Committee: Economic and Social Council (ECOSOC)

Issue: Reshaping the economy after calamities; technology and circular economy combined

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**INTRODUCTION** 

The world has faced many crises at an international and national level, that can be described

as calamities, since the beginning of time. After the industrial revolution in the 18th century, human

dependency on resources has intensified and there has been an increase in the usage of fossil fuels.

Scientists defined this new era of intensified human activity as "Anthropocene", while major crises of

this era include global warming, floods, famine, and biodiversity loss which are caused by climate

change. Alongside the climate crisis, some other global and local crises can be listed; the Syrian civil

war and refugee crisis, the Yemen civil war and food crisis, the Venezuelan migrant crisis, the Beirut's

port explosion, the locust swarms and hunger in Africa, the nuclear and natural disasters (hurricanes,

tsunamis, typhoons, cyclones, earthquakes, floods, wildfires). Nevertheless, the most prominent crisis

that our research report will focus on is the COVID-19 pandemic.

Since the establishment of global economic activity, the world has been facing global and local

economic crises causing big shifts.

During Covid-19, the international and national economies have confronted a shock.

Governments struggled with lockdown measures, there have been big shifts in stock markets,

unemployment rates have been rising, which means the world has been facing a major hit since

February 2020. The decline in gross domestic product (GDP) last year was the biggest since the Great

Depression in 1929 (Bloomberg). Thus, according to the researchers at the Pew Research center, the

middle class shrunk for the first time since the 1990s showing that an estimated 150¹ million people

faced depletion.

On the other hand, national crisis support and the commencement of vaccinations globally

have fueled a faster recovery than anticipated. However, the Covid-19 pandemic will leave deep scars

in the global economy even after recovery, according to Bloomberg. The poorer nations and emerging

 $^{1}$ Curran, Enda, and Simon Kennedy. "Covid Will Leave Deep Scars in World Economy Even After Recovery." Bloomberg.com, Bloomberg, 18 Apr. 2021, www.bloomberg.com/news/articles/2021-04-17/economic-recovery-after-covid-scars-will-remain-

after-the-rebound.

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economies will be hit the most according to specialists and these nations/territories are the most vulnerable ones who will suffer long-term consequences. Countries like Philippines, Peru, Colombia and Spain were highlighted by Oxford Economics Ltd. as the most vulnerable countries to economic scarring. "Getting back to the pre-Covid standard will take time," said Carmen Reinhart, the World Bank's chief economist.

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#### **DEFINITION OF KEY TERMS**

#### **Calamity**

Calamity can be described as a serious accident or bad event causing damage or suffering to many people. Economically speaking, calamity is the name of a crisis, disaster, or emergency that affects the welfare of people by increasing unemployment rates, causing inflation and/or recession leading to a lower growth rate. In this guide, the Covid-19 pandemic is recognized as a calamity.<sup>2</sup>

## **Circular Economy**

Circular Economy is the name of the new economic model aiming for a sustainable and durable industry. In accordance with the United Nations Development Programme's (UNDP) Sustainable Development Goals, the circular economy aims to reduce environmental footprint which is in contrast to the "take-make-waste" economic model.



## **Sustainable Development Goals (SDGs)**

Adopted by the UN in 2015, the SDGs, also known as the Global Goals, consist of 17 goals which were made primarily to end poverty, protect the planet and to ensure the safety of the goals by 2030. Some of the sustainable goals can be listed as such: zero hunger (2), gender equality (5), clean water and sanitation (6), affordable and clean energy (7), climate action (13).

<sup>&</sup>lt;sup>2</sup>"Calamity." Cambridge Dictionary, dictionary.cambridge.org/dictionary/english/calamity.

### Recession<sup>3</sup>

A recession is a significant decline in economic activity that lasts for months or even years It's usually determined by a negative gross domestic product (GDP) which means the economy has stopped growing. During a recession, unemployment rates start to increase and retail sales fall. Some of the causes of recession can be listed as such: a sudden economic shock, excessive debt, asset bubbles, too much inflation, too much deflation and technological change.

#### Inflation

Inflation is the decline of purchasing power of a given currency over time. A quantitative estimate of the rate at which the decline in purchasing power occurs can be reflected in the increase of an average price level of a basket of selected goods and services in an economy over some period of time. The rise in the general level of prices, often expressed as a percentage, means that a unit of currency effectively buys less than it did in prior periods.<sup>4</sup>

#### **Domestic Product (GDP)**

GDP is a commonly used measure for economic productivity of a country that measures the monetary value of final goods and services—that is, those that are bought by the final user—produced in a country in a given period of time (IMF)<sup>5</sup>.

#### **Gross National Product (GNP)**

There is also an alternative concept to GDP, which is gross national product (GNP). It excludes the foreign goods and services produced in a country, meaning that GNP only counts the output of the residents of a country.

## **Emerging Market Economies**

Emerging market economies<sup>6</sup> are in parallel with developing nations who, as they grow, start to engage more with global markets. Some of these markets tend to show the characteristics of a developed market but not all of the emerging markets have the same characteristics. India, Russia,

<sup>&</sup>lt;sup>3</sup> Rodeck, David. "What Is a Recession?" Forbes, Forbes Magazine, 26 Aug. 2021, www.forbes.com/advisor/investing/what-is-a-recession/.

<sup>&</sup>lt;sup>4</sup> Fernando, J. (2021, September 21). *What is inflation?* Investopedia. Retrieved September 27, 2021, from <a href="https://www.investopedia.com/terms/i/inflation.asp">https://www.investopedia.com/terms/i/inflation.asp</a>.

<sup>&</sup>lt;sup>5</sup>Callen, Tim. "Finance & Development." Finance & Development | F& Develo

<sup>&</sup>lt;sup>6</sup>Team, The Investopedia. "Emerging Market Economy Definition." Investopedia, Investopedia, 13 Sept. 2021, www.investopedia.com/terms/e/emergingmarketeconomy.asp.

Latin American countries, the majority of Asian and Middle East countries can be counted as emerging economies.

#### V-Shaped Recovery<sup>7</sup>

As one of the most common economic recovery types, v-shaped recovery represents the rapid growth of the economy after a crisis. Thus, it is an optimistic recovery which is without causing any lasting damage to the economy.

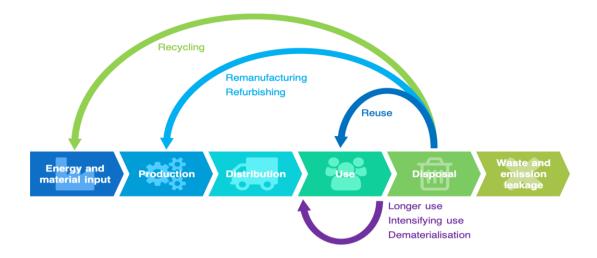
#### **BACKGROUND INFORMATION**

A country's major goal worldwide is to strengthen their economy and create a viable stability, that also includes recovery from major losses or else a reshaping of the current economy in order to prevent it from considering more losses. As states globally aim for a greener approach, this economic reconstruction could happen through circular economy, a system based upon green ideals which works through reusable energy and resources. Circular Economy was introduced in the 1970s during the time of the modern environmental movement, gaining momentum through a small number of academics and businesses. It was first stated as a term in 1988 in an article called "The Economic of Natural Resources" and this idea became a reality because of 3 major events that forced the hands of governments, the explosion of raw material prices between 2000 and 2010, the Chinese embargo on rare earth materials and the arrival of the economic crisis.

(Depiction of how the circular economy system works)

<sup>&</sup>lt;sup>7</sup>Hansen, Sarah. "U-Shape? V-Shape? Recovery Shapes Explained and What They Mean for America's Economy." Forbes, Forbes Magazine, 7 Jan. 2021,

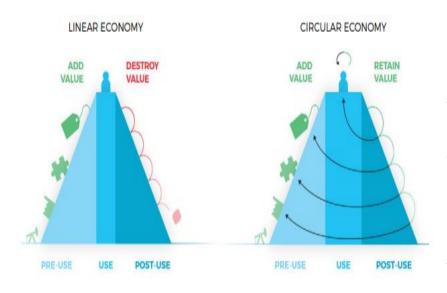
www.forbes.com/sites/sarahhansen/2020/06/03/u-shape-v-shape-recovery-shapes-explained-and-what-they-mean-for-americas-economy/?sh=5fd8dde325a5.



## The use of Circular Economy and Technology in recovering after calamities

Between the years 2000-2010 the industrial sector saw a huge increase in raw material prices delivering a fatal blow to industrial dependent economies. China being one of them took action by initializing the use of the circular economy system through their high reputation technology, by these means China managed to fend off the resource depletion that was threatening their industry while also minimizing environmental damage. Other countries continued in the same steps and had similar results and a general improvement in their economy, the transition from a linear economy to a circular one not only protects economies from calamities but flourishes them as it opens new jobs, is fund efficient and demands less energy and resources.

## (The difference between linear economy and circular economy)



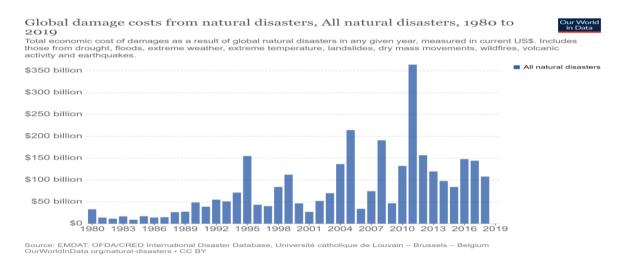
By retaining value, countries were able to limit their losses contrary to countries with a linear economy that destroyed value and had to manage more waste. This is the main reason why circular economy states pushed through COVID-19 more easily than linear economy

states.

## Recovering from Natural Disasters Through the Circular Economy System

A rising problem around the globe is the increase of natural disasters, countries that are struck by them tend to lose resources or industrial buildings and are left with billions in damage, this was the main concern in Europe as the continent as a whole average's annuals loss of 13 billion, in Asia damages came up to 67 billion in 2020 alone and the US paid 13 billion in damages the same year. Seeing the cost of damages, countries pushed to adopt circular economy on a bigger scale in order to maintain more resources and limit damages from natural disasters. Through this system balancing out damages is easier as resources are more quickly produced and are cheap for construction giving the country the ability to bounce back and maintain economic stability.

#### (Global Damages from natural disasters)



#### Implementation of The Circular Economy System in Previous Worn Torn Countries

Although industries in past worn torn states are implementing the circular economy technique especially in the middle east in countries such as Syria, Afghanistan, Iraq etc., a nationwide implantation is highly unlikely for the next 20 years as economic instability sores around these countries and minor conflicts are still ongoing leaving little space for investment in economic reconstruction as everything is deposited in military investments. Yes, circular economy is not compatible with these countries' current economic system. The success of the implementation of a circular economy is partially related to the development of compatible infrastructure that would support the 3Rs system with enhancement of the industrial sector being one of the fundamental parts of the system. It is evident that the industrial sector in these has been struggling over the past decades due to neglect, and high cost of operation with cheaper imported products flooding the local market.

Accordingly, to enhance the 3Rs, industrial sector should be developed to manage the various streams especially those related to reuse and recycling. The industrial sector can contribute to reuse by repairing used products, and/or enabling reuse of certain products as part of other new systems/products, while it can contribute to recycling by transforming current products into new one. In the absence of a competitive industrial sector, enhancing the recovery capacity of material from waste streams will not serve its purpose in moving towards a circular economy, as such recovered products may end up in landfills.

## MAJOR COUNTRIES AND ORGANISATIONS INVOLVED

### **United Kingdom**

The United Kingdom has issued a "build back better" plan that consists of three pillars of investment that will act as the foundation of economic recovery for the country. In the year 2021-22 the UK will make a capital investment of £100 billion towards infrastructure, that will purposely develop maintain and support the current eco-friendly industry. They also plan on delivering a Ten Point Plan for a Green Industrial Revolution and taking action to fulfil their commitment to be the first generation to leave the natural environment in a better condition than they found it.

#### **United States of America**

In January 20,2021 President Biden announced the American Rescue Plan aiming at getting American citizens and especially small businesses back on their feet. Provide grants to more than 1 million of the hardest hit small businesses. The US government will provide small businesses with an investment of \$15 billion which will be split to equitably distributed grants. The US congress will also generate \$175 billion in low interest loans and venture capital to aid entrepreneurs include those who work in the clean green energy sector. Lastly USA is a pioneer in implementing the use of circular economy through the Corporate Citizenship Center's Sustainability and Circular Economy program.

#### The Netherlands

Up until now The Netherlands have adopted two emergency aid packages to combat the direct effects of COVID-19 on the economy and to provide temporary liquidity support to businesses (e.g., loan support, tax deferrals) to avoid large scale increases in unemployment and insolvencies. The Netherlands' government has committed to firmly uphold the 2030 and 2050 mitigation goals, which ensure a green foundation under the economic recovery from COVID-19. The National Climate Agreement commits the government to reduce domestic GHG emissions by 49% in 2020 and the

Climate Act includes a binding target to reduce domestic GHG emissions by 95% in 2050. The government also aims at making the Dutch economy circular by 2050 with 3 "simple" steps, 1) by ensuring that raw materials are processed more efficiently, 2) by using sustainably produced resources such as biomass when new raw materials are needed, 3) by developing new production methods and designing new products to be circular.

### **GCC (Gulf Cooperation Council)**

The GCCs "recovery" plan in the year 2021 was to aid GCC peers through the FBP program, which was endorsed in 2018, through this program GCC members were able to narrow the fiscal deficit prior to COVID-19 and after. However, the GCC has been vastly criticized for its confrontation with waste management, that is why the UAE has taken action to impose a transition to a circular economic state, this transition will see an increase up to 75 percent in recycling rates and waste diversion from landfills and will open the path for UAE to develop on renewable energy and water recycling. Other GCC members have yet to follow in the steps of UAE due to the effects of COVID but the directed path of the GCC as a whole is to a more green and circular economy.

#### China

China is one of the most important countries on the topic if not the most important. China is the founding country of the circular economy system which they introduced in 2008, only to put it in force a year later in 2009, since then they have been a leading figure in its implementation. Through this system China managed to increase recycling rates and combat industrial waste with the use of major renewable resources. This system was the pillar of strength of the country's finance during the rise of COVID-19 which led to a more stable economy compared to other affected nations and which led China to quickly bounce back and introduce a 5 year "recovery" plan-development plan.



#### **European Commission**

In July 2020 the EU Council decided to put in place a new fiscal and governance framework. This was built on a Franco-German proposal, for the first time in EU history direct transfers to countries were allowed, in addition to loans, and on proposals by the Commission to finance such combined grants and loans by borrowing in markets and temporarily lifting the 'own resources' EU ceiling. The resulting EU Recovery Plan relies on two parts (European Commission 2021c): a new recovery instrument of €750 billion, which involves funding raised on financial markets for 2021-2024 (Next Generation EU); and a reinforced long-term EU budget for 2021-2027 (€1.1 billion). Together, these are aimed at aiding Member States to recover and 'build back better', by aligning public and private investment with broader EU goals – notably its green and digital agenda. Such as the Circular Economy Package, which was introduced in 2015, which led EU member states and regions to start implementing different types of policies to support the transaction towards a circular economy in different ways.

### **TIMELINE OF EVENTS**

Date	Description of Event
1970s	The origins of Circular Economy.

2002	China officially adopted the ideas of Circular Economy.
2008	Circular Economy Promotion Law of the People's Republic of China.
2008	Law for the Promotion of the Circular Economy and industrial park demonstration programs.
October 2014	The European Commission adopts a zero- waste program.
2015	The European Commission approves an action plan to boost Europe's transition to circular economy.
2017	Portugal adopts the Açao Plan for a Circular Economy.
2018	A series of transition agendas gets approved in the Netherlands.
December 2019	The European Green Deal is presented. The European Green deal, is an effort of the European Commission, to transform the EU to a modern, resource-efficient and competitive economy, to ensure that no net emissions of greenhouse gases by 2050, that economic growth gets decoupled from resource use and no person and no place left behind.
February 2020	France approved the law against squandering in a circular economy.
March 2020	The new Circular Economy Action Plan got approved
11 <sup>th</sup> of March 2020	The World Health Organization (WHO) declared a Global Pandemic.

## PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

Natural disasters and economic catastrophes have been known to mankind since the beginning of time and solutions have been found, so that the economy and the population can be reshaped. The

adoption of the circular economy has now begun to gain international recognition, not only on the technological, but also on the environmental sector. Unfortunately, we do not have much data or information on the specific area of this topic. Ecology, waste reduction and the usage of quality resources, are three things proposed to reduce waste (which is the main goal of Circular Economy) and finally shift the idea of waste as we know it. The technological sector and CE have not yet been combined and so there are no previous mentions, or information for us to point out.

Apart from the aforementioned, there have been some recent attempts and plans of the European Commission to solve the issue, to introduce CE to society and make our way of life Greener, like the delivering of the European Green Deal or the Zero pollution action plan.<sup>8</sup>

#### **POSSIBLE SOLUTIONS**

The main focus on the current topic should be to urge countries to adopt the circular economy system as a whole and influence them in developing tight frameworks through this system that will ensure economic stability after calamities. Delegates should also take into consideration that the task at hand is to create a withstanding economy that puts human rights first and governments' best interest second.

*Press corner*. European Commission - European Commission. (n.d.). Retrieved September 23, 2021, from <a href="https://ec.europa.eu/commission/presscorner/detail/en/ip 21 2345">https://ec.europa.eu/commission/presscorner/detail/en/ip 21 2345</a>.

*Press corner*. European Commission - European Commission. (n.d.). Retrieved September 23, 2021, from <a href="https://ec.europa.eu/commission/presscorner/detail/en/ip 20 420">https://ec.europa.eu/commission/presscorner/detail/en/ip 20 420</a>.

*Press corner*. European Commission - European Commission. (n.d.). Retrieved September 23, 2021, from <a href="https://ec.europa.eu/commission/presscorner/detail/en/ip 20 17">https://ec.europa.eu/commission/presscorner/detail/en/ip 20 17</a>.

*Press corner*. European Commission - European Commission. (n.d.). Retrieved September 23, 2021, from <a href="https://ec.europa.eu/commission/presscorner/detail/en/ip 19 6691">https://ec.europa.eu/commission/presscorner/detail/en/ip 19 6691</a>.

<sup>&</sup>lt;sup>8</sup> Delivering the European green deal. European Commission - European Commission. (2021, September 17). Retrieved September 23, 2021, from <a href="https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal en">https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal en</a>.

These goals can be achieved by organizing global meetings that focus on a green agenda, there, country leaders can discuss environmental problems and the possibility of a global adaptation of the circular economy system, although this system might not fit all, countries that have already applied it might encourage other states to follow in their path by showcasing the positive outcome it done for their economy. Through these meetings not only will a greener economic system spread but also more economies will be prepared to withstand huge effects from external sources such as COVID-19.

As we can see, the goal of global adaptation of the circular economy is of utmost importance, however many countries cannot afford to transition their system in these hard times as their already vulnerable economy has been exposed to the effects of COVID-19 and has succumbed to devastating levels. This problem can be solved via persuasion of major economy states to aid less fortunate ones in order to maintain global economic stability.

In general delegates should focus on finding a solution on the questions of how can the economy be reshaped around the circular economy system and how can that be achieved? How to persuade other countries to adopt this system? How to aid countries to make this economic transition and last but not least how to ensure economic safety for citizens?

#### **USEFUL LINKS**

United Nations Industrial Development Organization (UNIDO)- Guide for "Circular Economy"

https://www.unido.org/sites/default/files/2017-07/Circular Economy UNIDO 0.pdf

OECD- The Circular Economy: What, why, How and Where

https://www.oecd.org/cfe/regionaldevelopment/Ekins-2019-Circular-Economy-What-Why-How-Where.pdf

Coronavirus: How the pandemic has changed the world economy

https://www.bbc.com/news/business-51706225

The Global Economy: on Track for Strong but Uneven Growth as COVID-19 Still Weighs

https://www.worldbank.org/en/news/feature/2021/06/08/the-global-economy-on-track-for-strong-but-uneven-growth-as-covid-19-still-weighs

The Circular Economy in Detail

https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail

Covid-19: How to fix the economy

https://youtu.be/p0tCPwyJ6JI

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**ScienceDirect** "A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies" January 2021

https://www.sciencedirect.com/science/article/abs/pii/S0921344920304869

Managing environmental and energy transitions for regions and cities

"The Circular Economy: What, Why, How and Where"

Paul Ekins, Teresa Domenech, Paul Drummond, Raimund Bleischwitz, Nick Hughes, Lorenzo Lotti UCL Institute for Sustainable Resources, University College London

https://www.oecd.org/cfe/regionaldevelopment/Ekins-2019-Circular-Economy-What-Why-How-Where.pdf

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