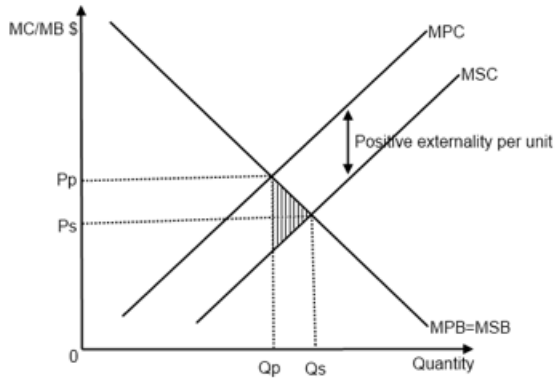
DEMAND AND SUPPLY **DEMAND**	The quantity of a good or service that consumers are willing and able to purchase at a given price in a given time period
DETERMINANTS OF DEMAND	• **Income** • **Price of other products** • - Substitutes • - Complements • - Unrelated Products
SUPPLY	The quantity of a good or service that producers are willing and able to produce at a given price at a given time period, cetarus parabus
DETERMINANTS OF SUPPLY	• **Costs of factors of production** • **The price of other products the producer produces** • **State of technology** • **Government intervention** *Tax, Subsidies* • **Number of firms in a market**
MARKET EQUILIBRIUM	Occurs where the forces of demand and supply are equal, i.e. where the willingness and ability of consumers to buy is the same as the willingness and ability of suppliers to supply
ELASTICITIES **ELASTICITIES**	A measure of the responsiveness of a variable to the change in another variable or one of its determinants
PRICE ELASTICITY OF DEMAND (PED)	A measure of the responsiveness of the quantity demanded of a product when there is a change in price of that product
PED/PES VALUES	• **0** –Perfectly Inelastic • **0-1** Inelastic • **1** – Unit elastic • **1 - ∞** - Elastic • **∞** Perfectly elastic
PERFECTLY INELASTIC DEMAND	Where a change in price has no effect in the quantity demanded of the product. (0)
PERFECTLY ELASTIC DEMAND	Where any change in price will lead to the quantity demanded falling to 0 (Infinity)
INELASTIC DEMAND	Where a change in the price of the product leads to a proportionally smaller change in quantity demanded of the product (0-1)
UNIT ELASTIC DEMAND	Where the change in price of a product leads to a proportional change to the demand for the product (1)

	• Increases costs so shifts MPC to MSC = MPC + tax. Firms resent cost so this line shifts right as they switch to greener energy or less pollution. This shifts MSC=MPC right, creating a new parato optimum, Q*2 and P*2 • **CAP AND TRADE** • Upper limit for the carbon produced is set • Then distributed, firms can trade the right to pollute – market for carbon permits with perfectly inelastic supply • Provides firms with an incentive to not pollute – profit of selling permit vs profit of producing and polluting • Leads to pollution being caused by those who value it the most • Encourages technological innovation, again lead to Q*2 • **Negatives** • Issue of measuring pollution, controlling pollution, how much to cap? How to distribute permits? Only works if government isn't corrupt • Still polluting, just making firms pay for it • Can only innovate so much within an airline industry • **LEGISLATION** • Ban the product, production process or set legal limits • **Negatives:** • Good or service may bring benefits, or be a high employer in the country
POSITIVE EXTERNALITIES OF PRODUCTION	Where the production of a good or service leads to external benefits of a third party i.e. society
	
SOLUTIONS TO POSITIVE EXTERNALITIES OF PRODUCTION E.G. TRAINING STAFF RECEIVE	• **SUBSIDISE** • **GOVERNMENT PROVISION**
MARKET FAILURES **MERIT GOODS**	A merit good is a good the government thinks is good for us and society and is underprovided and under produced and therefore under consumed in a free market system.

BREAKEVEN PRICE	The price where a firm makes normal profit in the long run, i.e. where its average revenue equals its average total cost including opportunity cost
BREAKEVEN PRICE	• Occurs where P = ATC • If **P > ATC** • The firm is making abnormal profit in the long run – stay open • If **P < ATC** • Businesses should shut down permanently in the long run as making a loss
PROFIT MAXIMISING LEVEL OF OUTPUT	All firms are assumed to do this. Occurs where MC = MR as there is no additional profit gained by producing the next level of output.
EFFICIENCIES **PRODUCTIVE EFFICIENCY**	A firm is productively efficient when it produces at its lowest possible unit cost. Where AC = MC
ALLOCATIVE EFFICIENCY	Where a firm is using the optimum amount of resources to produce their good or service, i.e. where producers are producing the optimal amount of goods and services. Parato Optimum level of output, best for society. Where MC=AR
PERFECT COMPETITION **ASSUMPTIONS**	• There are a large number of small firms therefore firms are 'price takers' • They all produce a homogenous product • There are no barriers to entry or exit i.e. firms are able to freely enter or leave the market • There is perfect knowledge • Possible to make abnormal profit, normal profit and losses in the short run
LONG RUN EQUILIBRIUM	• **SHORT RUN ABNORMAL PROFIT TO LONG RUN NORMAL –** • Perfect knowledge, so more firms enter the market, increasing supply so price decreases to equal ATC (draw backwards) • **SHORT RUN LOSSES TO LONG RUN NORMAL PROFIT –** • Perfect knowledge, unsustainable nature of making a loss, firms leave the market • Decreases supply, increases price to equal ATC