THE CIRCULAR ECONOMY: ITS ADOPTION AND IMPLEMENTATION WITHIN THE EUROPEAN UNION

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Abstract

The reconciliation of economic, social and environmental goals has been regarded as top priority on the European Union's agenda and this was possible through Sustainability. The concepts of Green Economy and Circular Economy are currently regarded as buzz phrases both by academics and policy-makers. Generally the Green Economy is regarded as an 'umbrella' concept including renewables, recycling, ecoefficiency, and the Circular Economy itself. The ultimate target is to set a sustainable economy with the adaptation and/or transformation of the current economy system.

The concept of Circular Economy is not new; it goes back to the late 1970's and early 1980's when the world, especially Europe started rethinking of its industrial process, aiming to transform the once linear economy into something more reliable and sustainable. Through this new idea the production of waste is minimised as a result of minimal input, leading to redesigning the products' life cycle.

In a recent European Commission press release, the Commission stated that the new rules on the Circular Economy Package are going to help in the prevention of waste. Where this is not viable, it will be pushing more on the recycling of both municipal and packaging waste. Landfills will be phased out while the use of economic instruments such as Extended Producer Responsibility schemes will be promoted.

The aim of this dissertation is to provide an overview of the general system(s) adopted by the European Union and the transposition of laws by Member States to protect the environment while offering initiatives for a Circular Economy. In addition, it will analyse the underlying problems that the Union faces when coming to implementation and enforcement of environmental regulations, in order to create a Circular Economy that in practice works.

Keywords: Circular Economy, Extended Producer Responsibility, EU law, Member States' implementation, End-of-life cycle

One man's rubbish is another man's treasure

Table of Contents

Intr	oduct	tion	.14		
1	. C	Overview	.15		
2	. В	ackground	.15		
3	. R	esearch Scope	.17		
4	. R	esearch Methodology	.17		
5	. R	esearch Limitations	.18		
6	. R	esearch Format	.18		
7	. R	esearch Approach	.18		
8	. R	esearch Outline	.19		
Cha	pter	1:	.20		
Literature Review					
1	. G	General Overview	.21		
2	. н	listoric Background	.22		
3	. S	econdary Legislation and Other Important Agreements	.24		
4	. E	nvironmental Economics	.27		
5	. Т	The New Phenomenon of Circular Economy – Closing the Loop and the Green Deal			
Р	act .		.27		
6	. C	Concluding Remarks	.29		
Cha	pter 2	2:	.30		
The Way	EU (v For	CE Package – Current Environmental Legislation and Legislative Proposals for the ward	.30		
1	, т	he EU Circular Economy Package	.31		
2	B	Before the Circular Economy Package	32		
23	. D	urrent FII Environmental Legislation	33		
5	31	Legislation on Waste Reduction	.55		
	3.1	Legislation on Substance Restriction	.55		
	3.2	Legislation on Performances of Products Put on the Market	.55		
1	5.5 Т	be New Circular Economy Action Plan -1 egislative Proposals and Initiatives	36		
4	. 1 1	The Design of Sustainable Products	.30		
	4.1	Consumers' Empowerment	.30		
	4.2	Circularity in Production Processes	.57		
5	4.5 V	Care Broduct Volue Chains	.57		
3	. K	Electronics and ICT	.31		
	J.I	Detterior and Vakielas	.51		
	5.2	Datteries and venicles	.38		
	5.3	Packaging	.38		

5.4 Plastics	38				
5.5 Textiles	38				
5.6 Construction and Buildings	39				
5.7 Food, Water and Nutrients	39				
6. General Conclusions	39				
Chapter 3:	40				
The Legal Framework Regulating EU Waste Management – The Line of Thought of the European Court of Justice					
1. What is 'Waste' and Who is 'the Waste Holder'?	41				
2. Case Law with Reference to the Meaning of 'Waste', 'Holder of Waste' and 'Produce of Waste'	er 12				
2.1. The Paul van de Walle judgement	+2				
2.2 The Masquer judgement	+2				
2.2 The Wellonia case	.43				
2.5 The watching case					
2.5 Other recent judgements					
3 Packaging Waster Single-Use Plastics and Producer Responsibility	5				
3 1The Plastic Directive					
3.1.1 The Plato Plastik Robert Frank GmbH judgement	47				
3.1.2. Fost Plus VZW judgement	48				
3.1.3 Commission v Germany case	48				
3.2 Waste Shipment, Disposal and the Use of Illegal Landfills					
3.3 The EU Landfill Directive	50				
3.3.1. EU-Wood-Trading judgement	50				
3.3.2 DaimlerChrysler AG judgement	51				
3.3.3 Illegal landfills in Italy and Greece	52				
3.4 The WEEE Directive and the RoHS Directive	52				
3.5 The Concept of Waste and the Free Movement of Goods in the Internal Market	53				
3.5.1 The Classic Judgements	54				
3.5.2 Positive Harmonization	55				
3.5.3 Prioritising Economic Efficiencies Over Environmental Gains?	55				
3.5.4 Green Public Procurement Practices Across the EU	56				
4. General Conclusions	57				
Chapter 4:					
The Circular Economy in Practice through EPR Schemes – Packaging and Packaged Waste59					
1. Introduction	60				

2. Extended Producer Responsibility (EPR) Towards a Circular Economy				
2.1 The Role of EPR and its Legal Base61				
2.2 The Role of EPR Schemes				
2.3 Operational and Necessary Costs of EPR Schemes				
2.4 Applicable Waste Streams				
2.5 Efficient Service Delivery				
3. Existing Practices Across the EU Member States in Packaging and Packaging Waste65				
Table 3.1: Overview of Packaging Fee Modulation in the EU 66				
Table 3.2: Comparison of Fees and Fee Modulation in CITEO (France), CONAI (Italy) and Fost Plus (Belgium)				
4. Batteries and EEE				
5. Existing Practices in Malta				
Table 5.3 Additional Fee for a Self-Compliant Producer of Packaging or Packaging Material (Malta) 71				
6. Conclusions - Basic Principles for Fee Modulation71				
Chapter 5:				
Conclusions and Recommendations				
1. Introductory Remarks74				
2. The Free Movement of Packaging and Packaged Goods in the Internal Market75				
3. The Free-Riding Problem				
4. Environment and Competition Policy76				
5. General Recommendations				
6. Conclusions Derived Regarding the Primary Research Question: How and to what extent the policies in place are sustainable to support the Circular Economy through better waste management systems?				
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- Case C-288/08 Nordiska Dental [2009];

- Case T-331/06 Evropaïki Dynamiki Proigmena Systimata Tilepikoinonion Pliroforikis kai Tilematikis AE v European Environment Agency (EEA) [2010];
- Case C-368/10 European Commission v Kingdom of Netherlands [2012] ;
- Case C-196/13 European Commission v Italian Republic [2014];
- Case C-378/13 European Commission v Hellenic Republic [2014];
- Case C-534/13 Ministero dell'Ambiente e della Tutela del Territorio e del Mare and Others v Fipa Group srl and Others [2015];

List of Abbreviations

AG	Advocate General
CE	Circular Economy
CE (mark)	Certification Marking
CEAP	Circular Economy Action Plan
CJEU	Court of Justice of the European Union
DG	Directorate General
EC	European Communities
EEA	European Economic Area
EEC	European Economic Community
EEE	Electronic and Electrical Engineering
EFTA	European Free Trade Association
ELD	Environmental Liability Directive
ELV	End-of-life Vehicles
EPR	Extended Producer Responsibility
ERA	Environment and Resources Authority
EU	European Union
EUCHR	European Union Charter of Human Rights
EUROPEN	The European Organization for Packaging and the Environment
GMOs	Genetically Modified Organisms
GPP	Green Public Procurement
ICT	Information and Communications Technology
MEEs	Measures having Equivalent Effects
MS	Member States
OECD	The Organisation for Economic Co-operation and Development
PE	Polyethylene
PET	Polyethylene Terephthalate
PP	Polypropylene
PPWD	Packaging and Packaging Waste Directive
PROs	Producer Responsibility Organisations
PVC	Polyvinyl Chloride
QMV	Qualified Majority Voting
	Regulation on Registration, Evaluation, Authorisation and Restriction
REACH	of Chemicals
RoHS	Restriction of Hazardous Substances
SL	Subsidiary Legislation
SME	Small and Medium-Sized Enterprises
UK	United Kingdom
WEEE	Waste Electrical and Electronic Equipment
WFD	Waste Framework Directive

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Introduction

1. Overview

Living systems have been around for a few billions of years, and will be around for some more. In the living world there is no landfill; materials flow. One species' waste is another one's food. Living things grow, die and in turn nutrients go back into the soil safely. In the big circle of life, this circular life cycle works!

The new concept of Circular Economy was introduced by W.R., Stahel¹ some 40 years ago in a report to the European Commission. The need for the switch from a linear economy to a circular one is vital if the world is to make sure that there are enough resources by 2050. This is only attainable through a safe and healthy life, together with working conditions that are the less harmful possible for the environment.

For this reason, it is of utmost importance that European Union legislation and policies regulating waste collection systems and separation are efficient, the reuse and recycling of waste are facilitated, and all Member States adhere to such policies and legislations.

2. Background

Most dictionaries define the word '*economics*' as the efficient use of resources. As a social science, economics relates to the production, distribution and consumption of society's goods and services. All these economic activities are somehow linked to the Earth's environmental systems. This is because it is the environment which supplies the energy and the other resources needed, while on the other hand, it is also Earth which is acting as our 'dumping bin' for our waste. One assumes that the invisible hand does not allocate resources. In most cases there is an industry which takes certain decisions. The firms are the ones which make certain decisions and not the invisible hand. Mankind tends to be selfish, and through its greed and avid urge for economic growth, it rarely considers the true value of nature and the environment, thus putting at risk its equilibrium.

Prior to the 1950s, the economic analysis of industry was not recognised as a distinctive branch of economics. In The Organisation of Industry, Stigler (1968)² argues that industrial economics does not really exist as a separate discipline, but it is simply a different form of micro-economics. On the other hand, Environmental Economics studies show how environmental policies can have a financial impact with the ultimate aim of attaining environmental resource sustainability. For example a typical topic dealt with in environmental economics is emissions policies and regulations, their impact on technology, competition and production.

¹ W.R., Stahel & G., Reday-Mulvey, *Jobs for Tomorrow: The Potential for Substituting Manpower for Energy*, Vantage Press (1981)

² G.J., Stigler, *The Organization of Industry*, Homewood (1968)

The environment was never central to neither classical nor neoclassical economic schools of thought. The environment was regarded as a social issue more than anything else. It was through the Industrial Revolution of the 18th and 19th century that the world economies in general saw an increase in production and consumption. Relative to this, even waste, pollution and the degradation of the environment registered an increase. Over the years the standard of living improved, same as the levels of education, awareness and health. Awareness as regards environmental protection became more widespread and ultimately a 'powerful tool' in the hands of the citizens.

During the 1970s, especially after the first oil crisis of 1973, the levels of pollution and environmental damage increased so much, that the unsustainable exploitation of resources triggered a global alarm of concern, popular, political and legal. It was not until the late 1980s and 1990s that topics such as global warming, nuclear leaks, the ozone layer and the loss of biodiversity started appearing on news bulletins and newspaper headlines.

This awareness and push from the people resulted in a group of important environmental principles and policies such as *Transnational Environmental Damage*, the *Polluters Pay Principle*, *State Sovereignty*, the *Precautionary Principle*, and the *Sustainable Development Principle*.

In a recent European Commission press release³, the Commission stated that the new rules on the Circular Economy Package are going to help in the prevention of waste. Where this is not viable, it will be pushing more on the recycling of both municipal and packaging waste. Landfills will be phased out while the use of economic instruments such as Extended Producer Responsibility schemes will be promoted.

The European Green Deal is a new growth strategy that aims to "*transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy*".⁴ Through this 'deal' the Commission is promising to refocus its coordination at a macroeconomic level, in order to integrate the United Nation's sustainable development goals. The document comprises a series of 50 steps to be undertaken in seven areas. As EU Commission President Ursula von der Leyen stated, "*the circular economy is the number one priority for the European Green Deal*"⁵ of incoming EU Commission.

A Circular Economy can only be achieved through stronger demand for recyclates, efficient markets, and fair competition. Thus, this dissertation will first provide an overview of the general system(s) adopted by the European Union and the transposition of laws by Member States to protect the environment while offering initiatives for a Circular Economy. This is done in order to analyse what is already available at a European level with reference to Circular Economy, and where the Union is heading.

³ European Commission Press Release, *Circular Economy: New rules will make EU the global frontrunner in waste management and recycling*, Brussels, 22 May 2018

⁴ European Commission Communication on The European Green Deal, Brussels, 11 December 2019.

⁵ European Union, 2019 Source: EC – Audio-visual Service

3. Research Scope

The main aim of this research is to introduce the concept of Circular Economy and its implementation through the current the current EU policies and legislation, specifically dealing with Waste Management. In fact, this dissertation will assess the various EU waste laws and policies which directly provide for a harmonised waste management system, and at the same time already contribute towards the attainment of Circular Economy. At the same time, the research will refer to the further proposed amendments which the EU is adopting to further promote various practices for the best transition towards a Circular Economy in Europe. On the other hand, the challenges which lay ahead will be highlighted, mainly by analysing various ECJ case law on Waste Management. Through the analysis of this case law, one will understand better the challenges which Member States together with their economic stakeholders and consumers, encounter when implementing the various Waste Management regulations. The Circular Economy goals may also present similar future contestations.

4. Research Methodology

In the case of Circular Economy, Member States have to come up with ways and incentives in order to boost the market for secondary raw materials while at the same time safeguarding the internal market. This balance is attained by the adoption and implementation of EU laws and policies. In fact, the methodology being used to understand better the adoption and implementation of the Circular Economy within the EU is by analysing Waste Management legislation and respective case law.

In this research, the methodology is concentrated on the current waste legal network, and its implementation by Member States in order to:

- 1. Analyse what there is already on board, and how much this is already contributing towards this concept of Circular Economy;
- 2. Analyse the problems and challenges being faced by the EU and its Member States through the analysis of several case law on Waste Management. This will also contribute to understand better the problems and challenges which the concept of Circular Economy will present where on the one hand one wants to protect and safeguard the environment, but on the other hand there is an economic factor where businesses are being involved, and being obliged to take particular measures in order to control and use best practices in Waste Management.

5. Research Limitations

The main obstacle encountered in the data collection process was the lack of data available on the different EPR schemes adopted across Member States. Locally, since to date, there are only two main competitors operating such schemes, information with reference to costs was quite sensitive. Unfortunately also, since the Green Deal as part of the Circular Economy was only proposed and set in motion in 2018, relevant and current literature was very limited. So far Case Law has dealt with environmental issues mainly in terms of defining who the polluter is but never in terms of the effect on the Circular Economy. The extraordinary circumstances brought about by the COVID-19 pandemic made it even more difficult as the Commission's focus had to move away from the ones originally set on its own agenda – the Circular Economy.

On reflection, certain information could have been elicited through formal interviews with local producers involved in EPR schemes regarding the incentives and also the difficulties they encounter in reaching the set targets through innovative methods of waste management and collection on their part for a practical Circular Economy.

6. Research Format

This dissertation encompasses three distinctive yet entwined discussion chapters. An attempt will be made to answer the following research questions:

1. How and to what extent the policies in place are sustainable to support the Circular Economy through better waste management systems?

The above primary research question will be supplemented by the following research questions with the aim of offering a more extensive analysis on the proposed Circular Economy package and how it could be obtained across Member States.

- A. How does the European Court of Justice's line of thought changed along the years to give the environment its due importance and ultimately setting up the structure for a Circular Economy?
- **B.** How does the implementation of environmental directives by Member States set the way forward for an attainable Circular Economy?

7. Research Approach

Grounded on qualitative desk-research, this study seeks to employ the existing data and information that has been collected. By virtue of this data, the researcher aspires to extract a critical evaluation on the current situation and provide an answer for the posed

research questions. The sources employed for data collection will comprise of EU legislation, EU commissioned reports, case-law, academic journals and relevant books.

8. Research Outline

In order to carry out this study, Chapter 1 provides a review on the existing literature in terms to waste management, the waste hierarchy and the existing regulatory framework; Chapter 2 offers an analysis of the current EU environmental legislation and legislative proposals for the way forward; Chapter 3 explores the legal framework regulating EU waste management by analysing in detail the line of thought of the European Court of Justice through important case law within this sector; Chapter 4 portrays a comparative exercise by analysing the practicality of the Circular Economy through the operations of EPR Schemes. Ultimately, Chapter 5 offers an exhaustive conclusion whilst offering general recommendations on this study.

Chapter 1: Literature Review

1. General Overview

Most dictionaries define the word '*economics*' as the efficient use of resources. As a social science, economics relates to the production, distribution and consumption of society's goods and services. All these economic activities are somehow linked to the Earth's environmental systems. This is because it is the environment which supplies the energy and the other resources needed, while on the other hand, it is also Earth which is acting as our 'dumping bin' for our waste. One assumes that the invisible hand does not allocate resources. In most cases there is an industry which takes certain decisions. The firms are the ones which make certain decisions and not the invisible hand. Most often, mankind tends to act selfishly, and through its greed and avid urge for economic growth, it rarely considers the true value of nature and the environment, thus putting at risk its equilibrium.

Prior to the 1950s, the economic analysis of industry was not recognised as a distinctive branch of economics. In *The Organisation of Industry*, Stigler⁶ argues that "*industrial economics does not really exist as a separate discipline, but it is simply a different form of micro-economics*". On the other hand, Environmental Economics studies how environmental policies can have a financial impact with the ultimate aim of attaining environmental resource sustainability. For example a typical topic dealt with in Environmental Economics is emissions policies and regulations, their impact on technology, competition and production.

The environment was never central to neither classical nor neoclassical economic schools of thought. The environment was regarded as a social issue more than anything else. It was through the Industrial Revolution of the 18th and 19th century that the world economies in general saw an increase in production and consumption. Relative to this, even waste, pollution and the degradation of the environment registered an increase. Over the years the standard of living improved, same as the levels of education, awareness and health. Awareness in terms of environmental protection became more widespread and ultimately a 'powerful tool' in the hands of the citizens.

During the 1970s, especially after the first oil crisis of 1973, the levels of pollution and environmental damage increased so much, that the unsustainable exploitation of resources triggered a global alarm of popular, political and legal concern. It was not until the late 1980s and 1990s that topics such as global warming, nuclear leaks, the ozone layer, and the loss of biodiversity started appearing on news bulletins and newspaper headlines.

⁶ *Op. cit.*

This awareness and push by the citizens of Europe resulted in a group of important environmental principles and policies such as *Transnational Environmental Damage*, the *Polluters Pay Principle*, *State Sovereignty*, the *Precautionary Principle*, and the *Sustainable Development Principle*. Although, there is still the idea amongst many lawyers and economists that environmental concerns do not have an important role in relation to competition policy within the EU^7 , at the same time consumer awareness on ecological concerns have lead the way to new rivals in the market.

2. Historic Background

The main focus of the Treaty of Rome which established the European Economic Community (1957) was the common market and the customs union. In fact there were no provisions whatsoever in this treaty as regards the environment. Through the utilisation of trade provisions, the EU began eliminating differing member product standards or restrictions that were environmentally-based. From there it has proceeded to develop, maintain, and improve an environmental regulatory system that encourages the EU's original economic purpose. Its aim was to show how a stronger economy and a cleaner environment are possible.

Although the EEC Treaty had nothing which focused directly on the protection of the environment, it introduced a number of joint policies, amongst which were the Common Agricultural Policy and the Joint Action in the field of Environmental Policy. In this regards, it is important to take account of Article 191(2) TFEU, which states that: "Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union..." This same obligation is also mentioned in Article 3(3) TEU and Article 37 EUCHR. Article 114(3) TFEU lays down a similar obligation with a higher focus on measures related to the establishment of the internal market.

Article 100 of the EEC Treaty states that the Council shall issue directives. Pursuant to this article, the Council issued directives to eliminate differences in environmental policies amongst Member States. These differences were causing obstacles to free intracommunity trade and competition.

The Single European Act (1987) reflected the connection between the environment and inter-member trade. In fact it contains several provisions that mentioned ways in which the EU was empowered to deal with the common environment. It introduced the first legal basis for a common environmental policy through the introduction of a new 'Environment Title'. This resulted into a genuine division into different sectors of the level of environmental protection.

⁷ See Bishop and Walker, *The Economics of EC Competition Law: Concepts, Application and Measurement*, Sweet and Maxwell 3rd edition (2010)

The Environment became an official EU Policy area with the signing of the European Union Treaty (the Treaty of Maastricht). Article 130 was also amended to enable environmental (and other) measures to be passed by a qualified majority of the Council, in contrast to the past where environmental measures were passed unanimously. Not to overreach State Sovereignty, Article 3 was also amended to include and emphasise the importance of the Subsidiarity Principle; the European Union only takes actions in those areas that are particularly suited to a resolution at Union level.

A provision was added with the signing of the Treaty of Amsterdam, requiring that all Union policies and activities must integrate within their definition and implementation environmental protection. A formal recognition as a legal objective was given to sustainable development, formalised subsequently as one of the EU's fundamental goals.

The Treaty of Lisbon which entered into force in 2009 was designed to change the workings of the EU. Amongst other things it gave legally binding force to the Charter of Fundamental Rights. Environmental protection features under the EU Charter of Fundamental Rights; Article 37 on Environmental Protection states that "a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development".

Article 191(2) requires high level of environmental protection; however the Charter article is broader since it covers all Union policies. This does not give the citizens a right to claim in courts for positive action but it could serve as a basis for a demand of a judicial review of legislative acts and/or omissions in cases where the EU Institutions or Member States would have manifestly breached their margin of discretion.

The principle of sustainable development as mentioned in Article 3 TEU states the objectives of the EU and defines the principle of sustainable development in Europe with its 3 elements, being economic, social and environmental. Article 3 TEU also recognises sustainable development as one of the specific policy goals of the EU in its external relations; taking the implementation of the principle of sustainable development beyond the Union.

Article 11 TFEU promotes the implementation of the principle of sustainable development through the integration of environmental protection requirements. In fact it states that "environmental protection requirements must be integrated into the definition and implementation of Union policies and activities, in particular with a view to promoting sustainable development".

For the first time, the Treaty of Lisbon defined the different categories of the Union's competences; Articles 2-6 TFEU list the respective areas for each type of competence. Article 4 TFEU lists the areas where the Union has shared competence with Member States, amongst which are section (d) agriculture and fisheries, excluding the conservation of marine biological resources; and section (e) environment.

The pre-Lisbon treaty gap in relation to compliance with environmental law has been eliminated. The Lisbon Treaty left its impact on climate change policy, due to changes in the provisions for the EU environmental policy and the new chapter establishing the legal basis for an EU energy policy.

Through the Lisbon Treaty the democratic legitimacy of the EU decision-making process was improved. The ordinary legislative procedure continues to be the main rule for the adoption of environmental legislation, same as the adoption of the legally binding acts setting out the General Action Programmes which programmes define the priority objectives of the EU environmental policy.

The Lisbon Treaty makes it possible for climate and energy measures to be based in different Treaty provisions with different consequences in terms of competences and procedures. As a result, recently, the EU Council has played a vital role in the adaptation and setting up of policies in regards to climate change.

After the Lisbon Treaty, in terms of the environment, the major changes were related explicitly to climate change. Most of the previous Community objectives on the environment were given more importance as they have now become general Union objectives. The international and external environmental role of the EU was given more prominence through the Lisbon Treaty, mainly pursuant to Article 3 and Article 21 TEU.

The history of European law and legislation with reference to the environment has evolved since the 1960s. The European project has expanded from a project focused mainly on a common market and trade to address new social challenges. EU environmental policy has responded to the needs and challenges that modern lifestyle has presented. The tension between national and international governance, policy making processes, better implementation of legislation and increased effectiveness are still present. It is up to the Union to try and make sure that these are addressed for the sake of the conservation and better use of the global environment.

3. Secondary Legislation and Other Important Agreements

The Waste Framework Directive⁸ is the legal framework related to waste management in the European Union. Designed to protect the environment in general and the health of humans, by putting emphasis on the proper management of waste, its recovery and recycling methods with the aim of reducing the impact on natural resources while improving their usage. Central to the Waste Framework Directive is the Waste Hierarchy, which is based on the 4 concepts of prevention, reuse, recovery and recycle. It confirms the Polluter Pays Principle which was originally introduced in the First Community Environmental Action Programme back in the 1970s. It also introduces the

⁸ Directive 2008/98/EC of the European Parliament and of the Council on Waste and repealing certain directives

concept of Extended Producer Responsibility, by which manufacturers are given the responsibility of good disposal of products when they are returned after being used.

This directive puts a lot of pressure on waste management, in the sense that it is important that waste is treated without any risk to water, air, soil, plants and animals, without causing other disturbance such as noise pollution, or else harming the countryside, places of interest or habitats. The directive puts on Member States the responsibility of establishing waste management plans and other waste prevention programmes. These plans involve the responsibility of producers of waste or holders of waste to either treat the waste themselves or else have it treated by an officially recognised operator. Waste oils, bio-oils and hazardous waste should be treated as per the special conditions listed in the directive. For the first time also, the Waste Framework Directive introduced recycling targets for different types of wastes to be achieved by 2020.

The EU Landfill Directive⁹ is also paramount, as it established how waste can be disposed of. Landfilling, which involves the burying of waste in the ground, is regarded as the least environmental friendly of them all. The aims of this directive are to prevent and reduce as much as possible the effect of landfilling on water (both ground water and surface water), soil, human health and air. As a directive it is a technical one, as first of all it divides landfill sites into three categories. National governments of Member States are obliged to set up national strategies by which the use of landfills is progressively reduced. Only treated waste can go to landfills. Operators charge a price for disposing of waste. Through this directive, national authorities have to make sure that the price which is charged covers all the costs involved from the beginning of operation of the site(s) to its closure. A permit has to be issued for an operator of a site to be used as a landfill. This directive was needed to make sure that there is synergy with other pieces of European policies and legislation.

All the things we consume somehow or another generate waste, once their shelf life is over. But sometimes it is more the packaging of things we consume that generate more waste, at times even more harmful than the consumables themselves. The Packaging Directive¹⁰ aims at reducing the production of package waste, while instilling a sense of reuse and recycling of packaging waste. Other forms of recovery of packaging waste are also encouraged. This also leads to a new way of rethinking towards a Circular Economy.

Regardless of the material used, all packaging waste in the European market falls under this Directive. It does not matter from where it originates; it could be from an office, from households, industrial, commercial, from a shop or even a service. In this way through national schemes, mainly the Extended Producer Responsibility scheme, Member States have to take measures and introduce incentives to prevent the generation

⁹ Council Directive 1999/31/EC of 26 April 1999 on the Landfill of Waste

¹⁰ Directive 94/62/EC on packaging and packaging waste; Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste

of packaging waste, while reducing the negative effects of packaging waste on the environment as much as possible. This directive also sets recycling deadlines and targets that have to be met by 2025 and 2030. Also all packaging placed on the EU market has to meet certain criteria as per Annex II of the mentioned directive. It is up to the European Commission to reinforce the requirements for the implementation of the rules and regulations leading to high quality recycling or even a Circular Economy.

Through the Directive on electric and electronic waste, end-of-life vehicles, batteries and accumulators and waste batteries and accumulators¹¹, which recasts and amends the original WEEE directive¹², the environment and human health are protected by the prevention and reduction in the creation of electrical and electronic waste, while promoting the reuse and recycling of electrical and electronic equipment. While this directive does not apply to all type of electrical and electronic equipment, it categorises WEEE into different categories. Cooperation between producers and recycles is very important in order to minimise WEEE, while ensuring that the minimum annual WEEE collection rate is retained. Random inspections, especially those aimed to make sure that WEEE disposal has been treated properly is also vital for the minimum treatment targets to be met.

The Waste Shipment Regulation¹³ specifies the conditions under which waste can be shipped between countries, including countries within the European Union's borders, between countries of EFTA, OECD, and countries which are parties to the Basel Convention. This Regulation introduced a system by which waste is shipped between the above mentioned borders. These rules are there to regulate and control waste shipments with the aim of better environmental protection. It covers almost all types of waste. The shipment of waste is controlled through two types of procedures, being the general information requirement pursuant to Article 18, and the procedure of prior written notification and consent. In 2014 the Waste Shipment Regulation was amended so that the inspection system is strengthened. All parties involved should ensure that the waste gets disposed of in a way that is environmentally sound while respecting both EU and international rules.

The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal¹⁴ is the most comprehensive global environmental agreement on hazardous waste and other waste. Its aims are to protect human health and the environment from the effects of such wastes. Through its 8 Annexes, the Convention introduces also notification procedures and additional requirements to make sure that there are no illegal shipments, no danger and that the parties adhere to international rules especially as regards packaging, labelling and transportation of waste.

¹¹ Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)

¹² Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE)

¹³ Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on Shipments of Waste

¹⁴ Decision 93/98/EEC

4. Environmental Economics

There is an inevitable link between the natural environment, law and the economy. As a result of this, competition law is going through a process of 'economization'. In fact the theory of the consumer¹⁵, the theory of the firm¹⁶ and the theory of the market interaction¹⁷ are regarded as the basic parameters adopted by competition authorities in their assessments and recommendations. Ultimately the main aim of environmental economics is the analysis of the economy's impact on the environment and in what way a balance is to be achieved between the environment, the economy and other social goals¹⁸.

Through one of its communications¹⁹, the Commission emphasises the fact that it envisages a society which is more prosperous and just, while working for a cleaner, safer and healthier environment. As stated by Perez²⁰, the conflicts which arise between trade, law and the environment require a set of multi-dimensional ideas to be resolved and not simply the traditional legal formulas or pure economic models. For an efficient environmental-economical relationship, the overall amount of pollution control and the responsible allocation of pollution control to specific polluters are a must.

Since the environment provides us with life-support systems that sustain our existence, it is considered as a special asset, but at the same time it is also highly sensitive as a resource. As a matter of fact, when faced with environmental externalities, most of the times, governments are very quick to intervene. For the sake of environmental protection, the correction of failure within the internal market is simply not enough!

5. The New Phenomenon of Circular Economy – Closing the Loop ²¹ and the Green Deal Pact ²²

¹⁵ This answers the question on how a rational consumer would make consumption decisions

¹⁶ Firms exist primarily with the aim of making profits; all decisions taken by firms are with this intention ¹⁷ The interaction between demand, price and consumption: regarded as those social interactions mediated by the market

¹⁸ Kolstrad D. Charles, *Environmental Economics*, Oxford University Press (2000)

¹⁹ Communication from the Commission, A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development, COM (2001) 264 final

²⁰ Oren Perez, The Many Faces of the Trade-Environment Conflict: Some Lessons for the Constitutionalization Project, European Integration online Papers (EloP) Vol.6 (2002), No. 11, p.2

²¹ Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the Circular Economy Action Plan COM/2019/190final

²² Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the European Green Deal COM/2019/640final

The year 2018 saw a revision of Europe's two most important directives for packaging which have to be implemented by all EU Member States by end 2020. They are part of the Circular Economy package while they represent a fundamental paradigm shift in packaging policy; a shift that is supported wholeheartedly by the metal packaging sector. The focus is no longer on renewables or resource efficiency but on achieving a Circular Economy in which the value of products, materials and resources is maintained in the economy for as long as possible.

The action plan included in the mentioned report, which in itself includes 54 actions, sketches out future challenges that our economy has to face and overcome in order to move towards a climate-neutral, Circular Economy, where the pressure on the environment and the ecosystem is minimised. The concept of the Circular Economy, which saw its inception some 40 years ago seems to be the top priority of the Union for the next 50 years. The Green Deal is "a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use", according to the communication. Through this deal, which has at its roots the Circular Economy, the EU is aiming at transforming the society into a fair and prosperous one, with an economy which is resource-efficient and competitive and where the society into a fair and prosperous one, with an economy which is resource-efficient and competitive and prosperous one, with an economy the EU is aiming at transforming the society into a fair and prosperous one, with an economy which is resource-efficient and competitive and where there are no net greenhouse emissions by 2050.

Just reducing the weight of packaging is no longer considered packaging waste prevention but instead there is a push for packaging materials that are effectively recycled. The Commission is proposing new recycling rates for overall packaging and per packaging material for 2025 and 2030 which need to be achieved by all Member States, individually, and not just across the EU. There has also been a radical change in the way recycling rates are calculated; only packaging waste that is effectively recycled can now be reported as recycled. This implies that collection is no longer the same as recycling; what is collected and not actually recycled will no longer count. Finally, this new pact proposes also that packaging has to be designed for circularity.

The Extended Producer Responsibility (EPR), by which producers put packaged products on the market and have to provide for the main financial contribution for collection and sorting, has been around for a while. EPR fees will now be modulated based on real end-of life costs, providing financial incentives for products that are easily recyclable, re-usable and repairable. This will reshuffle costs among materials.

In Kestusis Sadauskas's words²³, the shift from a linear to a Circular Economy has to be an intelligent one, in the sense that we have to incentivise activities that prevent waste such as absolute reduction targets for resources and the development of policy framework at EU level to cover products with high material-impact. We also have to rethink our product policy for better quality products, which last longer, and which are

²³ Director for Circular Economy and Green Growth, DG Environment, European Commission

easy to repair and upgrade. This is why Europe is considered as a leader in the protection of the environment while at the same time safeguarding the internal market.

6. Concluding Remarks

Through the historical shift and development in EU environmental policy-making, and the applied policy network, both institutional and societal actors have gained importance. Although at EU level, the Council of Ministers still holds the power in terms of EU's policy-making processes, Qualified Majority Voting (QMV) has given more power to the Member States in the policy development process. Also, since its inception, the Commission's Environment Directorate has grown substantially, to include within its remit all areas of environmental policy. As a result of the institutional changes mentioned above, industry associations started recognising the environment as a good business opportunity for competition and trade even with states outside the Union. There is an urgent need to bridge the gap between an inter-governmentalistic approach and a multi-level governance approach to the EU, especially since policy networks vary drastically from one sector to the other. For example foreign and security policy is highly inter-governmental, whereas environmental policy is regarded as highly pluralist. A balance has to be found between the two theoretical extremes in order to provide a better understanding and ultimately application in the EU's day-to-day policymaking and decision-taking.

On the other hand, the principles of the Circular Economy are structured on the need to reduce resource depletion and environmental degradation, while at the same time retaining the value of the produced and recovered materials as long as possible in the economy. Although the Circular Economy is regarded by the Commission as one of the basic pillars in greening the economy, there are still some economies which find it difficult to optimally respond to the changing economic conditions. This could be a result of a too simplistic existing literature, or even because the involved considerations are very complex.

This literature review has portrayed the different mechanisms which are already available at EU level within the field of waste management and the new concept of Circular Economy. The mentioned literature is crucial and will help to further substantiate and validate arguments throughout. By virtue of this exposition we may deduct that although there have been ample studies and commissioned reports on waste management, its re-use and recycling, literature relating to the implementation and actual enforcement practices in terms of the Circular Economy is still lacking.

This study is aimed to fill some of the existing gaps in literature while providing an analysis on the phenomenon of Circular Economy with particular focus on its practical applicability across different Member States mainly through EPR schemes.

Chapter 2:

The EU CE Package – Current Environmental Legislation and Legislative Proposals for the Way Forward

A fundamental interest by the European Commission to improve substantially the resource efficiency of the European economy while at the same time transitioning towards a Circular Economy (CE), resulted in the introduction of the Roadmap to a Resource Efficient Europe $(2011)^{24}$ and later on The Action Plan towards the Circular Economy $(2015)^{25}$. The wide concept of Circular Economy involves not only technology and innovation, but also new business models, new financial structures and ultimately new and updated policies and set of legislations.

1. The EU Circular Economy Package

In July 2014, under the former President Barroso, the Commission adopted a Circular Economy Package. Through its communication²⁶, the Commission emphasised on:

- a. the increase of recycling while losing the less valuable materials possible;
- b. the creation of economic growth;
- c. the design of new business models and eco-designs towards zero-waste; and
- d. the reduction of greenhouse emissions.

This Circular Economy package was criticised as it did not reflect the various production structures across Member States, while it put a lot of emphasis on waste. As a result, the package was withdrawn by the Commission which followed, lead by Jean-Claude Junker. Forward thinking entities that believed that the Circular Economy was the only way forward led the Commission to rethink its views, and as a result it came up with a new package in 2015.

The new proposed package is made up of two parts – the first part gives a detailed explanation of the proposals and an Annex with the proposed timescales. *Closing the* $Loop - An \ EU \ Action \ Plan \ for \ the \ Circular \ Economy^{27}$ focuses on the whole cycle – from the design of the product to its disposal and recovery. With this package, the EU is leading by example for others to follow in the environment protection sector. It aims at

²⁴ 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, COM(2011) 571

²⁵ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Closing the Loop – An EU Action Plan for the Circular Economy, COM (2015) 614 final

²⁶ EMF, Towards the Circular Economy: Economic and Business Rationale for an Accelerated Transition, Ellen MacArthur Foundation (2012)

²⁷ European Commission 2015b, Closing the Loop – An EU Action Plan for the Circular Economy (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions No. COM (2015) 614/2. Brussels, European Commission

presenting "*the most modern waste legislation in the world*".²⁸ Amongst the 54 actions included in the action plan, the new package includes:

- a. a review of the eco-design legislation;
- b. testing programmes under Horizon 2020;
- c. requirements for dismantling, reusing and recycling of electric products;
- d. the promotion of green procurement;
- e. the inclusion of individual responsibility under the Extended Producer Responsibility scheme;
- f. a review of all waste directives (mentioned above);
- g. stricter rules for calculating recycling rates.

On 11 December 2019, a finalised version of the European Green Deal was unveiled by the Commission in which the Circular Economy has been mentioned as "*number one priority*"²⁹. Amongst the 50 steps in 7 different areas to be taken, the Circular Economy and sustainable resource management will be given utmost priority, as per the Green Deal. The new action plan for the Circular Economy which was published by the Commission on 11 March 2020, promises to be a continuation of what has been initiated in 2015.

2. Before the Circular Economy Package

Although today the environment and its protection is a key priority to the European Union, this was not always the case. The main focus of the Treaty of Rome which established the European Economic Community (1957) was the common market and the customs union. In fact there were no provisions whatsoever in this treaty as regards the environment. Through the utilisation of trade provisions, the EU began eliminating differing member product standards or restrictions that were environmentally-based. From there has proceeded to develop, maintain, and improve an environmental regulatory system that encourages the EU's original economic purpose.

Many of the principles that guide the EU environmental law today were introduced in 1972 with the First Action Programme, including the Precautionary Principle and the Polluter Pays Principle. The environment became an official EU Policy area with the signing of the European Union Treaty (the Treaty of Maastricht), and later on through the signing of the Lisbon Treaty (Art 37 TFEU), "*a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development*".

²⁸ European Commission Press Release, Circular Economy: New rules will make EU the global frontrunner in waste management and recycling, Brussels, 22 May 2018

²⁹ EU Commission President Ursula von der Leyen, European Union, 2019, Source: EC-Audio-visual Service

The history of European law and legislation in terms of the environment has evolved since the 1960s. The European project has expanded from a project focused mainly on a common market and trade to address new social challenges. EU environmental policy has responded to the needs and challenges that modern lifestyle has presented.

3. Current EU Environmental Legislation

Through its communications, the European Commission has made it clear that if environmental problems are not tackled as early as possible, the EU's economy will suffer financial losses and excessive disruptions³⁰. Thus the increased concerns with environmental protection could be seen through the evolution of policies and legislative instruments at EU level.

Environmental measures at Union level can be grouped up into three categories:

- a. policies regarding waste reduction
- b. policies regarding substance restriction
- c. policies regarding product performance

3.1 Legislation on Waste Reduction

Although "*a directive is a legislative act that sets out a goal that all EU countries must achieve*"³¹, each Member State is sovereign in the sense of the ways and means in reaching such goals. With regards to environment protection such directives can either be general requirements or else specific to certain products.

The Waste Framework Directive (revised) binds all Member States, while giving them a margin of discretion in its assessment. This Directive was repealed by Council Directive (EC) 2006/12 on waste which consolidates the 1975 Directive and its amendments.

A better way of living, both on an economic and social aspect, implies a higher level of waste generation. This in turn effects the management and control of the waste being created, and thus legal measures for enforcement need to be updated. Through this revised directive, the EU's Commission is committed to reduce the legislative burdens through better regulation since it is highly important to keep the balance between simple, effective and necessary environmental regulations.

Article 1(1) (a) of Directive 2006/12/EC on Waste, states that waste is set to be "*any* substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard"³². The interpretations of the definitions of waste can vary; if taken narrowly they can include recycling and recovery; on the other hand if taken widely such interpretations can include also those materials going for recovery

³⁰ European Commission Communication, *Facts and Figures – the links between EU's economy and environment*, Luxembourg, 2007

³¹ https://europa.eu/european-union/eu-law/legal-acts_en

³² Council Directive (EC) 2006/12 on waste [2006] OJ L 114/9

and recycling. In both cases, how one defines waste is based on the holder's intention. Article 6 of the new revised directive introduces a new "*end-of-waste*" status.

The Waste Hierarchy is part and parcel of the Waste Directive. Such hierarchy is vital in waste prevention and management as it is appropriate for specific waste streams. Such concept is vital for the development of different waste management strategies in order to get the maximum benefits from the generation of waste while generating the least waste possible. This pyramid hierarchy is built on prevention, preparation for reuse, recycling, other recovery and disposal.

The Waste Directive also sets recycling targets, in fact pursuant to Article 11(2), Member States are required to "*take the necessary measures designed to achieve*"³³ the set targets by 2020, even though these targets and their precise nature seem to be ambiguous. Member States are also required by Article 29 of the set directive to develop national waste prevention programmes.

Although the new revised directive on waste is much more diplomatic than the previous one, in the sense that it gives Member States more flexibility in its implementation and transposition, there is also the risk that interpretations may vary in such a way that the regulatory system between the different 27 Member States will become obsolete at its very inception.

The Landfill of Waste Directive ³⁴ aims to reduce and prevent as much as possible the adverse effects of landfill of waste on the environment. Through this Directive waste is also categorised through specific technical requirements. Another distinction of waste, what is a product, what is a product residue and by-product in a production context is given by the Commission through its communication on waste and by-products³⁵.

EU Member States are obliged to meet set recovery and recycling targets as per the Packaging Directive³⁶. They also have an obligation to recover and recycle used packaging. Free circulation within the EEA is guaranteed to those products having packaging that meets the set requirements. This directive also set the ball rolling for the indirect introduction of what is referred to today as Eco-design.

The End-of-Life Vehicles (ELV) Directive³⁷ and the Batteries Directive³⁸ are another two product-specific waste measures as one covers motor cars and light commercial vehicles, and the other one the controlled disposal of spent batteries and accumulators.

³³ *ibid*.

³⁴ Council Directive 1993/31/EC of 26 April 1999 on the landfill of waste

³⁵ Commission Communication of 21 February 2007 on the Interpretative Communication on waste and by-products [COM(2007) 59]

³⁶ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

³⁷ European Parliament and Council Directive 2000/53/EC of 18 September 2000 on end-of-life vehicles

³⁸ European Parliament and Council Directive 2006/66/EC of 6 September 2006 on batteries and

Electronic waste is regarded as one of the fastest growing streams in the EU. Due to the complex mixture of components and materials used in such products, waste management is of utmost importance, mainly due to the hazardous matter, that if not managed properly can cause various problems to both the environment in general and the health of humans, animals and plant life. For this reason, two pieces of legislation were introduced to treat this matter. The Waste Electrical and Electronic Equipment (WEEE) Directive³⁹, focuses mostly on the collection schemes by which consumers are encouraged to return their WEEE for free with emphasis on re-use and recycling.

Practically all the above mentioned legislation aims to reduce waste, and treat waste in an environmentally sustainable manner. Apart from that it also adopts the polluter pays principle whereby most of the waste has to be disposed of and treated by its producer. In fact most of these Directives emphasize on one of the main obligations under waste legislation that of producer responsibility, which also set regulations and quota management on what is exported and imported within the EU market.

3.2 Legislation on Substance Restriction

Since all products are subject to the major requirements of hazardous substance restriction, the legislation is formulated as EU Regulations. This implies that there is no need for any amendments of national legislation as such measures apply directly across the Union. At the same time, Member States are still obliged to set up some form of authorities to supervise the market while imposing penalties in cases of non-compliance.

The only directive as part of the legislation on substance restriction is the RoHS Directive⁴⁰ which entered into force in February 2003 and later on its revised version became effective as from 3rd January 2013. The aim of this directive is to restrict the use of hazardous substances and heavy metals such as lead and mercury, amongst others, in electrical and electronic equipment, and thus introducing the same technical standards for all Member States. Through the CE marking manufacturers show that the products which they are putting on the market are in conformity with the said directive.

Examples of EU Regulations dealing with substance restrictions are the Ozone Depleting Substances Regulation⁴¹, the Fluorinated Greenhouse Gases Regulation⁴², the Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)⁴³, and the Biocidal Product Regulation⁴⁴.

³⁹ European Parliament and Council Directive 2002/96/EC of 27 January 2003 on waste electrical and electronic equipment (WEEE)

⁴⁰ European Parliament and Council Directive 2002/95/EC of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment

⁴¹ Regulation (EC) 1005/2009 on substances that deplete the ozone layer

⁴² Regulation (EU) 517/2014 on fluorinated greenhouse gases

⁴³ Regulation (EC) 197/2006 on registration, evaluation, authorisation and restriction of chemicals (REACH)

⁴⁴ Regulation (EU) 528/2012 on the making available on the market and use of biocidal products
This set of legislation controls mainly hazardous material and its control and disposal. Furthermore, it also imposes harmonized restrictions on what come in and goes out of the European market.

3.3 Legislation on Performances of Products Put on the Market

The Eco-design Directive⁴⁵ is a framework directive, since it establishes a framework that complements other community legal instruments. It is aimed mainly at manufacturers and the performance criteria that they have to meet so that their products will be placed 'legally' on the market. The CE marking is proof of conformity. Although this directive aims at harmonizing standards, it lacks in giving detail on how compliance is assessed.

As in the previous cases this set of legislation not only controls waste management, but has market and economic implications. The CE marking is a certification to several consumers that the products which they buy are in accordance with EU standards, and also an exclusive guarantee for the free circulation of such products within the EU market.

4. The New Circular Economy Action Plan – Legislative Proposals and Initiatives

Since the 1970s the Union has seen big improvements in EU waste laws especially dealing with waste management, however these laws and legislations have to be modernised and updated to make them fit for purpose – the Circular Economy and the digital age. Through the Circular Economy Action Plan the Commission is presenting a set of "*interrelated initiatives to establish a strong and coherent product policy framework*".⁴⁶

4.1 The Design of Sustainable Products

As seen in section 2.3, the EU initiatives and legislations currently in place already address to a certain extent the sustainability of products. This is done both on a voluntary basis and in other areas on a mandatory one, mainly through the Eco-design Directive and the EU Ecolabel⁴⁷. Through the new Eco-design and Energy Labelling Working Plan 2020-2024, the Commission is proposing a new legislative initiative by which the Eco-design Directive is widened beyond energy-related products and goods while including also services. This will be possible through concerted inspections and

⁴⁵ European Parliament and Council Directive 2009/125/EC of 6 July 2005 establishing a framework for the setting of eco-design requirements for energy-using products

⁴⁶ COM (2020) 98 final

⁴⁷ Regulation (EC) 66/2010 on the EU Ecolabel

actions targeted to monitor products placed on EU markets and the establishment of a common European Dataspace for Smart Circular Applications⁴⁸.

4.2 Consumers' Empowerment

Consumers' participation has a vital role in the sustainable product policy framework in a Circular Economy. For this reason the Commission is proposing for EU consumer law to be revised, in order for consumers to be given more protection against green washing and premature obsolescence. Through a review of Directive 2019/771⁴⁹, and the establishment of a new 'right to repair', the Commission is proposing changes in the new horizontal material rights for consumers. Also, the Commission is proposing a minimum mandatory green public procurement (GPP) targets and criteria, aimed at public authorities as consumers.

4.3 Circularity in Production Processes

Through its Industrial Strategy⁵⁰, the Commission is proposing a review of the Industrial Emissions Directive⁵¹, the implementation of the Bio-economy Action Plan⁵², and the new SME Strategy⁵³. In this way, industry will be experiencing a wider transformation aiming at climate-neutrality and competition on a long-term basis. This can be possible through industrial collaboration, where SMEs have a very important role, especially when it comes to the training of employees and collaboration in knowledge transfer between different enterprises.

5. Key Product Value Chains

5.1 Electronics and ICT

For this sector, the Commission is aiming towards longer product lifetimes, and other regulatory measures. For this reason, it will be presenting a Circular Electronics Initiative, a review of EU rules on restrictions of hazardous substances in electrical and electronic equipment, and guidance for better coherence with relevant REACH and Ecodesign legislations.

⁴⁸ COM (2020) 67 final

⁴⁹ European Parliament and Council Directive 2019/771/EC of 20 May 2019 on certain aspects concerning contracts for the sale of goods

⁵⁰ COM (2020) 102

⁵¹ European Parliament and Council Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

⁵² COM (2018) 763 final

⁵³ COM (2020) 103

5.2 Batteries and Vehicles

Following the Batteries Directive⁵⁴, a new regulatory framework for batteries is being proposed in order to enhance battery sustainability mainly for the purpose of electromobility, thus boosting Circular Economy in the battery sector. The Commission is proposing also a revision of the rules on end-of-life vehicles primarily with the aim of improving the efficiency of recycling. This will create a better link between issues of design and end-of-life treatment, thus focusing more on Circular Economy.

5.3 Packaging

The essential requirements for packaging which will be allowed in the European market will be reinforced through a review of Directive 94/62/EC⁵⁵. EU wide labelling will be assessed for harmonised separate collection system across Member States. Food contact materials and their safe recycling will be strictly monitored through the implementation of new rules apart from the PET. The Commission is also aiming to monitor the access of drinkable tap water in public places through the implementation of the requirements of the Drinking Water Directive. In this way the community will depend less on bottled water and thus less waste will be generated from plastic bottles and packaging.

5.4 Plastics

Although the EU Strategy for Plastics in the Circular Economy⁵⁶ introduced a set of initiatives aimed at dealing with this serious public concern, mandatory requirements for recycled content and waste reduction measures will be proposed for a more sustainable use of plastics. The Commission will be addressing also the presence of micro-plastics in the environment, while monitoring closely the implementation of the new Directive on Single Use Plastic Products⁵⁷.

5.5 Textiles

For a stronger industrial competition and innovation in this sector, the Commission is proposing a comprehensive EU Strategy for Textiles which will put more emphasis also on extended producer responsibility.

⁵⁴ European Parliament and Council Directive 2006/66/EC of 6 September 2006 on batteries and accumulators and waste batteries and accumulators repealing Directive 91/157/EEC

⁵⁵ Op. cit.

⁵⁶ COM (2018) 28 final

⁵⁷ European Parliament and Council Directive 2019/904/EU of 5 June 2019 on the reduction of the impact of certain plastic products on the environment

5.6 Construction and Buildings

Material efficiency and climate impacts are very important in this sector. Thus the Commission will be launching a new comprehensive Strategy for a Sustainable Built Environment. A revision of the Construction Product Regulation⁵⁸ is proposed for a better assessment of the sustainability performance of construction.

5.7 Food, Water and Nutrients

Food waste reduction will be one of the Commission's targets as part of the review of the Waste Framework Directive mentioned earlier. The aim is for an increase in food sustainability and consumption in a sustainable manner. These initiatives will target amongst others tableware and cutlery, water reuse, and single-use packaging. The Commission is also considering the review of the wastewater treatment and sewage sludge directive for a more sustainable use of nutrients.

6. General Conclusions

Two of the most important pieces of legislation in terms of waste management are the Waste Framework Directive and the Eco-design Directives. Waste regulation is founded on the polluter pays principle, the principle of extended producer responsibility and the waste hierarchy – pillars which emerged from previous EU Treaties. The newly proposed packages for the Circular Economy involve a complete shift from a linear system thinking to a circular one, where the objective is to minimize the production of waste while maximising value at each part of the product's life cycle. To realise such an economy certain action has to be taken on several fronts, mainly in research and innovation, communication and information strategies, but above all in policies which promote desirable activities while punishing those which are detrimental to society.

The next chapter will analyse the practicality of the available legislation through case law. The newly proposed initiatives will be analysed along the same parameters in order to predict whether these can guarantee the Commission's aim of creating a viable Circular Economy.

⁵⁸ Regulation (EU) 305/2011 on harmonised conditions for the marketing of construction products

Chapter 3:

The Legal Framework Regulating EU Waste Management – The Line of Thought of the European Court of Justice

This chapter will give an overview of European Union waste legislation and its interpretation by the European Court of Justice, with the aim of analysing the difficulties, limitations and defaults of its adaptation by various Member States. This analysis will help one to understand better the efforts and at the same time also the difficulties which Member States have to face in order to move on with the EU initiative to promote and adopt the concept of a Circular Economy.

1. What is 'Waste' and Who is 'the Waste Holder'?

Article 1 of Directive 75/442/EEC, amended by Directive 91/156/EEC defines waste as "any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard." At the same time, waste is described by the Basel Convention as "substances or objects which are disposed of by the provisions of national law." Notwithstanding its vital importance within the waste management structure, the definition of waste and how it is 'discarded' are not always that straightforward, and various interpretations have led to heated debates by academics and a series of judicial reviews to say the least. While the main focus of waste legislation is the protection of the environment and that of public health, waste management involves other actors which range from transport limitations to energy recovery, incineration, distortions of the internal market and competition. The Court of Justice has been called more than once to take action or give judgments on preliminary rulings as a result of the ambiguity in waste legislation and the broad definition of waste.

Legally speaking, waste is relative in the sense that when an object loses its primary function to the user it loses its value. However in the concept of re-use, re-cycle and ultimately the Circular Economy what could be considered as waste in its primary function, could also have a secondary function, not to mention the significant economic value that it can create in the process. More than once, the Commission has recognised in its communications (COM (96) 399 final), that there is a very fine line between when a product becomes waste and when waste becomes a product. This lack of specific definition causes difficulty in the harmonized applicability of Union legislation. Through case law it could be easily seen that the notion of 'waste' does not distinguish between a product having a commercial value or not, not even the waste's destination or its geographical purpose.

2. Case Law with Reference to the Meaning of 'Waste', 'Holder of Waste' and 'Producer of Waste'

2.1 The Paul van de Walle judgement ⁵⁹

For the first time, on 7th September 2004, the Waste Framework Directive was applied by the Court of Justice in this particular case with reference to contaminated land. The case involved the leaking of petrol from underground tanks at a filling station owned by Texaco and operated by Van de Walle and others, in Brussels, Belgium. As a result of the leaked hydrocarbons the soil and groundwater got contaminated.

Originally the main aim of the Waste Framework Directive was the definition of 'waste' and the management of mainstream waste. In fact, the directive focuses on common waste management practices while identifying waste recovery operations and giving examples of ideal waste disposal without endangering the life of humans or causing harm to the environment. Also, as per directive, the necessary measures have to be taken by Member States with reference to the abandonment, dumping and uncontrolled waste disposal, while holders of waste have to manage it as per the said directive.

Although the illegal deposit of waste onto unlicensed land and the contamination of soil and ground water as a result of the released chemicals from waste were the subject of various legal litigation, contamination released 'accidentally' into the environment was not considered as being much a question of bad waste management or incorrect disposal practices. However in its conclusion on soil and ground water pollution as a result of accidentally released contaminants, the Court of Justice specified that such contaminants must be regarded as waste, also in line with the prohibition on abandonment, dumping and uncontrolled discharge of waste listed in the Waste Framework Directive. Leaked fuel is waste falling under the category Q4 of the directive.

The hydrocarbons were not intended to be produced by the holder, even though they were discarded involuntarily at the time of distribution. In fact the Court of Justice pointed out that "*a product which is not itself wanted for subsequent use and which the holder cannot economically re-use without prior processing must be considered to be a burden which the holder seeks to discard*".⁶⁰ The contaminated soil is also regarded as waste in terms of the Waste Framework Directive, since it cannot be separated from the spilled hydrocarbons and thus cannot be recovered for future use, unless going through the expanse of decontamination.

⁵⁹ Case C-1/03 Paul van de Walle, Daniel Laurent, Thierry Mersch and Texaco Belgium SA – Region de Bruxelles [2004] ECR I-763

⁶⁰ *ibid*, para 43

The practical consequences of such a decision brought about a lot of criticism in the legal world⁶¹. Just to mention a case in point, the United Kingdom had already in place a legal system which dealt successfully with the problems of contaminated land. This judgment transformed radically the legal position of the Member States concerned (i.e. Scotland and England) since the European Court of Justice interpreted 'waste' more broadly than what was being applied in the mentioned States.

2.2 The Mesquer judgement ⁶²

The questions sent for a preliminary ruling in this judgment were based on the meaning of waste as per Directive 2006/12/EC. In other words, can heavy fuel oil be termed as waste? Does a cargo of heavy fuel oil which got spilled into the sea accidentally by the ship transporting it fall within Category Q4 in Annex I to Directive 2006/12/EC? Mesquer was claiming that both Total International Ltd and Total France had to be held liable for the damage caused both as 'previous holders' of the waste, and as 'producer of the product from which the waste came'.

According to Advocate General Kokott, since heavy fuel oil is a product resulting from a refining process, and aimed to be used as a combustible fuel, it cannot be treated as waste within the meaning of Article I of the Waste Framework Directive. Another argument brought forward by the AG against heavy fuel oil being treated as waste is the fact that Directive 68/414 includes those strategic resources which can have a stockholding obligation. Heavy fuel oil is produced to be used, and thus it cannot be treated as waste.

The second question referred to the nature of the leaked fuel oil as waste. As per Article 1(a)(1) of the Waste Framework Directive, substances and objects are treated as waste, only if, their holder discards, intends to discard or is required to discard them. For the Court, accidentally spilled hydrocarbons are not regarded as a product which can be reused without processing, even if they can contaminate soil and groundwater. The holder did not intend to produce the mentioned hydrocarbons, even though they got discarded, in an involuntary manner, during the distribution process. On the other hand, once the heavy fuel oil got mixed with water and sediment, once it was discharged in the tanker, then it has to be treated as waste for the purpose of the Waste Framework Directive, since Article 2(1)(b) (iv) does not exclude oil waste from its scope.

⁶² Case C-188/07 *Masquer* [2009] ECR I-450

⁶¹ Nicolas de Sadeleer, Liability for Oil Pollution Damage versus Liability for Waste Management: The Polluter Pays Principle at the Rescue of the Victims, Journal of Environmental Law Vol. 21, No. 2 (2009), pp. 299-307, Oxford University Press

2.3 The Wallonia case ⁶³

This landmark judgement was important for the interpretation of the term 'discard', as the Court found Belgium in breach of two Community directives, Directive 75/442EEC and Directive 84/631EC (as emended by Council Directive 87/112/EEC). As per Article 3 of the first mentioned directive, Member States are encouraged to take the necessary steps in order to prevent, recycle and process waste, while disposing of waste in ways which do not cause harm to the health of humans or to the environment (Article 4). Waste disposal operations have also to be organised, authorised and supervised for optimal management (Article 5). On the other hand, Directive 84/631 focuses on the shipment of hazardous waste between Member States.

The fact that the region of Wallonia treated waste originating from foreign countries in a different manner than that of a national origin breached Directive 84/631. The fourth recital of the mentioned directive states that there should be no differences between the provisions on the disposal of hazardous waste which in turn lead to a distortion of the conditions of competition and thus having an effect on the internal market. The ban on the storage and tipping of waste triggers also Article 30 TFEU, since such a ban is considered as a measure having an equivalent effect on imports.

In its defence Belgium stated that waste has no commercial value and thus it cannot be considered as a good. The fact that the waste can be recycled and later on re-used will make it subject to a commercial transaction, and thus the Treaty provisions should apply to all types of waste products. Not only waste is a good in itself as defined by the treaty provisions, the disposal of waste is a big industry generating a lot of jobs and financial revenue.

Similar to the Court's judgement in the *Van Tiggele* case⁶⁴, the fact that certain administrative formalities have to be adhered to by traders and importers, cause a measure having an equivalent effect to quantitative restrictions.

2.4 Fipa Group Srl and others ruling⁶⁵

In this case a preliminary ruling was requested particularly bringing into question the applicability of the holder of waste and the polluter-pays principle, and the other principles governing preventive action with reference to environmental damage, as laid down in Article 191(2) TFEU, and Articles 1 and 8(3) of the Environmental Liability Directive.

As per Article 8 of the Directive, Member States have to take the necessary measures to make sure that waste is handled, recovered and disposed of without harming the environment or putting a risk to human life. For this reason, various Italian competent

⁶³ Case C-2/90 Commission of the European Communities v Kingdom of Belgium [1992] ECR I-7411

⁶⁴ Case C-82/77 Openbaar Ministerie (Public Prosecutor) of the Kingdom of the v Jacobus Philippus van Tiggele [1978] ECR I-0025

⁶⁵ Case C-534/13 Ministero dell'Ambiente e della Tutela del Territorio e del Mare and Others v Fipa Group srl and Others [2015] ECR I-2393

directorates, including the Ministry for Health and the Ministry for the Environment ordered for specific emergency safety measures to be adopted by the owners of plots of land for the protection of the groundwater table and the rehabilitation of the land. Spilled chemicals causing contamination to the soil are considered to be hazardous waste under Council Directive 91/689/EEC of 12 December 1991 on hazardous waste and Council Decision 94/904/EC of 22 December 1994 establishing a list of hazardous waste pursuant to Article 1(4) of Directive 91/689. As 'guardians of the land', the three undertakings had to incur all the costs to satisfy the decisions addressed to them, and thus proceedings were brought before the Regional Administrative Court of Tuscany claiming that the undertakings had no direct responsibility in the contamination of the site and thus, as per the polluter-pays principle, they were not financially liable.

The first subparagraph of Article 191(2) TFEU immediately invokes the polluter-pays principle, stating that, "the prevention and remedying of environmental damage should be implemented through the furtherance of the "polluter pays" principle, as indicated in the Treaty and in line with the principle of sustainable development". This implies that operators should be held financially liable for the environmental damage caused, while practices have to be developed so that the risks of damage are minimised, and so in turn financial liabilities are also reduced.

As per Article 8(3) of Directive 2004/35, if the operator can prove that it was a third party who caused the environmental damage, then he is not to bear the costs of the preventive and/or remedial action. Also, since there is no causal link between the operator and the environmental damage, it is up to the national courts to decide on the matter, keeping in mind that as per Article 16 of Directive 2004/35 together with Article 193 TFEU, Member States are able to adopt more stringent measures in terms of prevention and remedying of environmental damage. When all considerations are applied, in this case, Directive 2004/35 does not preclude national legislation. This implies that the owners of the land are not liable to adopt preventive and remedial measures since it was impossible to identify the polluter of the plot of land. As per Directive, the imposition of the burden is on that one who caused the waste, independently from being holders or former holders of the waste or even producers of the product from which the waste came.

2.5 Other recent judgements

Recent judgements such as C-317/07⁶⁶ (crude gas produced from waste), C-195/05⁶⁷ (leftover from food scraps intended for animal feed), C-194/05⁶⁸ (excavated earth and rocks intended for re-use), and others, are an indication of the different concepts attributed to 'waste' in Europe. Such varieties could be a result of culture, historical and geographical conditions. At times they could be attributed also to administrative

⁶⁶ Case C-317/07 Lahti Energia Oy [2008] ECR I-09051

⁶⁷ Case C-195/05 Commission of the European Communities v Italian Republic [2007] ECR I-11699

⁶⁸ Case C-194/05 Commission of the European Communities v Italian Republic [2007] ECR I-11661

methods devised by the Member States for the proper management of waste. Although the Waste Framework Directive is aimed to harmonize such interpretations and definitions, the European Commission has declared more than once that at times the methods applied by Member States depart from the European terminology in terms of classification, definition, implementation, application and enforcement.

3. Packaging Waste, Single-Use Plastics and Producer Responsibility

As part of the Circular Economy package, by end 2020 all Member States have to implement both the Waste Framework Directive and the Packaging and Packaging Waste Directive as revised in 2018. Resource efficiency or renewables are no longer the main target as part of the mechanism for environmental protection but rather the achievement of a Circular Economy. In doing so, the value of resources, materials and products is maintained in the economy as long as possible.

Through the evolution of packaging waste prevention it no longer solely implies the reduction of the weight of packaging. Instead the concept of effectively recycled packaging materials is pushed forward. This resulted in a change in the recycling rates which have to be achieved individually by all the Member States by end of year 2025 and 2030. In turn this has also an effect on the way recycling rates are counted. Only effectively recycled packaging waste can now be reported as recycled. Finally, packaging has to be designed for circularity as per the extended producer responsibility (EPR). Also, producers who put packages on the market, have to provide the main financial contribution for both collection and sorting. Producers have an obligation to collect their waste products. As a service of general interest, Member States, through municipalities, also have an obligation towards the citizens they represent to collect their waste. Therefore we all have to work together to create waste collection systems that work in terms of convenience and cost, while at the same time deliver the set recycling targets.

EPR fees will be modulated based on real end-of-life costs. Further financial incentives are given to those products which are easily re-used, recycled and repaired. In this way, those products which are more difficult to recycle or even worse cannot be recycled at all, have to carry a significant cost burden. For packaging strategies to be practical on the market, they have to be reassessed. Although metal packaging is easily separated from other waste, mixed packaging cause a big problem both in terms of practicability but also in terms of infrastructure and legality.

Examples from case law show that a set of minimum performance requirements for whatever type of compliance scheme in operation is needed to be applied in every Member State. Minimum binding requirements for a better implementation of EPR have to be set, along with clarified roles and responsibilities for all. This challenge for society

in general needs to be addressed where the good governance and practicality of some Member States have to become the rule for the Union as a whole.

3.1The Plastic Directive

Plastic is all around us and it seems quite impossible to live without it. The plastic's industry has an important role in the economy. 18% of the world's plastic is produced in the EU. 1.5 million people work in the European plastics industry which in turn generates \notin 350 billion per year.⁶⁹ Transforming the plastics industry into a sustainable business is inevitable. In fact it is already happening. The plastic strategy has been proposed to change the way we design, produce, use and recycle plastics. It will have an effect on both the environment and the economy by improving the valued chains that stretch across the single market. Better designed, more durable and easily recycled products will offer great opportunities to EU businesses. At the same time, citizens have a central role in this strategy since a lot depends on consumption patterns especially because the main target is for consumers to make conscious choices favourable to the environment.

Although the legislation exists, the amount of plastic thrown in the sea every year is increasing drastically. Legislation has to be well applied and constantly, as a whole package. Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment builds on the Waste Framework Directive but goes a bit further in setting stricter rules on certain throwaway plastic products and packaging waste that end up polluting the seas.

3.1.1 The Plato Plastik Robert Frank GmbH judgement⁷⁰

As per Directive 94/62/EC and the definition it gives to a 'manufacturer of packaging', it is stated that it does not necessarily refer to the party associating or bringing together goods and the product intended for packaging who is considered as a 'manufacturer'. Also, whoever is involved in the process of supplying plastic carrier bags to customers, either free of charge or even against payment in shops is also considered as a 'manufacturer' of packaging.

The case involved a preliminary ruling pursuant to Article 234 EC where questions focused on the interpretation of packaging and packaging waste as per cited directive. Plato Plastik Robert Frank GmbH, a manufacturer and distributor of plastic bags, brought an action against Caropack Handelsgesellschaft mbH ('Caropack'), which in turn was involved in the marketing process of the said products. The first question was

⁶⁹ European Commission Communication, Facts and Figures: the links between EU's economy and environment (2017)

⁷⁰ Case C-26/05 Plato Plastik Robert Frank GmbH v Caropack Handelsgesellschaft mbH [2005] ECR I-00024

whether the plastic carrier bags given to customers by retailers for taking their purchases away were regarded as packaging or not. The plastic bags' main purpose was to protect the purchased goods while at the same time transport the same goods from the retail outlets directly to the customers for their consumption. Once all this process is over, generally the bags are disposed of and thus treated as waste. As a result, the Court came to a conclusion that the two conditions laid down in Article 3(1) of Directive 94/62/EC were met. It was clarified also that the definition of 'producer' in these terms, refers to the packaged goods and not the manufacturer of the packaging products.

3.1.2 Fost Plus VZW judgement⁷¹

This judgement involved something a bit different from what we have seen so far, in the sense that the company involved put forward a claim against the Belgian Government who according to it was putting in place higher recycling and recovery rates than those provided by in Directive 94/62/EC, putting companies at a disadvantage while at the same time going against European Law. This case was first of all dismissed because the claimant had no individual concern in the matter, in the sense that the applicant was not treated differently from other persons involved in the packaging with reference to the contested decision. The applicant was only affected by such an imposition by its objective capacity, that is, that of an economic operator. Also, as per Article 6(6) of the directive, Member States can adopt higher level of environmental protection as long as such protection does not distort the internal market, does not have an effect on compliance by other Member States, is not a form of discrimination and finally does not imply a disguised restriction on trade.

3.1.3 Commission v Germany case ⁷²

This case, involved the packaging and distribution of natural mineral water in containers, and the harmonization measures in terms of packaging and waste packaging management. Although, Article 5 of Directive 94/62/EC provides that "*Member States may encourage reuse systems of packaging, which can be reused in an environmentally sound manner, in conformity with the Treaty*", through the application of the proportionality principle, the European Court of Justice considered that the 6 month transition period in the German Packaging Ordinance was not proportionate enough as it was too short a period for compliance. The final decision of whether this 6 month period was proportionate or not, was left to be taken by the national court. The Court maintained also that in a deposit and return system, like the one involved in this judgement, there should be enough return points set up by the Member State concerned from where consumers can recover the deposit which had been paid for goods in non-

⁷¹ Case T-142/03 Fost Plus VZW v Commission of the European Communities [2005] ECR I-00589

⁷² Case C-463/01 Commission of the European Communities v Federal Republic of Germany [2004] ECR I-11705

reusable packaging, even if customers do not return to the initial place of purchase for their return.

The German Government's claims go against Directive 94/62 in the establishment of a hierarchy between the reuse of packaging and the recovery of packaging waste. Also, Member States are able to regulate the shipments of waste for disposal in terms of Article 4(3)(a)(i) of Regulation No 259/93 as long as this is done *"in accordance with the Treaty"*. As a result, when exercising such power Member States have to take into account a series of principles, such as the principles of proximity, of priority for recovery and of self-sufficiency at both Community and national levels.

3.2 Waste Shipment, Disposal and the Use of Illegal Landfills

Municipal waste collection is one of the most critical services in the community; it contributes to both a hygienic environment and quality of life, while at the same time supports public health. With previous directives, the European Commission has not sought to encourage shipments of waste outside the EU/OECD areas, mainly due to the implementation of the proximity principle, the self-sufficiency principle and even the Basel principles. However, some shipments have been permitted, especially those which are "operated in accordance with human health and environmental protection standards that are broadly equivalent to those established in community legislation."⁷³ For a long period of time Member States had the responsibility to ensure that effecting rules are put in place in order to determine which facilities meet the 'broadly equivalent conditions'. Restricting exports pose practical and economic challenges. If not exported, countries had to do something useful with the recycled waste.

Within the new Waste Framework Directive we still see that the language of 'broadly equivalent conditions' have been maintained but now there is new guidance to its interpretation and new requirements have been posed on Member States to report annually to the Commission on how exporters are making sure that the conditions are being met. More importantly, underlying incentives are addressed. Member States can only count material towards recycling targets where 'broadly equivalent conditions' rule is demonstrably met. Also, Member States have to calculate the recycling net of losses, whereas producers are to bear the cost of waste management.

The new directives do address many of the underlying reasons for waste shipment. Although it is not an outright ban, with such legislative structures and the existing incentives would these be enforceable? Even though some of the new directives' materials are directed primarily to the industry, they also provide a stimulus for the development of reprocessing infrastructure within the EU. There is still a big need though to tackle criminality in terms of waste shipment; a lot relies on people understanding and applying the rules, take reasonable measures to close off the criminal

⁷³ Article 49 of Directive 2018/98/EC

pathways available within this sector. This becomes easier if the volume of shipment is smaller.

3.3 The EU Landfill Directive

The main aim of the European Landfill Directive 99/31/EC is the reduction of the amount of biodegradable municipal solid waste disposed of into landfills. Moreover, in order for increased waste recycling and rates of recovery to be achieved, Member States have to change their national solid waste strategies. For the set targets to be met, as per the landfill directive, waste strategies have to be modified.

Many academics' views on the subject, and even case law suggest that in order for the long-term goal which is set by the landfill directive to be achieved, this has to be done through a succession of incremental steps. Such steps should keep also in the picture both the economic and the institutional development of the Member States and the Union as a whole. Thus the improvement in such area of waste management standards can happen by small incremental steps. It involves a process that needs time to be structured, studied well and finally put into practice in a harmonious way. This is why, the policy is still allowing a small number of larger landfill sites in operation. In the meantime, such landfills undergo environmental protection systems, while other methods of waste management are being put in place by Member States.

3.3.1. EU-Wood-Trading judgement ⁷⁴

This case involved the entitlement of the competent authority of dispatch (that is, the Member State from where the waste is being shipped) to an objection on the shipment. The objection regarded the conditions and standards which were not satisfied by the receiving country (that is, the country of destination of the shipped waste) since in the Member State of departure such conditions were more stringent than those applied by the Member State of destination.

It is important to keep in mind that with reference to the environmental sector, the Union does not have exclusive power, but rather such issues are subject to the subsidiarity principle, while the Union and Member States enjoy joint powers. Such powers permit the adoption by Member States of more stringent measures in the protection and safeguarding of the environment as well as the adaptation of safeguard clauses. As per Directive 75/442/EEC⁷⁵, Member States are responsible to take measures in order to restrict waste production, including the promotion of safe technologies and recycled and reused products.

⁷⁴ Case C-277/02 EU-Wood-Trading GmbH v Sonderabfall-Management-Gesellschaft Rheinland-Pfalz mbH [2004] ECR I-11957

⁷⁵ Council Directive of 15 July 1975 on waste (Ol 1975 L 194. p.39) as amended by Council Directive 91/156/EEC of 18 March 1991 (Ol 1991 L 78, p. 32) and by Commission Decision 96/350/EC of 24 May 1996 (OJ 1996 L 135. p. 32) ('the directive')

The problem arose when the competent authority of dispatch (Germany) filed a complaint to the receiving country (Italy) based on Article 4 of the directive, stating that the waste had to be recovered or eliminated without endangering human health in the process, considering the fact that the intended waste exceeded the guide-value of lead content. Thus the use of such wood waste in the recovery process of chipboard production would endanger the health of workers involved in such a recovery operation and as a result contravening national law of the competent authority of dispatch. EU-Wood-Trading GmbH opposed to this objection claiming that objections by the competent authorities could only be made on the waste and its shipment and not on the process of its recovery. In his opinion on the case, Advocate General Léger concluded that first of all the planned recovery goes against Article 4 of the directive, since it contravenes national law on the basis of environmental protection and the safeguarding of human health in the process. Secondly, the competent authority was right in its objection based on the particular conditions of recovery which were regarded as harmful, and thirdly, the competent authority of dispatch was also right in basing its arguments on the national law standards in terms of waste recovery, as long as such arguments respected the proportionality principle.

3.3.2 DaimlerChrysler AG judgement ⁷⁶

This case involved the shipment of hazardous waste and national provisions since the LAbfG, the Government of Land Baden-Württemberg adopted a decree, stating that for waste which is not capable of being processed in the processing centres themselves, the producer or the holder of the waste has to identify another processing establishment to where such waste could be sent. A joint operation was set up to make up for the absence of a specialised incineration facility for special waste in the area. Although the decree stated also that such waste had to be under supervision, it also permitted certain exemptions especially with reference to the quantity of waste falling within certain thresholds and waste treated under certain conditions in plants belonging to the producers or the holders of waste.

DaimlerChrysler argued that since it was obliged to send its waste to the incineration centre in Hamburg it had to suffer a financial burden amounting to a quantitative restriction on imports, because it was deprived of sending its waste to another country (Belgium) at a lower rate.

In his opinion on the case, Advocate General Léger states that the mechanism put in operation by the German competent authorities goes against the harmonised Community procedure since the decree calls for the operator wishing to ship waste for disposal to first apply with an authority of the state of dispatch. Article 4 of the Treaty must be expressly authorising thus precluding national measures. On the other hand, as per Article 4(3)(a)(i) of Regulation 259/93, the principle of proximity justifies the

⁷⁶ Case C-324/99 DaimlerChrysler AG v Land Baden-Württemberg [2001] ECR I-09897

national measure, and as a result there was no need to review the compatibility of the measure with Articles 34 and 36 of the Treaty.

3.3.3 Illegal landfills in Italy and Greece ⁷⁷

These cases are examples involving the failure of Member States to comply and fulfil their obligations with reference to waste law, particularly illegal landfills on the basis of Article 258 TFEU. In *Commission v Italy*, the Court held that the Member State failed to fulfil its obligations under Articles 4, 8 and 9 of the former Waste Directive, under Article 2(1) of the Hazardous Waste Directive and under Article 14(a) to (c) of the Landfill Directive. As a result the Republic of Italy was ordered to pay the lump sum of ϵ 60 million into the European Union own resources account as well as periodic payments until the illegal landfills are closed down and the hazardous waste cleaned up.

Similarly, in *Commission v Greece*, Greece failed to take all the necessary measures to ensure compliance with Articles 4, 8 and 9 of the Waste Directive, and thus failed to fulfil its obligations. The Court ordered the Hellenic Republic to pay the lump sum of \in 22 million as well as periodic payments until the closing down of illegal landfills have been fulfilled and the disposal of waste recovered in a lawful manner.

3.4 The WEEE Directive ⁷⁸ and the RoHS Directive ⁷⁹

New regulations were put in place making sure that businesses take the responsibility for the end-of-life of their products, ultimately to reduce waste while promoting the environment. The WEEE regulations apply to producers, importers and retailers who are to help users of electric and electronic equipment as well as to businesses that recover and/or treat e-waste. WEEE is broken up into more or less 10 categories, which cover almost everything ranging from large and small household appliances, tools, medical devices and toys. Although there is nothing in the directive that obliges customers to recycle electric and electronic waste, these cannot be ignored either. The signals on the equipment which have been put in place since 2005 indicate that retailers have to take the products back for recycling once their life cycle is over.

The WEEE Directive and the RoHS Directive are two legal obligations aimed to ensure long-term sustainability of both businesses and the environment. Whereas the RoHS requirements are applicable to the device from its inception throughout its whole lifecycle, the WEEE requirements are applicable to end lifecycle. It is possible to design a device with non-allowed RoHs substances, but it is not permissible to put such a

⁷⁷ Case C-196/13 European Commission v Italian Republic [2014] ECR I-2407, and

Case C-378/13 European Commission v Hellenic Republic [2014]

⁷⁸ Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)

⁷⁹ Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment

device on the market. These directives are closely connected since both are applicable on parts of the lifecycle of electric and electronic equipment.

As has already been stated, through the RoHS directive, certain substances that are used in the manufacturing process are banned. On the other hand, the WEEE directive puts an obligation on the manufacturer to collect and dispose of discarded equipment at the end of the products' lifecycle.

Directive 2011/65/EU (RoHS2) replaced Directive 2002/95/EC (RoHS1), becoming EU Law in July 2011, whereas RoHS2 regulations came into effect in January 2013. It is important to mention here that for particular product categories, such as medical devices (category 8), monitoring and control instruments (category 9) and all other electrical and electronic equipment which is not covered by any other category, implementation timelines went even further to 2019.

On the other hand, Article 24 of the WEEE Directive stipulated a transposition by February 2014. Great Britain was the only Member State ready in time to transpose fully the set directive, which introduced a threshold level on the electric and electronic equipment which is put on the market yearly. Other Member States, particularly France and the Netherlands, did work on their legislations, in order to emend them to be ready for implementation. However, operational questions that focus mainly on the legality of the directive's representatives are still not finalised and fine-tuned as evident from case law. Being introduced quite recently, so far the main cases with reference to the above mentioned directives involve either bad transposition or late transposition by Member States.

3.5 The Concept of Waste and the Free Movement of Goods in the Internal Market

The internal market (Article 26 TFEU), which is based on the free movement principles, and the removal of obstacles to free trade and free competition, lies at the very core of the EU integration process. There has always been an aura of controversy surrounding environmental protection and economic integration, since wealth is increased by trade liberalization and free competition, while at the same time, economic growth can leave its mark on the ecosystem. The fact that the EU legal order is based on economic integration has presented a lot of difficulties to environmental law. New product policies, such as eco-labels, product standards, restriction on use of hazardous substances and others, have been introduced by various Member States, along the years, to better safeguard resource efficiency, sometimes with the risk of creating a clash between these new implemented environmental measures and the free movement of goods – one of the four fundamental freedoms enshrined in the TFEU. There are two ways which make it easier in analysing whether the environmental measures taken by Member States are compatible with the economic freedoms as enshrined by the Treaties or not: either by negative or positive harmonization.

Through the adaptation of regulations (rather than directives), a total or complete harmonization in products standards is achieved. Also, in virtue of Article 193 TFEU, Member States may adopt more stringent standards than those provided for as in the *Tridon* Case⁸⁰. As per Directive 2009/28/EC on the promotion of the use of energy from renewable resources, Member States are given a more leeway in the transposition of directives which provide for the issuance of green certificates⁸¹, or the promotion of the Circular Economy⁸² at the detriment of the enforcement of internal market regulations on hazardous substances. Either through putting in action the reasons mentioned in Article 36 TFEU, or through a mandatory requirement, Member States are able to regulate their trade with the aim of protecting the environment, and needless to say this has resulted in a number of disputes. Most times in such disputes it seems that the internal market has an advantage over the environment based on its seniority, since the freedom of goods is one of the four freedoms forming the Union's DNA (Articles 34 and 35 TFEU).

3.5.1 The Classic Judgements

Through its classic judgements in this sector, the CJEU has claimed more than once that provisions prohibiting obstacles to trade are considered as fundamental principles of EU law. As per Article 34, the measures having equivalent effects to quantitative restrictions on imports cover any other national measure which is capable of hindering, directly or indirectly, actually or potentially, intra-community trade⁸³, and thus exceptions based on environmental protection are most of the time interpreted in a restrictive manner. Through the Cassis de Dijon case, it was also established that, "*in the absence of harmonization of legislation obstacles to free movement of goods which are the consequence of applying, to goods coming from other Member States where they are lawfully manufactured and marketed, rules that lay down requirements to be met by such goods"* constitute MEEs which are prohibited by Article 34 TFEU⁸⁴. At the same time, Article 36 TFEU allows Member States to take measures in protecting the life of plants and animals and human life against environmental risks⁸⁵.

⁸⁰ See Case C-510/99 *Tridon* [2001] ECR I-7777, para. 45; Case C-100/08 *Commission v Belgium* [2009] ECR I-140 para. 60.

 ⁸¹ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources, OJ L 140/16
 ⁸² Proposal for a Directive of the European Parliament and of the Council amending Directive

⁸² Proposal for a Directive of the European Parliament and of the Council amending Directive 2009/98/EC on waste, COM/2015/0595 final

⁸³ See *Dassonville*, 8/74, EU:C:1974:82, para. 5, and *PreussenElektra*, C-379/98, EU:C:2001:160, para. 69)

⁸⁴ Case C-120/78 *Cassis de Dijon* [1979] ECR 649

⁸⁵ See Case 302/86 Commission v Denmark [1988] ECR I-4604 para. 9; Case C-389/86 Aher Waggon [1998]ECR I-4473; Case C-213/96 Outokumpu [1998] ECR I-1777, para. 32; Case C-176/03 Commission v Conseil [2005] ECR I-7879, para 41; and Case C-320/03 Commission v Austria [2005] C:2005:684, para. 72

3.5.2 Positive Harmonization

Secondary law is complementary to the implementation of free movement of goods especially through the adaptation of harmonized EU environmental product standards. Since the late 1960s a considerable body of EU legislation, ranging from GMOs to motor vehicles has developed. For example in *Nordiska Dental*⁸⁶, the Court concluded that there was a breach of Directive 93/42 as a result of the Swedish prohibition on exporting dental amalgams containing mercury. This was regarded as a 'new approach directive' on the grounds that it covered environmental considerations.

Recent years have seen a development in the area of product safety, and thus more regulations had to be adopted pursuant to Article 114 TFEU, creating a common playing field for producers of certain goods on the market which pose both an environmental and health risks. This also included the control on importation, exportation and transfer of such goods within the internal market. Member States are limited in laying down their product standards based on harmonization on the basis of Article 114 TFEU, especially in terms of dangerous substances⁸⁷, fertilizers⁸⁸, cars⁸⁹ and even trucks⁹⁰.

3.5.3 Prioritising Economic Efficiencies Over Environmental Gains?

"EU competition policy does not occur in a vacuum."⁹¹ In this consideration one has to analyse whether environmental concerns could possibly fall under Article 101(3) TFEU, considering the influence of the environment on competition. It seems that lately, DG Competition has adopted an economical-value approach to environmental concerns. For example, the development of green power instead of coal-fired plants can be regarded as *negative externalities*⁹², which according to the Commission are the most common market failures in the field of environmental protection. Thus it could be argued that a competition law breach could also be decisive in the fact that undertakings would be allowed to go greener. If this is not allowed and the companies are straightforward labelled as cartels, then undertakings might be deterred from collaborations which help them go greener.

⁸⁶ Case C-288/08 Nordiska Dental [2009] ECR I-11031, para. 30

⁸⁷ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, OJ L 353/1

⁸⁸ Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers, OJ L 304/1

⁸⁹ Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, OJ L 117/1

⁹⁰ Regulation (EU) No 582/2011 of 25 May 2011 implementing and amending Regulation (EC) No 595/2009 of the European Parliament and of the Council with respect to emissions from heavy duty vehicles (Euro VI), OJ L 167/1

⁹¹ K Van Miert, 'An Active Competition Policy for Economic Growth, Frontier-free Europe (monthly newsletter), Luxembourg, European Commission, 1995

⁹² Commission Guidelines on State Aid for Environmental Protection. (2008/C 82/01), para 20

1) Competition and environmental policies are complementary. They seek to correct market failures and enhance social welfare.

2) Environmental regulations can however reduce competition in markets through diverse channels, raising prices for consumers. They may create barriers to entry into particular markets and increase concentration.⁹³

Given the concerns about concentration in the energy markets, the Commission has been vigilant when controlling mergers. In fact in 2004 the proposed merger between *EDP and GDP in Portugal* was prohibited by the Commission; in 2006 significant remedies in the mergers between *GDF and Suez* and *E.On and MOL* were also imposed.

On the other hand there have been cases where the Commission allowed cooperation between companies and thus a horizontal agreement due to the benefits for the environment, as in the landmark case *CECED*⁹⁴, the *Philips International BV and Osram GmbH* case⁹⁵, and the Dutch case Stibat, where it was stated that "preventing environmental problems is cheaper than curing them afterwards."⁹⁶

3.5.4 Green Public Procurement Practices Across the EU

Green Public Procurement or Green Purchasing refers to the process by which public organizations meet their needs for goods, services and utilities in a way that value for money is achieved on a whole life-cycle basis. Through this benefits are generated, not only for the organization but also to society and the economy in general by significantly reducing the negative impacts on the environment. Shifting towards a system which generates more sustainable goods and services will help in the drive of markets in the direction of innovation and ultimately the Circular Economy. By delivering key policy objectives in the application of Green Public Procurement, governments will lead by example. Other positive social results arise from this such as the reduction of poverty and improved equity. From an economic perspective it generates income, reduces costs, support the transfer of skills and technology while promoting innovation by domestic producers. Sustainable procurement can encourage and deliver the re-design of products, and thus ensuring that a full account is taken of the whole product's life-cycle. It can also include specifications for different types of materials with the aim of reducing the carbon impact of the procured products. Products should be designed in a way that they enable recycling, getting rid of different formats and materials which make recycling almost impossible or very difficult, and be clearly labelled so that consumers and customers are well aware of the routes for recycling and re-using.

⁹³ Environmental Regulation and Competition, Directorate for Finance and Enterprise Affairs,

Competition Committee, DAF/COMP(2006)30 (17 November 2006)

⁹⁴ 2000/475/EC: Commission Decision of 24 January 1999 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Case IV.F.1/36.718.CECED) (notified under document number C(1999) 5064)

⁹⁵ Commission Decision 94/986/EC IV/34.252 Philips Osram JV [1994]

⁹⁶ Decision in Case number 51, *Stibat*, para 63

In terms of Green Procurement, different strategies have been adopted by different Member States across the EU, which varies according to the sector and circumstances. For example in Ghent (Belgium) procurement strategies have been adopted for catering contracts, in Torino (Italy) for healthy sourcing especially in schools, while in Copenhagen (Denmark) public spaces are being used for the growing of food. In construction, opportunities can be realised to design for de-construction or end-of-life. Encouraging the use of re-used materials and furnishing especially in refurbishing and restructuring can also lead to significant cost reductions and thus the reduction of waste material and the reduction of materials going to landfills.

A significant proportion of waste is generated through the lack of detailed asset management. Understanding the available assets and their conditions is thus very important. In the UK, mobile asset management tools were developed to enable effective asset management while keeping track of residual value while supporting maintenance schedules. These examples are a simple illustration of the wide range of possibilities for sustainable procurement. Through commitment from the organizations and collaboration across the supply chain, a wide range of benefits can be achieved. But unfortunately there have been a number of cases and disputes that the Court of Justice had to issue its rulings about as in the Dutch coffee case⁹⁷. Other environmental-oriented judgements include the Wienstrom case⁹⁸ dealing with the electricity supply from renewable energy sources and the Evropaïki Dynamiki case⁹⁹ dealing with the assessment of environmental management policies put forward by tenderers.

Although GPP is a voluntary instrument, it is very central in the efforts of the EU for a more resource-efficient economy and thus eco-innovation. The challenge remains for the different Member States' governments to adopt this instrument as a common practice.

4. General Conclusions

It seems that in the past couple of years, environmental law was the 'victim' of political developments because it has been often claimed that environmental benefits are not easy to measure in economic terms. As observed by the Business and Industry Committee to the OECD, competition law as it stands today does not fully safeguard environmental objectives. Through the concept of Circular Economy, the environmental benefits are translated into economic efficiencies. Collaboration is a must for a Circular Economy that works. The fact that there are still various interpretations of even the basic 'meaning' of what waste is and how to deal with it presents quite a serious problem. Through its legal framework, the Union has to present something which is easy and very direct to understand while at the same time feasible for all Member States to apply

⁹⁷ Case C-368/10 European Commission v Kingdom of Netherlands [2012] ECR I-284

⁹⁸ Case C-448/01 EVN AG and Wienstrom GmbH v Republik Österreich [2003] ECR I-651

⁹⁹ Case T-331/06 Evropaïki Dynamiki – Proigmena Systimata Tilepikoinonion Pliroforikis kai Tilematikis AE v European Environment Agency (EEA)[2010] ECR I-292

equally. If this is not done at the earliest possible, this innovative and beneficial concept of the Circular Economy will be something ideal 'on paper' but never applied to its full potential.

Another important factor is the economic growth that such a concept fosters as a result of resource consumption. It is a known fact that initially, the European Union was built on the concept of the internal market in which Member States can benefit from the removal of trade barriers and the harmonization of national laws. The various interpretations of the concept of waste by different Member States are causing difficulties in the application of the basic principles of free movement of goods and services, thus going against the Circular Economy's basic vision in which the environment and the economy complement each other.

Case law has shown that the barriers to the Circular Economy are various: they range from financial, to technological, structural to operational. If it is to succeed, the European Union has to work on how all these different perspectives amongst its Member States are to be regulated and integrated. The next chapter will be analysing in more detail the regulatory barriers to the Circular Economy and how such barriers are affecting Member States in their process of adoption of this innovative concept. **Chapter 4:**

The Circular Economy in Practice through EPR Schemes – Packaging and Packaged Waste

1. Introduction

The European Commission published its Circular Economy Package in December 2015, with the aim of 'closing the loop' for product lifecycles with the introduction of four legislative proposals in respect to waste-management targets mainly reuse, recycling and landfilling. The new concept of Circular Economy no longer focuses on economic growth as a result of higher production, but on the contrary it aims at keeping the produced products in circulation for a longer period of time. The Circular Economy thus emphasises on the concept of maintaining rather than replacing. The need for sustainable development involves new methods for better solutions and radical innovation. This implies that in order for an economy to be transformed from a linear (traditional) one to a circular one, factors such as product design, business models, manufacturing and distribution processes, data management and other factors have to be taken into consideration. To make sure that all these are carried out in a harmonised way amongst the stakeholders involved within the Member States, the legal framework has to be structured in such a way that all these are equally included.

The primary driver for the Commission to push forward the Circular Economy package is the pressure to reduce the negative environmental impacts resulting from the generation and treatment of waste within its Member States. The Commission is envisaging a state, where businesses will be presented with an opportunity of cost savings by reducing waste and energy costs. Through the generated potential for innovation and development, business will grow while at the same time companies will experience an increase in profits. Global standards and specific goals for cleaner environmental solutions will push national governments to support companies in their transition towards a Circular Economy through the introduction and implementation of directional laws, subsidies and other supportive taxation schemes. Finally brands aiming for a Circular Economy shift will benefit in terms of image strengthening especially with the implementation of eco-labels and green certificates.

But like all other things, the Circular Economy is not a straightforward process, and certain barriers make this innovative concept very difficult to being implemented in practice. Amongst such barriers one can mention the financial capability of companies to make the shift especially since new technology costs a lot. Another barrier is the high economic uncertainty that all changes in the internal market bring along. The complexity of laws and regulations, especially in terms of gaps in legislation, unclear definitions of targets to be met, incomplete implementation and enforcement by different Member States, conflicting national implementations and conflicting values in legislations at Union level, do not make the task easier either. From a supply chain perspective, multiple stakeholders involved and lack of collaboration between them present another barrier to Circular Economy.

For a Circular Economy that works it is no use that only the academics put forward their theories, nor for legal experts to structure the legislative instruments to be used. Industry

has to be involved as it is the industry that has to deliver the philosophy of the new concept to its consumers. The Union is aiming at involving the industry in the Circular Economy concept through the Producer-Responsibility Approach. This chapter will be analysing differences in performances between Producer Responsibility Organisations across Member States with particular reference to Malta, in order to identify further the barriers that are creating obstacles in the adoption and implementation of the Circular Economy.

2. Extended Producer Responsibility (EPR) Towards a Circular Economy

The new Circular Economy package will affect greatly the packaging supply chain in Europe. Although over the last decades there has been considerable progress in terms of packaging waste recycling and recovery rates¹⁰⁰, Member States are still adopting different infrastructures and management methodologies in relation to packaging waste.

For a full functioning Circular Economy in Europe, there needs to be a properly functioning Internal Market. As a matter of fact, the notification procedure in Article 16 of the Packaging and Packaging Waste Directive (PPWD)¹⁰¹ safeguards against national protectionist or discriminatory measures in terms of the free movement of packaging and packaged goods. At the same time, Article 8a (5) of the same Directive emphasises on the transparency and rule enforcement of Extended Producer Responsibility Schemes (EPR Schemes). Different methods of transposition and implementation of the PPWD have led to variations in waste management performance across the 28 Member States.

2.1 The Role of EPR and its Legal Base

For Member States to move towards a more sustainable waste management, EPR is a vital tool. OECD defines EPR as "an environmental policy approach through which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle"¹⁰². Also, as stated in Article 14 of the WFD, EPR schemes are a practical extension of the Polluter Pays principle, in fact, "in accordance with the polluter pays principle, the costs of waste management, including the necessary infrastructure and its operation, shall be borne by the original waste producer or by the current or previous waste holders".¹⁰³ Article 8 and Article 8a of this directive also clarify the fact that extended producer responsibility schemes must be established for all packaging. Recital 21 of Directive 2018/851 recognises that, "extended producer responsibility schemes form an essential part of efficient waste management. However,

¹⁰⁰ Eurostat (2013), Packaging recycling rates have been rising from 47% in the EU-15 in 1998 to an estimated 65% in the EU-28 in 2012

¹⁰¹ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste ¹⁰² OECD, Extended Producer Responsibility - A Guidance Manual for Governments, 2001.

¹⁰³ European Parliament and Council Directive 2018/851 of 30 May 2018 amending Directive 2008/98/EC on waste

their effectiveness and performance differ significantly between Member States. It is necessary therefore to set minimum operating requirements for such extended producer responsibility schemes..."

At the same time, Recital 22 states that, "the general minimum requirements should reduce costs and boost performance, as well as ensure a level playing field, including for small and medium-sized enterprises and e-commerce enterprises, and avoid obstacles to the smooth functioning of the internal market. They should also contribute to the incorporation of end-of-life costs into product prices and provide incentives for producers, when designing their products, to take better into account recyclability, reusability, reparability and the presence of hazardous substances..."

Although the general minimum requirements for EPR schemes are established in Article 8a, there is still the possibility that Member States implement such elements in divergent ways. Acknowledging the fact in terms of the wider transposition of legislative requirements, the Commission stated that, "the complete and correct transposition of the new legislation is essential to guarantee that their objective (i.e. protecting human health and the environment, increased resource efficiency, and ensuring the functioning of the internal market and avoiding obstacles to trade and restriction of competition within the EU) are achieved".¹⁰⁴

2.2 The Role of EPR Schemes

On the requirements concerning the types of costs to be covered through EPR, Article 8a(4)(a) states that "*it shall not apply to extended producer responsibility schemes established pursuant to Directive 2000/53/EC, 2006/66/EC or 2012/19/UE*". As a result, the provisions of Article 8a(4)(a) apply to packaging waste.

Through this policy tool, both the financial and the operational responsibility of the producer are extended beyond the post-consumer state of the product's life-cycle. In this way, national and EU recycling and recovery targets are met as imposed by the PPWD. EPR schemes are set up at a national level to meet these obligations. Since the PPWD does not specify how such EPR schemes should be implemented, practices differ amongst the Member States, mainly in terms of responsibilities, costs and requirements involved in the collection and sorting of packaging waste. The producer's legal obligation is then taken over through the implementation of EPR schemes, particularly those imposed by Member States for consumer packaging waste. Most often, in most countries, commercial and industrial packaging waste is handled by other systems than the EPR schemes, which involve directly the producers and the end-users. EPR schemes are funded by the fees paid by the producer and/or importers, based on the weight of packaging put on the market by the producer (per tonnage) on specific materials. It is

¹⁰⁴ See <u>http://eur-lex.europa.eu/resource.html?uri=cellar:c2b5929d-999e-11e5-b3b7-01aa75ed71a1.0018.02/DOC 1&format=PDF</u>

estimated that in Europe alone, the annual fees paid by producers via EPR schemes amount to $\in 3.1$ billion¹⁰⁵.

Since the adoption of the PPWD, progress amongst Member States in the meeting of EU recycling/recovery targets continues to be uneven. This is a result of the different packaging collection strategies applied amongst the different Member States. Whilst, in the Waste Framework Directive (WFD), the Commission has defined minimum requirements so that transparency, cost effectiveness and recycling performance of EPR schemes are improved, in the PPWD there are no minimum legal requirements mentioned. This is creating problems at a national level especially where there are competing schemes.

2.3 Operational and Necessary Costs of EPR Schemes

The operational activities which are involved in the collection, sorting and management of relevant waste material fall within the remit of the producers. So do the net costs involved in such activities. Article 8a(4)(c) explains that Member States must ensure that the contributions required of producers "do not exceed the costs that are necessary to provide waste management services in a cost-efficient way. Such costs shall be established in a transparent way between the actors concerned".

The emphasis on 'necessary costs' may be taken to refer to both the minimum costs which result from the collection of waste to its recycling operations, as well as the other costs involved in supporting these activities. The latter may include activities of data gathering, communications and management. For costs to be 'necessary' they have to be directly linked to the services provided in terms of waste collection, sorting and recycling. They also have to be efficient and transparent in reflecting a system which maximises value in terms of material management and the value obtained from the reusability and recyclability of the treated waste.

Article 8(a)(4)(i) also gives Member States a lee way to depart from requiring the meeting of the full costs by producers. If the EPR scheme covers 80% of the necessary costs, the waste producer or distributor will only bear the responsibility of the remaining costs. At least 50% of the necessary costs should be borne by producers for EPR schemes which were established before 4 July 2018 (as per Article 8a(4)(iii)).

While Article 8a (4)(a) states that the producer is obliged to cover the costs involved in "separate collection of waste and its subsequent transport management targets, and costs necessary to meet other targets and objectives as referred to in point (b) of paragraph 1", Article 8a(1)(b) obliges Member States to "set waste management targets, aiming to attain at least the quantitative targets relevant for the extended producer responsibility scheme as laid down in this Directive, Directive 94/62/EC, Directive 2000/53/EC, Directive 2006/66/EC and Directive 2012/19/EU of the

¹⁰⁵ EUROPEN-The European Organisation for Packaging and the Environment, Factsheet – Extended Producer Responsibility for Used Packaging, on <u>www.europen-packaging.eu</u>, accessed on 15 July 2020

European Parliament and of the Council, and set other quantitative targets and/or qualitative objectives that are considered relevant for the extended producer responsibility scheme".

Since the targets set out in Directive 2008/98/EC refer to municipal waste, construction waste and demolition waste, and since there have been no proposed EPR scheme for either demolition nor construction waste as yet, the municipal waste targets are relevant to packaging EPR schemes. Other relevant targets and objectives are set by Directive (EU) 2019/94 on the reduction of the impact of certain plastic products on the environment. Also, per Article 8a(1)(b) Member States have the competence and authority to put in place other relevant targets and/or quantitative objectives as long as such systems are in line with the waste framework legislation and the waste hierarchy as per Article 4 of Directive 2008/98/EC.

2.4 Applicable Waste Streams

Member States have to make sure that the minimum target levels for municipal waste recycling which are defined in Directive 2008/98/EC, and those for different packaging streams which are set in Directive 94/62/EC are met at a national level. Also, Member States have to make sure that they comply with the separate collection obligations as per Article 10(2) and (3), and Article 11 of Directive 2008/98/EC. As a result, the costs covered by EPR schemes for separate collection, and those costs involved in meeting the targets of recycling, set in the mentioned directives, are completely distinct. This implies that the costs to be covered under particular EPR schemes are defined according to the cost of separate collection, if the latter exceeds the costs involved in meeting the relevant recycling targets. As a general rule, packaging waste has to be collected separately from any other waste, with the exception of limited derogations. For this reason, EPR schemes are to cover the costs involved in separate collection, as per Article 8a(4)(a).

It is up to the Member States to design separate collection systems that work for them. Such systems could also involve a range or combination of other systems such as doorto-door collections, bring-in sites, civic amenities sites and others, as long as waste is truly collected separately. In certain cases, for targets to be met, Member States have to take action also in terms of the management of mixed residual waste, such as sorting. In these particular cases, as per Article 8a(4)(a) producers have to cover the costs for these management operations. As a matter of fact, Article 14 covers these extra costs by stating that "without prejudice to Article 8 and 8a, Member States may decide that the costs of waste management are to be borne partly or wholly by the producer of the product from which the waste came and that the distributors of such product may share these costs".

2.5 Efficient Service Delivery

When determining whether the costs involved in particular schemes and waste management operations are necessary or not, one has to study the efficiency of such schemes and operations that are in place. For such an analysis, it is important to distinguish between systematic efficiency and local efficiency. The first type of efficiency focuses on the design of the waste management system and its delivery capability at a reasonable cost. The latter focuses on the cost-efficiency involved in the implementation of the operated system(s). Although Member States are not obliged to make competitive tenders available for waste collection, competition is important in making sure that services are being run cost-effectively. In this way, producers are assured that the costs involved are reasonable. Transparency is vital in cases of competition between PROs and for systems to be transparent they have to involve the producers in both the design of the services and the procurements, data with reference to costs and service performance have to be easily available, and producers have to be willing to cooperate in other studies which the PROs may deem important to carry out from time to time.

3. Existing Practices Across the EU Member States in Packaging and Packaging Waste

As per Article 8a(4) of Directive 2008/98/EC, "Member States shall take the necessary measures to ensure that the financial contributions paid by the producer of the product to comply with its extended producer obligations:

(b) in the case of collective fulfilment of extended producer responsibility obligations, are modulated, where possible, for individual products, or groups of products, notably by taking into account their durability, reparability, reusability and recyclability and the presence of hazardous substances, thereby taking a life-cycle approach and aligned with the requirements set by relevant Union law, and where available, based on harmonised criteria in order to ensure a smooth functioning of the internal market".

Fee modulation refers to the different fees charged, per kilogramme of packaging material that is placed on the market. Presently, there are 26 EU Member States running EPR schemes for packaging waste. As shown in Table 4-1, 20 Member States are applying specific fee categories, whereas 6 other countries are applying a more 'advanced' fee modulation, in the sense that a form of bonus or penalty fees have been introduced based on the levels of 'sortability' and/or 'recyclability'.

	'Basic'	Greater granularity in	'Advanced'
	modulation – i.e.	fee structure – e.g.	modulation – e.g.
	different fees per	specific fees for certain	penalty fees, or
	material type	types of packaging eg.	numerous
		PET/HDPE, beverage	different fee levels
		cartons etc.	within material
			type
Austria	Y	Y	
Belgium	Y	Y	
Bulgaria	Y	Y	
Croatia	Y	Y	
Cyprus	Y	Y	
Czech Republic	Y	Y	
Estonia	Y		
Denmark	-	-	-
Finland	Y	Y	
France	Y	Y	Y
Germany	Y	Y	
Greece	Y	Y	
Hungary	-	-	-
Ireland	Y	Y	
Italy	Y	Y	Y
Latvia	Y		
Lithuania	Y	Y	
Luxembourg	Y	Y	
Malta	Y		
Netherlands	Y	Y	Y
Poland	Y		
Portugal	Y		Y
Romania	Y	Y	
Slovakia	Y	Y	
Slovenia	Y	Y	
Spain	Y	Y	
Sweden	Y	Y	Y
United	Y		
Kingdom			

Table 3.1: Overview of Packaging Fee Modulation in the EU 106

¹⁰⁶ EcoEmbes (2019) Green Dot Fees, available at <u>https://www.ecoembes.com/en/companies/member-companies/green-dot-fees</u>

Table 3.2: Comparison of Fees and Fee Modulation in CITEO (France), CONAI (Italy) and Fost Plus (Belgium)

CITEO and Fost Plus are collective EPR schemes for household packaging waste in France and Belgium, respectively. The Italian CONAI scheme covers both household and commercial/industrial packaging. All three schemes apply some degree of fee modulation, but the extent of modulation, and in particular eco-modulation, differs.

	CITEO	CONAI	Fost Plus
Basic fee	Based on weight and	Based on weight and	Based on weight
modulation	type	type	and type
	of packaging material:	of packaging	of packaging
	Plastic, glass, paper/	material:	material:
	cardboard, steel,	Plastic, glass, paper/	PET/HDPE, drink
	aluminium, bricks, and	cardboard, steel,	cartons,
	other materials	aluminium, wood,	glass,
	+ fee based on number	and	paper/cardboard,
	of	glass.	steel, aluminium,
	packaging units		other
			recoverable
			materials, and
			other non-
			recoverable
			material.
Eco-	Bonus/malus system	Differentiated fees	None.
modulation	for all	for 108	
	packaging ¹⁰	plastic packaging ¹⁰⁰ :	
	I otal iee = (weight iee	A. S	
	+	Sortable/recyclable	
	units ree) x	(C170, 00/towns)	
	Donus/maius	(1/9.00/1000)	
	bonus: nee is reduced	D. Sortable/recyclable	
	10y	household waste	
	Malue fee is increased	(=208, 00/tonne)	
	hy	C Non-sortable/	
	10% - 100%	recyclable waste	
	1070 10070	(€228.00/tonne)	

Source: EcoEmbes

In Sweden¹⁰⁹, as of April 2019 there is a low fee and a higher fee for household and service packaging. These differentiated fees depend on the packaging formats and the

¹⁰⁷ Rates for period 2018-2022¹⁰⁸ Rates from 2018 onwards

properties of the material which effect the feasibility of sorting, processing and/or reselling the particular material. The low fee is of $\notin 0.29$ /kg for household packaging and $\notin 0.261$ /kg for service packaging, while the higher fee is at $\notin 0.360$ /kg for household packaging and $\notin 0.323$ /kg for service packaging.

In the Netherlands¹¹⁰, there has been a regular fee applicable for plastics, but as of 2019 there has been a reduction in fee for certain rigid plastic packaging, not trays, made from PE, PP or PET. The fee is now at $\in 0.38/kg$.

In Portugal¹¹¹ there is a different system being applied. Although there is a single fee category, the Member State is adopting an approach based on the applicability of penalties to discourage the use of certain materials which disrupt the recycling process. PET bottles with metal caps, glass bottles with non-removable ceramic and steel stoppers and PET bottles with PVC labels will be penalised at 10% of the fee.

In France¹¹² there is a basic flat rate of $\notin 0.3463$ /kg which is then applied on a material specific basis. A system of penalties and bonuses is then applied selectively. An eco-modulation tariff has been proposed to start being applied in 2020, since the previous system does not reflect the differing value of the resulting secondary material and its effect(s).

Germany¹¹³ has a system based on the involvement of competing PROs. As per the New German Packaging Act (VerpackG) EPR Organisations are obliged to create incentives for packaging manufacturers. The recyclability assessment of the materials is based on the unfilled packaging as a whole.

https://www.ftiab.se/download/18.3290e776169a201ce416ac/1557997776404/Packaging%20materials%20and%20reporting%20categories%202019.pdf

¹⁰⁹ Förpacknings-och Tidningsinsamlingen AB (FTI) (2019) Packaging Materials and Reporting Categories, available at

¹¹⁰ Afvalfonds Verpakkingen (2019) Packaging Waste Management Contribution, available at <u>https://afvalfondsverpakkingen.nl/en/packaging-waste-management-contribution</u>

¹¹¹ Sociedade Ponto Verde (2019) Packaging that disrupts the recycling process, available at <u>https://www.pontoverde.pt/aderentes_uk/Tabela%20de%20penaliza%C3%A7%C3%B5es%202019%20E</u> <u>N.PDF</u>

¹¹² Citeo & Adelphe (2019) *Proposition de Citeo et Adelphe pour l'eco modulation du tariff 2020, 29* May 2019

¹¹³ Presentation by Matthias Klein of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (2019) Reducing Fees through Better Recyclability: Modulated Fees in the New German Packaging Act, 2 April 2019 available at

https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupMeetingDoc&docid=34558

4. Batteries and EEE

A study in support of the evaluation of Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators¹¹⁴, together with statistics gathered by Eurostat¹¹⁵, show that approximately, in the European Union's market are placed every year approximately 1,100,000 tonnes of automotive batteries, 491,000 tonnes of industrial batteries, and 227,000 tonnes of consumer batteries. One has to add also the thousands of rechargeable batteries which vary in both energy density and recharge cycles in a drastically changing and evolving market. The majority of EPR schemes in terms of batteries within the EU market are generally based on battery weight. There are only a few schemes which involve also other factors such as the chemical compositions and type when setting up their costs and fees. The most developed eco-modulation system for portable batteries is applicable in France, as well as for EEE.

5. Existing Practices in Malta

In line with S.L.549.43¹¹⁶, the Waste Management (Packaging and Packaging Waste) Regulations, which bring into effect the provisions of Directive 94/62/EC on packaging and packaging waste as amended by Directive 2004/12/EC amending Directive 94/62/EC on packaging and packaging waste and Directive 2005/20/EC amending Directive 94/62/EC on packaging and packaging waste, the two Producer Responsibilities Organisations (PROs) currently operating in Malta bear both the financial and organisational responsibilities of the packaging waste arising from the packaging their members place on the national market. Such organisations are, in fact, legally obliged to finance any systems set up for the collection and treatment of consumer packaging waste. Similarly, they are obliged to make arrangements with the Local Councils for the collection of such packaging waste.

In the case of WEEE, any WEEE collected through systems by Local Councils and transferred to Civic Amenity sites is eventually handed over to the PROs at a price that reflect the total cost of recovery of the collection and storage, up to the point of takeover by the respective PRO and according to their market share. Hence, PROs are financially responsible for the first stage, whilst they bear both the financial and organisational responsibilities when it comes to the second stage.

A similar system is implemented for waste batteries and accumulators. In this context, it is worth noting that the provided description is a simplification, as both the producers and PROs are obliged to set up systems allowing final holders to return WEEE/batteries at no cost to them.

¹¹⁴ European Commission – DG Environment A.2 service request "Evaluation of the Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators" (Ref. Ares (2016) 5667354) under framework contract No. ENV.F.1./FRA/2014/0063

¹¹⁵ Eurostat data for 2017 (excluding Italy, Malta and Romania)

¹¹⁶ Subsidiary Legislation 549.43 of the Laws of Malta on Waste Management (Packaging and Packaging Waste) Regulations 1st March, 2007Legal Notice 277 of 2006, as amended by Legal Notices 426 of 2007,442 of 2012, 358 of 2013, 444 of 2014, 226 of 2017 and 227 of 2017

The Environment & Resources Authority (ERA), in its capacity as National Regulator on the Environment, regulates and monitors the implementation of the EPR principle in Malta. Schemes are authorised to operate as such in line with the respective Subsidiary Legislations upon granting of an Environmental Permit. The National Registers, whereby producers as defined in the respective Subsidiary Legislations required to register or to renew as a producer, are also maintained by ERA.

In terms of end-of-life costs covered by producers, the national legal framework on EPR allocates the full costs of waste management to the producers and PROs acting on their behalf. The collective fulfilment of producers' obligations has helped Malta improve its performance vis-à-vis waste management, although much progress still needs to be made in order for Malta to achieve its waste management targets.

Inter alia, locally there are only two organisations operating as PROs, Green MT and Green Pak (in packaging) and WEEE Malta (in terms of WEEE), while there are only a couple of companies that opted for in-house waste management treatment systems. The number of established PROs depends on the capacity of the reference market and the size of the country in which they operate, which, in the case of Malta, are both quite limited. Hence, it might be inferred that these key elements have determined the current number of operational PROs. In this respect, it is also to be noted that the current national legal framework on EPR does not restrict the number of PROs. The number of authorised PROs within Malta is also dependent on the number of companies who show interest in operating such schemes, and apply for a relevant PRO permit with ERA.

Like all other enterprises that are regulated by ERA, the Authority conducts regular compliance checks through its Compliance and Enforcement Directorate in order to ensure that the schemes are adhering to the conditions as identified in their permits.

Table 5.3 Additional Fee for a Self-Compliant Producer of Packaging orPackaging Material (Malta)

 $A^{*}(55\% - B)^{*}C = AF$

where:- "A" is the weight, in tonnes of back-end store packaging or packaging material put on the market in Malta during the operational year;

"B" is the rate of back-end store packaging waste recycled by the self-compliant producer during the operational year provided that if B is greater than or equal to55%, AF would be considered to be equal to zero (0);

"C" is a fee equivalent to:--three hundred and twenty euro (\in 320) per tonne if "B" is less than 25%;

-two hundred and fifty euro (\notin 250) per tonne if "B" is less than 50% but greater than or equal to 25%; and

-one hundred and eighty euro (\notin 180) per tonne if "B" is less than 55% but or equal to 50%.

"AF" is the additional fee for a self-compliant producer who fails to achieve the recovery and recycling targets.

Source: S.L.549.43

6. Conclusions - Basic Principles for Fee Modulation

For the best possible environmental change and at the same time an internal market which functions smoothly, Member States should make sure that the criteria for fee modulation are harmonised. In fact, in its recently updated guidance on EPR schemes, OECD states that, "*International harmonisation can enhance the impact of modulated fees for global consumer products*".¹¹⁷ To ensure harmonisation, the option of an implementing act could be used if guidance alone does not bring about sufficient consistency of approach across Member States.

EUROPEN also maintains that national modulation of EPR fees "are harmonised and applicable across the EU in order to avoid divergent national incentives/penalties for producers that impact the EU's internal market, and to encourage more harmonised sorting and recycling outcomes across Europe. Any erosion of the EU's internal market that results in divergent/disparate packaging measures across the EU will likely divert resources (financial and human capital) from innovation to legal compliance and hence

¹¹⁷OECD (2016) Extended Producer Responsibility – Updated Guidance for Efficient Waste Management
adversely impact the potential for investments in sustainable innovations (including in packaging design, packaging materials and recycling/sorting technologies)".¹¹⁸

To achieve specific objectives in terms of waste reduction and the Circular Economy, there are other policy tools which could be used and implemented apart from fee modulation within EPR schemes. For example, Member States could promote even more the use of reusable alternatives to single-use packaging. Incentives could be given to the end consumers at point of sale such as levies or charges, even tax deductions rather than involving only the producer through the fee modulation as the system is nowadays.

In terms of cost recovery, Article 8a(4) of Directive 2008/98/EC also states that "Member States shall take the necessary measures to ensure that the financial contributions paid by the producer of the product to comply with its extended producer obligations:

(b) in the case of collective fulfilment of extended producer responsibility obligations, are modulated, where possible, for individual products, or groups of products, notably by taking into account their durability, reparability, reusability and recyclability approach and aligned with the requirements set by the relevant Union law, and where available, based on harmonised criteria in order to ensure a smooth functioning of the internal market".

For a fairer fee structure then, such schemes have to move away from a flat fee structure towards a more granular structure where the cost of waste is calculated per tonne on the basis of recyclability. In other words, the products which are the most difficult to be recycled have to have a higher fee attributed to them. In this way the net cost of end-of –life products is more accurate and as a matter of fact the recycling targets are raised and even met. Ultimately, "the end-of-life phase of packaging must not be divorced from the functionality of packaging as part of the packaged product. Packaging's roles and functionalities need to be taken into account and should not be penalised through an isolated perspective and disproportionate focus on the end of life phase of packaging."¹¹⁹ Harmonisation between Member States should take into consideration not only variations in the magnitude of the modulation but also consistent direction.

¹¹⁸ EUROPEN (2019) Extended Producer Responsibility: EU Harmonised Principles for National Modulation of EPR Fees for Packaging, May 2019 ¹¹⁹ *ibid.*

Chapter 5: Conclusions and Recommendations

1. Introductory Remarks

The Polluter Pays Principle is enshrined in EU law, in fact Article 191(2) on the Functioning of the European Union (TFEU) states that: "Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the Precautionary Principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay".

On the other hand it is important that producers are treated equally and not according to their size or even origin. The burden put on them has to be proportionate; it should no longer be the case where producers of small quantities of products are treated the same as their 'giant' counterparts. Article 8a(1)(d) of the revised Waste Framework Directive emphasises on the concept of 'equal treatment' as it reads¹²⁰: "...ensure equal treatment of producers of products regardless of their origin or size, without placing a disproportionate regulatory burden on producers, including small and medium-sized enterprises, of small quantities of products".

If waste management is to be sustainable, Member States have to invest in EPRs which in their turn have to be incorporated in the EU waste legislation for a harmonised and streamlined implementation across all states. Although the Waste Framework Directive sets out the principles and definitions in terms of waste management, the EPR definition and its formalisation are minimal. More defined and specific legislation is needed for a functioning Circular Economy by which a fair level playing field for waste management is set up. The Commission's Ex-Post Evaluation of the Five Waste Stream Directives emphasises on the fact that although EPR is subject to both the Waste Framework Directive and the Packaging and Packaging Waste Directive, it is "*in need of further alignment as well as further development in both Directives*".¹²¹

Packaging makes part of a very specific waste stream. For this reason, a big number of companies involved in the packaging sector are obliged by EPR legislation. Different Member States have already in place various approaches to 'equal treatment' as part of the EPR schemes which they operate. Such schemes address different product types through different models of operation, and at times at different geographies within the same Member State(s). As a matter of fact the various approaches could be divided into two: those with no reduction in requirements, where the costs of end-of-life are borne by all producers, and those applying *de minimis* thresholds, with the aim of reducing those administrative burdens for smaller producers.

¹²⁰ OJEU (2012) Consolidated Version of the Treaty on the Functioning of the European Union, Official Journal of the European Union, 26th October 2012, available at <u>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN</u>

¹²¹ European Commission (2014) Ex-Post Evaluation of Certain Waste Stream Directives, Final Report, 18 April 2014, available at

https://ec.europa.eu/environment/waste/pdf/target_review/Final%20Report%20Ex-Post.pdf

2. The Free Movement of Packaging and Packaged Goods in the Internal Market

The internal market is one of the corner stones of the Union; if the internal market does not function properly the ambition of a Circular Economy in Europe will remain a dream set in stone. As a matter of fact the EU internal market forms the legal basis of the Packaging and Packaging Waste Directive (PPWD) as clearly stated in Article 16. Unfortunately though, there is a difference in terms of legal base between the Waste Framework Directive (WFD) and the PPWD. The different national EPR schemes, with different modulating fees and the different criteria used present a risk of fragmenting the internal market.

Another important fact to keep in mind is that packaging in itself is not a product but rather a product facilitator, since it protects various other products along different parts of the value chains while consumers are given an opportunity to avail themselves of the varied uses of the same products. While only the end-of-life of products is addressed by the EU waste stream directives, the full life-cycle of packaging is covered by the PPWD. For this reason, harmonisation between the WFD and the PPWD has to be taken on a case-by-case basis. It is therefore crucial that explicit provisions for EPR minimum requirements for packaging waste are included and specified in the PPWD.

3. The Free-Riding Problem

With reference to minimum requirements for EPR schemes, paragraph 5 of Article 8a of Directive 2018/851, amending Directive 2008/98/EC, states that "Member States shall establish an adequate monitoring and enforcement framework with a view to ensuring that producers of products and organisations implementing extended producer responsibility obligations on their behalf implement their extended producer responsibility obligations, including in the case of distance sales, that the financial means are properly used and that all actors involved in the implementation of the extended producer responsibility schemes report reliable data".

Certain companies may opt to sell their goods in other countries to free ride the system. This is because they make no contributions whatsoever either to take back the material for separate collection and not even in the funding for its collection and treatment. It seems that online distance selling is the main problem resulting in free-riding since most often distance sellers are neither registered as distributors and not even as producers. Statistics show that online sales within the European Union are growing rapidly, in fact it was reported that between 2012 and 2016 there was an increase from 25% to 32% in purchases from sellers in other Member States, while from sellers outside the EU there was an increase from 13% registered in 2012 to 20% in 2016¹²². Only very few Member States (amongst which are the UK, Ireland, Spain and France) have particular legislations in place which tackle directly the problem of free-riding. Up to the time of

¹²² OECD (2018) Extended Producer Responsibility and the Impact of Online Sales, OECD, available at <u>http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics_for_individuals</u>

writing this dissertation, there were no issued sanctions aimed at free-riding *per se* but only administrative charges were issued. In turn the latter vary widely amongst different Member States. For other importing countries such as Malta, cross border trade presents another problem, since most of the time goods are more expensive than in neighbouring Member States, and thus it is more worth financially convenient for the consumer to buy them from a short distance away.

4. Environment and Competition Policy

The tension between competition law and sustainable initiatives aimed to safeguard the environment in general and the life of humans, animals and plants is tense more than ever. This is a result of the increase in environmental awareness and sustainable initiatives. So in order to address the ecological problems we are facing, many markets need to be reshaped and thus the Circular Economy has to be fully and widely implemented if possible by all. Although measures which can either originate from either the European bodies and/or national governments to protect the environment, can have their effects on competition, it is about time that governments start realising that competition law could be given a bit the side, evaluated and prioritised from its social function perspective. As long as restrictions are proportionate, necessary and do not impair the very essence of competition, urgent environmental reasons should be given priority. This is not implying that the environment should be used as a 'wild card' at the detriment of competition law, but a better analysis of other means of achieving the environmental objectives having the least restrains possible on competition, should be applied.

5. General Recommendations

Harmonisation and equal treatment are vital if all Member States are to be the drivers in a fully functioning Circular Economy. In waste management treatment, regardless of the size of the organisation or the type and quality of the products placed on the market, all producers should join a PRO. This should be done at a specified and agreed point in the supply chain. In this way all producers are treated equally even though they operate in different markets through different systems applied by the Member States. Where producers opt to carry individual responsibility for products and waste placed on the market, a single point of compliance should be introduced.

Also, all producers should be involved in adequate minimum reporting where such reporting should be harmonised across all Member States so that it is not highly challenging for smaller organisations and free-riding is eliminated as much as possible. In the case of the fees involved, these should be levied, modulated and calculated prorata on the basis of the quantity and quality of products which are placed on the market. Where competition between schemes is healthy, Member States should make sure that such competition is only permitted for the sake of operational efficiency. For

transparency's sake, all PROs should publish their fees at particular point in times as deemed fit by the particular Member States.

To try and overcome the free-riding problem, mainly as a result of online selling, there has to be harmonisation between the different EU EPR laws (WEEE, batteries and packaging). Most often overseas sellers are faced with 28 different set of complex regulations together with the various different documentation to deal with. All this creates a lot of divergence, complication and confusion. Coordination is a must across different jurisdictions in terms of enforcement activities especially with reference to environmental regulations and the internal market.

Most often consumers tend to make their purchases through overseas sellers because the supplied products are cheaper. Only few are aware of the free-riding problem involved in packaging and waste management. If a visible fee such as the one for WEEE is available at the point of sale (as happens in some Member States), this can be a deterrent to illegitimate sellers, while at the same time consumers become more conscious of the effects of their purchases. Alternative product labelling would also help. It would be ideal if Member States make a deal with producers through multiseller platforms in order to obtain their commitment in dealing with free-riding. This could be done through the setting up of an e-commerce code of ethics or through a compliance requirement as mentioned in the e-commerce Directive¹²³ and the EU Blue Guide¹²⁴. On the spot fines, such as in the case of Ireland could also be used to prevent illegal online selling.

Couriers and parcel service providers can offer another practical solution. Since they act as representatives of the producers by delivering the sold/bought items, they can also be obliged to make a contribution towards a safer and cleaner environment, with the aim of reducing packaged waste as much as possible. It would be an example of good practice also if PROs and Authorised Representatives get involved in awareness raising in other Member States and even overseas where their products are sold.

Circular Economy is a very relevant idea for Malta, mainly due to its geographical position and lack of natural resources which ultimately make it dependent on other countries. Although this concept is not new within the Union, locally we are still on the doorstep of circularity. A series of bureaucracy and red tape do not help, in particular with regards to the complexity of certain rules which also lack the dissemination of correct and direct information. All this make compliance almost impossible. The duplication of information to be inputted and handed in when registering for particular schemes does not motivate companies to push forward, think outside the box and invest in setting up new systems to go greener either, as innovation and change cost considerable amount of time and ultimately money. Not to mention the concept of waste

¹²³ Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce')

¹²⁴ Commission Notice (2016/C 272/01), The 'Blue Guide' on the implementation of EU products rules [2016]

management in important sectors such as the construction industry; this still remain a major issue.

Finally, policymakers should present clear definitions for both the producer and the distributor so that EPR schemes are as harmonised as possible between different Member States. There should also be available an electronic register for all producers and distributors within the Member State which in turn is public and standardised for ease of access, information exchange and ultimately effective enforcement as established through the European WEEE Enforcement Network. As in the UK and Germany, Member States should be legally able to prosecute producers for illegal actions in another territory and/or country.

6. Conclusions Derived Regarding the Primary Research Question: How and to what extent the policies in place are sustainable to support the Circular Economy through better waste management systems?

The aim of the new Circular Economy Action Plan (CEAP 2.0) is the setting up of an innovation-driven policy agenda aimed to encourage viable solutions which are ambitious and at the same time economically viable for a circular EU economy. For the packaging supply chain to be ready for an effective and practical Circular Economy it has to be based of these four principles:

- The integrity of the internal market has to be preserved while avoiding competitive distortions;
- Packaging has to be functional and safe, while reducing product waste;
- Performance has to be based on the entire life-cycle of the product and its packaging;
- There has to be adequate funding of incentive schemes to support innovation and investment.

For this reason all packaging design has to be done in a holistic manner while maintaining its functionality. It has to focus on reusability, recyclability, recycling rate and recyclable content if the 2030 set target is to be reached. For a compromise to be reached between high level performance of the product and recyclability, it is important for the industry to set the design measures while the legislation makes sure that all is done in a harmonised manner across all Member States.

It will be useless to accelerate change in this sector if there is no continuity in the internal market, or if not all Member States fully transpose the net cost principle in EPR schemes. Even the processes involved in Food Contact Materials have to be approved by the EU, while Secondary Raw Materials have to be available at competitive prices.

Through the setting up at national level of EPR schemes, obligations in terms of recycling and recovery of packaging waste are more easily met by public authorities and producers/importers. But this is not enough. The consumer has to be involved even more especially in the development of better waste collection systems with a package-design notion. While the main burden in EPR implementation is carried by the producer, all actors in the value chain have to be directly involved and responsible, from the packaging production to the recycler. EPR systems should not be financially responsible for waste that is either littered or disposed of in an incorrect manner by the consumer.

While policymakers have to make sure that there are clear and defined legislations to support optimum and maximum levels for recycling, to align the level of quality of Member States reporting and to enforce the existing measurement point for recycling, for a circular economy that truly works, all actors involved have to be made legally liable for their responsibility or lack of it across all Member States.

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