the problem are dealt with within the EU framework. After a general introduction on the importance and features of food loss and waste in both the global (Section I) and European context (Section II), we have mapped and assessed the EU legal framework and highlighted both its substantive elements (Section III.a) and the role of the EU Platform on Food Loss and Waste as a multi-stakeholder space of dialogue between EU institutions, MSs, civil society and third parties interested in the issue (Section III.b). To offer a concrete example, Section IV confronted the 2017 EU Guidelines on Distribution of food surplus with the legislative experiences of France and Italy to illustrate the risk of a regulatory and political short-circuit created by the clash between the horizontal approach to food loss and waste and the strong verticality of food health and safety requirements.
The result of our research proves that the current polyarchic system of governance of food waste and loss may be prone to impasses and bottlenecks given to uncertainties, gaps and the presence of inflexible hierarchical rules. This may explain the recent worsening of the statistics in terms of amount of food waste at the European level.\(^{116}\) Some of the immediate solutions proposed in the paper, and currently explored by stakeholders at the EU level, are the adoption of a common definition of food waste that takes into consideration the uniqueness of food, immediate the introduction of Union-wide mandatory targets in line with SDG 12.3 and of tailored goals dependent on the individual conditions of Member States, the implementation of common methods of measurement for food waste, the establishment of an open and accessible system of monitoring and the provision of sanctioning schemes. However, we believe that something more must be done to implement a strategy against food loss and waste that is truly systemic, multi-layered and transnational.

Anyone who is interested in the reduction and prevention of food loss and waste should pay attention at what is happening at the European and national level and map the regulatory and political conflicts that slow down the achievement of these goals. In this contribution, we have conducted this exercise by looking both at the inherent limits of co-regulation in the sector of food loss and waste and at the way in which the hierarchy of food health and safety redefines incentives and constraints when flexible governance “touches down”.\(^{117}\) A similar analysis could concern other regulatory interventions through which EU law contributes to the presence of excess food in the EU, such as the common commercial policy and international trade, the incentives of the Common Agricultural Policy and consumers-based applications of competition law.\(^{118}\)

\(^{116}\) This data may also be explained by the increasing attention to food waste and a broader attention to measuring and making information public.


\(^{118}\) We should think, for example, at the obligation to respect, protect and fulfil the universal right to adequate food, which is defined by the UN Special Rapporteur on the Right to Food as the right to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free of fear. It has been recognised in different international instruments, most notably the Universal Declaration of Human Rights (UDHR); the International Covenant on Economic, Social and Cultural Rights
This contribution was a first attempt to systematize and better understand the potential and limits of the current European approach to the production of food loss and waste, where the EU and Member States stand in the global and local fight against it, how effective the current Open Method of Coordination is in paving the way to the Agenda 2030 and how it can be improved. If the aim is to avoid that the action against food loss and waste degenerates into a wicked problem, there is no better way out than an effort of collective self-critique and the recognition that social and ecological sustainability are the two axes along which the coherent and long-term integration of EU actions can be realised.

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