

- **Market failure** is when there is a **less-than-optimum allocation** of resources from the point of view of society in a free market.
 - [Video](#) on Market Failure
- **Cost-benefit analysis** helps us see if a project fixes market failure by weighing social costs against social benefits.

Cost-Benefit Analysis

Private Cost	Private Benefit
<ul style="list-style-type: none"> ● The financial cost borne directly by an individual / business / government when they produce or consume a good or service. ● E.g., the financial cost to the individual consumer incurred from their installation. 	<ul style="list-style-type: none"> ● The gain or advantage received directly by an individual / business / government from consuming or producing a good or service. ● E.g., consumers' personal electricity bill will be reduced

Social Cost	Social Benefit
<ul style="list-style-type: none"> ● The cost to society / third party from the consumption or production of a good / service. ● E.g., the cost of construction (emissions, land use / waste) to society, impact on health, traffic, etc. 	<ul style="list-style-type: none"> ● The benefit to society / third party from the consumption or production of a good / service. ● E.g., reduced GHG emissions, improved air quality, less use of finite resources

Cost-Benefit Analysis for Following Scenarios

Project	Private costs	Social Costs	Private benefits	Social benefits
Moyross / Suburban Rail	Cost of building the rail. Private cost of tickets.	Environmental impact during construction (emissions) Loss of business during construction Opportunity cost	Saves money on car running costs (fuel, parking, insurance) Time savings if rail is faster / avoids traffic	Reduced traffic congestion Lower air pollution New businesses More equitable transport system
Tree planting along Castletroy greenway	Buying/planting trees Time to maintain Land use	Small disruption during planting	Nicer local environment Shade & comfort for walkers Higher property values nearby	Cleaner air More biodiversity Better community spaces Improved mental/physical health
Expansion of the University of Limerick	Building costs Rent for students Maintenance costs	Construction noise & traffic Pressure on local services Environmental impact	Shorter commute Better accommodation Rental income for developers	More jobs More student spending locally Less car traffic Higher education levels
Drinking Alcohol	Cost of buying alcohol Health problems Hangovers & lost time	Hospital & Garda costs Accidents & violence Impact on families	Enjoyment & relaxation Social bonding	Jobs in pubs/hospitality Tax revenue Community social events

Exam Question 2024

Question 9

- (a) Coillte has pledged to add a further 100,000 hectares of woodland to the 440,000 hectares it already manages by 2050. It is estimated the proposal will cost €2 billion.
Adapted from the Irish Times

Outline one opportunity cost of this pledge by Coillte and outline one social benefit of this proposal.

Opportunity cost:
Social benefit:

Exam Question 2024

A major expansion to the Dublin Area Rapid Transport (DART) service (named DART+ project) is set to begin construction in 2024 with an operational target date of 2029. The DART+ project plans to extend the length of the network from 50km to over 150km at a cost of €1.1bn.

- (ii) Outline one social cost **and** one social benefit of the proposed DART+ project.

Social Cost:
Social Benefit:

Exam Question 2022

- (a) Identify one **private cost** and one **private benefit** for the consumer of installing solar panels.

Private cost of installing solar panels:
Private benefit of installing solar panels:

- (b) Installing solar panels also creates **social benefits**. Discuss this statement.



Exam Question Deferred Paper 2022

(iii) The per capita consumption rate of alcohol in Ireland may involve social costs. Outline two of these possible social costs.

1.
2.

Lorraine C.

Causes / Types of Market failure

Cause	Explanation
Public goods	<ul style="list-style-type: none"> Public goods are goods not provided for in a free market. A full public good is non-excludable and non-transferable <ul style="list-style-type: none"> <u>Examples</u>: national defense, flood barriers, public paths, street lights. Video on public goods
Externalities	<ul style="list-style-type: none"> Occur when there is an external impact on a third party not involved in the economic transaction between the buyer and seller, e.g., passive smoking <ul style="list-style-type: none"> Video on externalities
Merit goods	<ul style="list-style-type: none"> Merit goods are goods or services that are beneficial to consumer and society but the free market does not provide enough of them <ul style="list-style-type: none"> e.g. education or healthcare
Demerit goods	<ul style="list-style-type: none"> Demerit goods are goods that have harmful impacts on consumers or society, and the free market provides too much of them <ul style="list-style-type: none"> e.g., vapes, alcohol, junk food
Abuse of monopoly power	<ul style="list-style-type: none"> Firms with monopoly power can restrict output or increase prices to maximise profits. Because they are not producing at a socially efficient level of output, there is a welfare loss to consumers.
Imperfect / asymmetric information	<ul style="list-style-type: none"> When one party has more information than the other in an economic transaction. and this can distort market outcomes, resulting in market failure.

Negative Externalities of Production

- Negative externalities is the cost to the **third party** not involved in the production or consumption of goods and services
- The market is failing due to **over-provision** of these goods and services, as only the private costs are considered by the producers and not the external costs
 - **Common examples** include air pollution, water contamination, and health problems in local communities

Policy solutions to Negative Externalities of Production

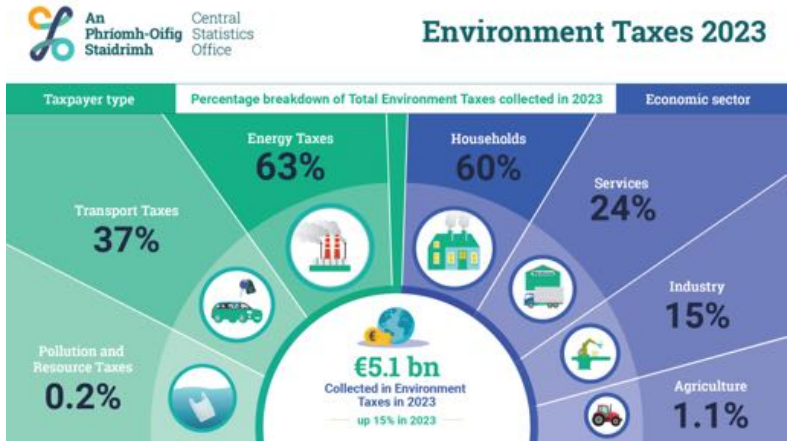
Brainstrom:

- Exam Question: **dairy and beef farming.**
 - The production of these goods has led to negative externalities for third parties such as individuals who aren't involved in the production or consumption of these goods have suffered the negative consequences of pollution and ill health.

Policy Solution: Reduce National Herd

Advantages	Disadvantages
<ul style="list-style-type: none"> • Reduces agricultural emissions: To achieve our overall targets, key areas such as agriculture must become a focal point for the government. • Environmental Sustainability: The Climate Action Plan 2021 sets out a roadmap for taking decisive action to halve our greenhouse gas emissions by 2030 and reach net zero no later than 2050. The overall emissions target for agriculture is a reduction of 22 to 30 per cent by 2030. 	<ul style="list-style-type: none"> • Unfair Focus on Agriculture: While agriculture is one of the largest contributors to greenhouse gases in the country, it is not the largest. Burning of fossil fuels, in homes and cars, made up 38% of all greenhouse gas emissions in Ireland in 2021. • Negative effect on Irish exports: If the herd is reduced, then exports may fall with a reduction in our circular flow of income. • Impact on Employment: If the herd is reduced, then production of dairy products may fall, resulting in unemployment.

Policy Solution: Environment tax



- Carbon tax is defined as a tax charge applied to carbon-emitting fuels such as coal, oil, and natural gas.
 - Watch the [video 1](#) and [video 2](#)

Evaluation of a Carbon tax

Advantages	Disadvantages
<p>Government revenue: Increased government revenue through increased revenues from this carbon tax.</p> <p>Investment in R&D / Encourage innovation: Greater investment in R&D into alternative sources of energy, renewables, and transport. Government could promote 'green industries' and thereby create jobs.</p> <p>Change consumer behaviour: Consumers may be more aware of the scarcity of these resources and so become more efficient in their consumption.</p> <p>Help pay towards our carbon footprint: the revenue collected can offset the cost of our collective carbon footprint and result in fewer emissions. Revenue may be targeted for specific environmental projects.</p>	<p>Inflationary pressures: Higher fuel prices will mean consumer prices increase, leading to a rise in the CPI</p> <p>Increased costs of production: The industry will now be paying higher prices, and this may reduce the international competitiveness of Irish firms. Increased costs may act as a disincentive to attracting foreign direct investment.</p> <p>Decrease in the standard of living: Higher prices mean less disposable income, and so the standard of living will fall.</p> <p>Regressive form of taxation: This tax would not take a person's ability to pay into account.</p>

Policy solution: The Circular Economy Act 2022

- The circular economy aims to transition away from the traditional 'take, make, waste' economy.

Challenges to Transition to the Circular Economy in Ireland

Challenge	Explanation
Consumer attitudes and behaviour	<ul style="list-style-type: none"> Many consumers are unwilling to acknowledge or are unaware of the ways they contribute to the traditional wasteful structure of our economy. Consumers must be made aware of the full cost of products and services and be charged the appropriate price. Consumers may be resistant to higher prices.
Government objectives	<ul style="list-style-type: none"> If the government truly wishes to achieve a circular economy which doesn't exploit people or the planet, then the focus of some of their objectives will need to change. The constant pursuit of economic growth may come at the expense of people and the planet. Government needs to provide infrastructure so as to provide citizens with responsible ways of disposing of waste i.e. compost / recycling facilities.
Business production methods	<ul style="list-style-type: none"> Businesses need to amend production methods, distribution methods, and sales expectations and introduce methods to extend the end of life of their products and reduce their negative environmental impact. Efforts made by firms to tackle waste generation may increase costs and act as a deterrent.

Exam Question

- (iii) Amazon secured planning permission for two new data centres in Dublin despite objections from environmental groups. (A data centre is a remote place, with many servers, used for the storage, processing and distribution of information.)
Adapted independent.ie

Discuss two possible **negative consequences** for the Irish economy of these data centres locating in Ireland.

1.
2.

Negative Externalities of Consumption

- Negative externalities of consumption are the **costs to a third party** not involved in the buying or selling of goods and services.
- The market is failing due to **over-consumption** of these goods/services, as only the private costs are considered by the consumers and not the external costs
 - E.g., the waste generated outside fast food outlets often has to be cleaned up and paid for using taxpayers' funds
 - Common examples include cigarettes, alcohol, fatty foods, single-use plastic products, etc.

Effects of the Deposit Return Scheme (correct negative externality)

Effect	Explanation
Incentive to return bottles	<ul style="list-style-type: none"> • Financial incentives drive consumer return rates and support a circular economy. This enables producers to manufacture new packaging directly from recycled bottles and cans, cutting down on waste.
Reduce use of scarce resources	<ul style="list-style-type: none"> • There is a reduced use of plastic or aluminum and energy used to make these products.
Reduced littering	<ul style="list-style-type: none"> • The deposit scheme reduces public littering, which improves community environments and cuts cleanup costs.
Reduced demand for plastic	<ul style="list-style-type: none"> • As the price has increased, this may create a disincentive for some Irish consumers to purchase the product.

Exam Question: 2022

Minimum Unit Pricing (MUP) for alcohol was introduced in Ireland in early 2022. Under the new measures, a standard bottle of wine (750ml) cannot be sold for less than €7.40 and a can of beer (500ml) for less than €1.70. Spirits (70cl) with 40% alcohol content cannot be sold for less than €20.70.
Adapted from Independent.ie

(a) Do you agree with this new MUP for alcohol?

Agree:

Disagree:

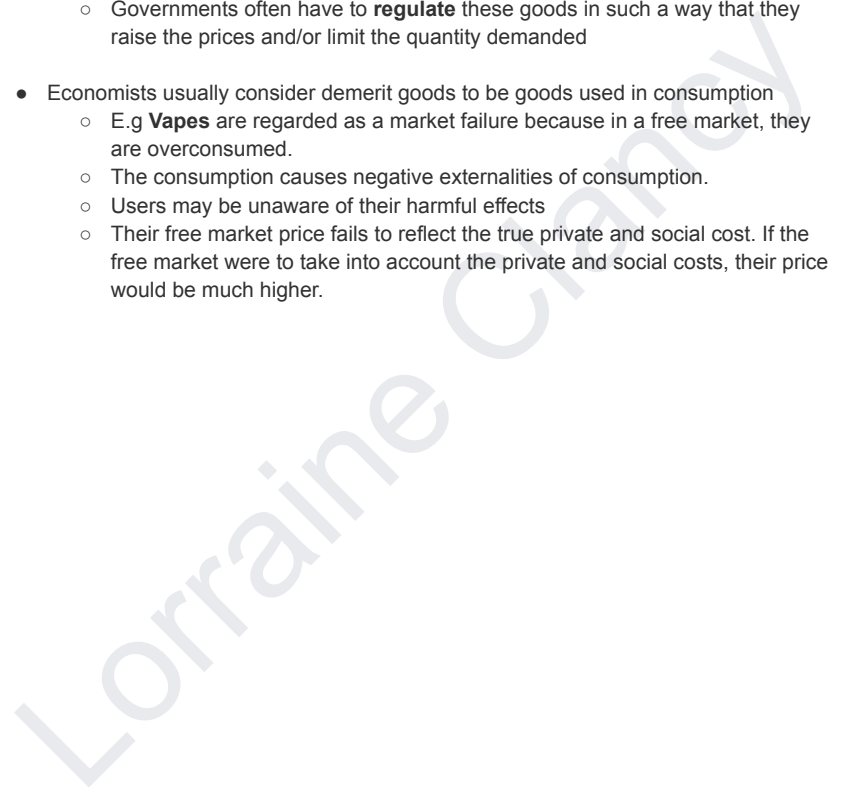
Justify your answer.

Justify:

(b) The purchase of alcohol in the free market may generate a **market failure**. Explain this statement using an example to illustrate your understanding.

Demerit Goods

- Demerit goods are goods that are harmful to the consumer
 - They are a market failure because there is an **overconsumption and overproduction** from the point of view society
 - These goods are usually addictive and harmful for consumers, e.g., gambling, alcohol, drugs, sugary foods/drinks
 - Governments often have to **regulate** these goods in such a way that they raise the prices and/or limit the quantity demanded
- Economists usually consider demerit goods to be goods used in consumption
 - E.g **Vapes** are regarded as a market failure because in a free market, they are overconsumed.
 - The consumption causes negative externalities of consumption.
 - Users may be unaware of their harmful effects
 - Their free market price fails to reflect the true private and social cost. If the free market were to take into account the private and social costs, their price would be much higher.



Solutions to Demerit Goods / Market Failure

E.g., vapes

Cause	Explanation
Ban Goods	<ul style="list-style-type: none"> The government could ban the sale of vapes to under 18s. They could enforce the law by imposing heavier penalties on sellers who breach the law.
Educational Incentives	<ul style="list-style-type: none"> The government could allocate funding to educational initiatives that explain the harmful effects of vaping. This will cause less consumers to purchase vapes.
Higher Tax	<ul style="list-style-type: none"> The government could impose higher levels of taxation on vapes or have a minimum unit pricing similar to that of alcohol. The more expensive e-cigarettes are, the less consumers are likely to purchase them.
Restrict Advertising	<ul style="list-style-type: none"> The government could legislate for strict advertising guidelines . This could restrict the marketing of vapes and consequently could have the effect of lowering demand.
Packaging / Point of Sale	<ul style="list-style-type: none"> The government could force producers to put health warnings on the packaging of vapes, similar to that on cigarettes. They could insist on plain packaging and/or restrict sales to certain retailers or put them out of sight of people under 18.

Sugar tax

- Is a tax on sugar-sweetened drinks. This came into effect in 2018. In 2021 it was 20c on 5-8g of sugar per 100 ml.
 - Watch the [video 1](#) and [video 2](#)
 - See [newspaper article](#) on Sugar Tax Shake-Up: UK Plans to Target Milkshakes and Dairy Drinks

Questions

- Is sugar tax a progressive or regressive tax?
- Explain how the introduction of a sugar tax is being used to overcome a negative externality? Brainstorm five economic implications of the sugar tax
- Debate whether the tax should be increased or decreased?
- Consider whether tax should be extended to other food items.

Advantages of Sugar tax

Advantage	Explanation
Revenue for state	<ul style="list-style-type: none"> This tax would bring in much needed revenue for the government that could help fund health initiatives. It could be programmes which tackle obesity particularly among young people.
Reduce consumption of sugary foods	<ul style="list-style-type: none"> The tax would increase the price of these foods and this may act as a disincentive to purchasing these foods. As price goes up, the retailer could pass the burden of the tax on to consumers, as price goes up, quantity demanded falls.
Reduces future health costs	<ul style="list-style-type: none"> By helping to reduce current consumption there may be less health problems in the future leading to less expenditure on health. Reduced illnesses in the population will help to reduce current health costs.

Exam Question 2024

- (ii) Cigarettes are classified as demerit goods.
Outline one possible effect of the demerit good markets.

Outline:

Exam Question 2024

- (ii) According to a European Agency, Eurostat, Ireland has the second highest rate of obesity in the European Union, with 26% of the adult population classified as obese.
Adapted from the Irish Times

Explain one economic measure **and** one social measure which, if taken, could help reduce obesity levels in Ireland.

Economic measure:
Social measure:

Exam Question 2021

Question 4

In budget 2021, the price of a 20 pack of cigarettes rose from €13.50 to €14.00. Cigarettes are classed as 'Demerit Goods' and as such their purchase constitutes a market failure.

- (a) Explain your understanding of the economic term **Demerit Goods**.

Answer (b) or (c)

- (b) Explain why the purchase of demerit goods, such as cigarettes, is seen as a market failure.

OR

- (c) Explain why the Irish Government intervenes by imposing higher taxes on cigarettes in budgets.

Exam Question 2024

The number of teenagers in Ireland who vape is on the rise. Vaping poses a number of possible dangers to teenagers.

Adapted from RTÉ News

(a) Explain why the purchase of vape products are a form of **market failure**.

Explanation:

(b) Outline two ways the Irish government could intervene in the vaping market to overcome this market failure.

1.
2.

Exam Question 2022

Question 3

Minimum Unit Pricing (MUP) for alcohol was introduced in Ireland in early 2022.

Under the new measures, a standard bottle of wine (750ml) cannot be sold for less than €7.40 and a can of beer (500ml) for less than €1.70.

Spirits (70cl) with 40% alcohol content cannot be sold for less than €20.70.

Adapted from Independent.ie

(a) Do you agree with this new MUP for alcohol?

Agree:

Disagree:

Justify your answer.

Justify:

(b) The purchase of alcohol in the free market may generate a **market failure**. Explain this statement using an example to illustrate your understanding.

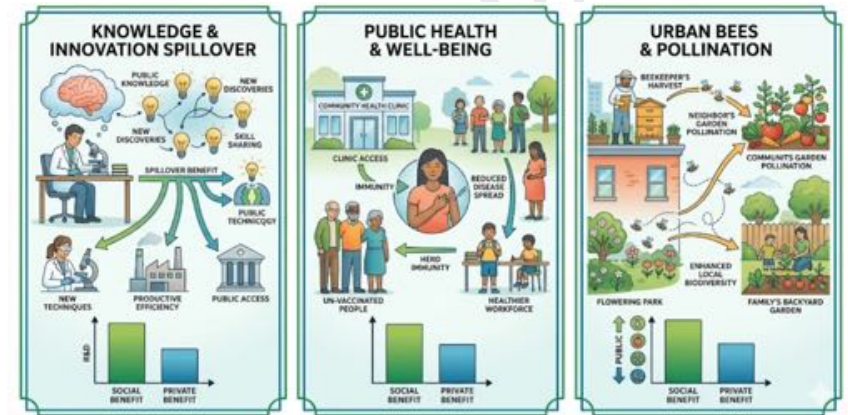
Exam question

(b) Explain how the introduction of the sugar tax is an example of taxation being used to overcome a negative externality.

Positive Externalities of Consumption / Production

- Whenever the consumption of a good or service gives positive effects to third party not involved in buying / selling
- The market is **failing due to under-consumption / under-production** of these goods and services, as only the private benefits are considered by consumers and not the external benefits
 - If external benefits were considered, the quantity of goods and services consumed would increase, and due to the higher demand, they would be **sold at a higher price**
 - Examples of goods with external benefits include education, healthcare, and vaccinations. These all have spillover benefits on third parties

Positive externalities



External benefits from beekeeping, education and vaccinations

- External benefits can be observed from university graduates
 - Educated individuals can obtain higher-skilled jobs and are more productive in the workplace, leading to economic growth
 - This reduces inequality if essential services are free, improving standard of living.

Analysing Private and Social Benefits

Product / Industry	Private Benefit	Social Benefit
Honey production	<ul style="list-style-type: none"> Satisfaction from keeping bees Revenue from sale of honey 	<ul style="list-style-type: none"> Pollination of surrounding flora / fruit orchards
Measles vaccination	<ul style="list-style-type: none"> Protection from a disease 	<ul style="list-style-type: none"> The protected individual is now unable to pass measles on to their friends - the friends are safe from catching measles

Exam Question: 2024

- (b) The Atlantic Technological University was launched in April 2022 creating a positive externality for counties Donegal, Sligo, and Mayo.

Explain what you understand by the term, positive externality.

Positive externality:

Exam Question 2022 Deferred Paper

- (b) 5% of new private cars purchased in 2020 in Ireland were electric-powered vehicles. This is a good example of a **market failure**.

In your opinion, is the statement above true or false? Explain your choice.

Indicate your answer by ticking (✓) the box. True: False:

Explanation:

Market Failure and Environmental Sustainability

- [Environmental Indicators CSO](#)
- Protecting the environment is important, as it aims to protect future generations, reduces threats to human life, and improves the standard of living now and in the future.
 - Measuring Ireland's [environmental progress](#)
- Brainstorm measures that could be used to protect the environment

Lorraine Clancy

Exam Question 2022 Deferred Paper

- (a) As world population has increased, so too has CO₂ emissions. World population is estimated to reach close to 8 billion by 2040. According to some experts this could be unsustainable. Do you agree with this statement? Explain your answer.

Explanation:

Exam Question 2022

The UN Secretary-General said the Working Group's report for sustainability was a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable. Adapted from rte.ie

- (b) (i) Outline the importance of environmental sustainability for the future of our economy.

Exam Question: 2022 Deferred paper

- (a) The Irish government is committed to protecting the environment.
Outline two measures the government introduced in Ireland to address this aim.

1.
2.

Asymmetric / Imperfect information (misinformation)

- When one party has more information than the other in an economic transaction and this can distort market outcomes, resulting in market failure.
- Asymmetric information causes market failure because it leads to an inefficient **misallocation of resources**.
 - E.g., In the second-hand car market, the seller possesses more knowledge about the vehicle's actual service or crash history. Because the buyer lacks this information, they end up overpaying / allocating too much of their financial resources to a good that is worth less than its sale price.
 - [Video](#) and video from [edco](#)
- Government solution is to **regulate / laws** consumers are protected through laws such as **competition and consumer protection commission (CPCC)** [link](#)
 - Pros: Legally enforceable
 - Cons: Increased costs for business

Exam Question

(b) Technology retailers mislead shoppers with Black Friday 'deals'. A survey of 'before and after' pricing shows that many products are not discounted as claimed.
Adapted from the Irish Independent

(i) Explain **why** misinformation to consumers by technology retailers represents a market failure in this industry.

(ii) Evaluate **how** Government intervention in this market could address this market failure.

Exam Question 2021

Question 13

(b) Technology retailers mislead shoppers with Black Friday 'deals'. A survey of 'before and after' pricing shows that many products are not discounted as claimed.
Adapted from the Irish Independent

(i) Explain **why** misinformation to consumers by technology retailers represents a market failure in this industry.

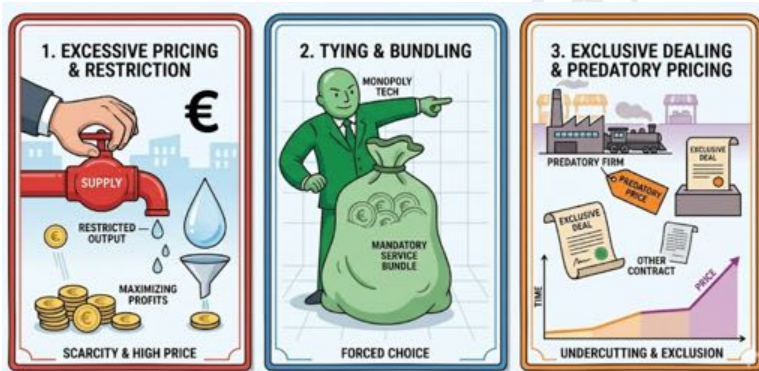
(ii) Evaluate **how** Government intervention in this market could address this market failure.

(iii) Explain, giving an example, one **advantage** of a government regulation.

Abuse of Monopoly Power

- A monopoly can lead to market failure because a dominant firm faces little to no competition. This allows the firm to **restrict output** below the socially efficient level and **increase prices** to maximise its profits.
 - As a result, **consumers get exploited** because they are forced to pay higher prices for goods and services.
 - This causes a **misallocation of resources**; consumers are forced to **over-allocate** their personal income to an overpriced good, leaving them with fewer financial resources to spend elsewhere in the economy. Because production is kept artificially low, a welfare loss occurs for society.

Examples of Abuse of Monopoly Power



Government Interventions and Abuse of Monopoly Power

- To reduce this market failure, governments use **competition policy** and regulation to control firms that abuse their dominant market position:
 - **Anti-Competition Watchdogs:** Regulators monitor market behaviour to protect consumers from being overcharged and ensure fair competition. In Ireland, this is managed by the **Competition and Consumer Protection Commission (CCPC)**, while international cases are handled by the European Commission.
 - **Preventing Mergers or Takeovers:** Governments pass laws to block corporate mergers or takeovers that would reduce consumer choice, stifle competition, or turn a market into an unregulated monopoly.
- **Real-World Example:**
 - [Google & Apple fined millions for abuse of monopoly power](#)
 - The European Commission heavily fines global technology giants for abusing their market dominance in mobile apps, operating systems, and digital advertising.

Sustainable Development

Exam Question 2022 Q7

- (a) The Irish government is committed to protecting the environment.
Outline two measures the government introduced in Ireland to address this aim.

1.
2.

- **Sustainable development** is defined as development that meets the needs of the present generation without compromising the ability of the **future generations** to meet their own needs
 - **Activity:** [Watch SDG video](#)



Exam Question: Ordinary Level

The UN Sustainable Development Goal (SDG) 14 is displayed below. The goal is to conserve and sustainably use the oceans, seas and marine resources for sustainable development.



Adapted from sdgsun.org

- (i) Explain one reason **why** our oceans and seas are a valuable economic resource.

Explanation:

- (ii) Outline one way **individuals** can help protect this valuable resource.

Exam Question 2022

Lego is to invest \$400 million to accelerate sustainability.

Adapted from www.lego.com

- (a) (i) **Sustainability** is a key concept in our study of Economics.
Explain the term 'sustainability'.

Exam Question

- (ii) Outline two steps **consumers** in Ireland can take to reduce the effects of the fast fashion industry.

1.
2.

Types of Sustainability

Types	Explanation
Social	<ul style="list-style-type: none"> • Social sustainability is the ability of a social system to operate indefinitely at a defined level of social well-being and harmony. • It focuses on quality of life, equal opportunities, law and ethics, and community development. <ul style="list-style-type: none"> ◦ E.g., housing/shelter for all, health equity, community development, social support, human rights, labour rights
Environmental	<ul style="list-style-type: none"> • In a sustainable environment, a system would be able to maintain populations, biodiversity and overall functioning over an extended period. • Environmental sustainability is the ability of the environmental system to support a defined level of behaviour indefinitely. <ul style="list-style-type: none"> ◦ Resource depletion: the reduction of available natural resources. E.g., oil, gas, and coal all cannot be replaced. ◦ Resource degradation: This is when natural resources become less productive over time. E.g., a river used for fishing becomes polluted.
Economic	<ul style="list-style-type: none"> • This is the ability of an economy to support a definite level of economic activity indefinitely • It refers to practices that support long-term economic growth without negatively impacting social, environmental and cultural aspects of the community

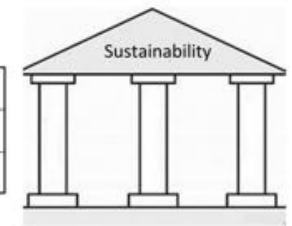
Exam Question: Ordinary Level

Question 9

Answer either (a) or (b)

- (a) Name the 3 pillars of sustainability.

1.
2.
3.



(iii) Outline one step **businesses** in Ireland can take to reduce the effects of the fast fashion industry.

Businesses in Ireland:

Activity: Make a poster of all the ways consumers, producers and government could be more sustainable

Challenges Meeting Sustainability Goals

Types	Explanation
Political & international instability	<ul style="list-style-type: none"> • Due to corruption, pandemics, crises, recessions, terrorism religion and wars, governments have become weak and unstable. • These factors make it very difficult for a government to implement their sustainability goals.
Implementation	<ul style="list-style-type: none"> • Transferring these goals into reality is a challenging task for many countries. • Countries and communities need access to a large amount of finance and support. • Poorer countries will struggle without assistance from larger and wealthier countries.
Governance	<ul style="list-style-type: none"> • Governance refers to how societies make decisions and take action. • For these sustainable goals this involves considering how government, business, non-governmental organisations, civil organisations and researchers will work together. • Countries need to co-ordinate and have a unified approach to these goals.
Time	<ul style="list-style-type: none"> • Progress is being made in many places, but it is not advancing at the speed or scale needed

Across

2. – _____ externality of consumption: Benefits others beyond the consumer. (8 letters)
4. – Negative side effect of production or consumption. (9 letters)
5. – Common single-use product causing environmental harm. (7 letters)
7. good – Beneficial good underprovided in a free market. (9 letters)
9. – Impact on a third party not involved in a transaction. (11 letters)

Down

1. – Single seller dominating a market. (8 letters)
3. tax – A tax on goods and services to discourage harmful consumption. (11 letters)
6. – Government policy to reduce negative externalities. (8 letters)
8. – Harmful good overconsumed in a free market. (7 letters)
11. – A habit linked to market failure and health concerns. (6 letters)

Lorraine Clancy