

Quiz 1

(5 points)

Time: 10 September 2021 at 15:00-15:30 (30 minutes)

There are 2 questions. You need to answer all questions. Please **submit** your answers in a PDF file with a file name “**Quiz1_StudentID_Name**” via BE Moodle class before **15:40**.

Question 1 (3 points)

Case A: The production of a plastic factory ‘K Chemical’ is located nearby a house village ‘Dreamland’. If the production of the plastic factory reaches a certain level at Q_m , it will release air pollutions to the level that destroy clean air around the Dreamland village. However, if the production of the plastic factory does not exceed Q_m , it will create no significant impact for people living in the Dreamland village.

Case B: In Thailand, the CO₂ emissions from oil consumption in transport sector increased from 51 million tons of CO₂ in 2008 to about 63 million tons of CO₂ in 2018.

Please answer the following questions for both Case A and Case B above

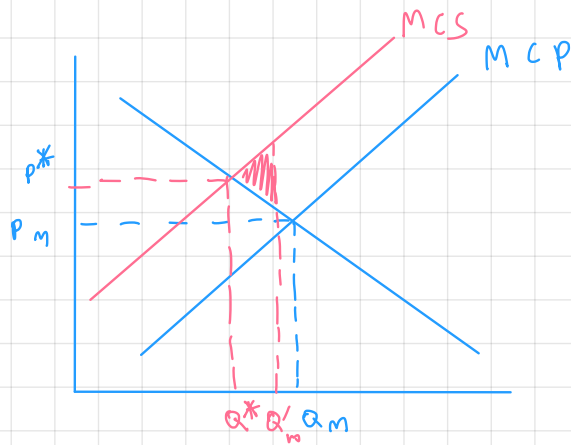
- i. Does an externality exist? If so, classify the externality type (e.g., positive vs. negative, costs vs. benefits) and explain how inefficiency problems could arise in this case.
- ii. If an externality exists, could the Coase Theorem be applied to solve market inefficiencies in this case? Please explain your answer (Hint: is it possible to use property right rules and solve the problem?)
- iii. If the Coase Theorem does not apply, what the government could do to solve the problem?

Question 2 (2 points)

Suppose an investor is considering a wind farm project to produce electricity. The wind farm will create noises that affect people living in a house village Dreamland.

- i. How could you estimate the compensation amount for people living in the Dreamland to approve the wind-farm construction? (Hint: Choose WTP vs. WTA question, methods to estimate WTP and WTA).
- ii. What should be considered in the cost-benefit analysis to decide if the wind farm project should be built or not?

i) In case A



the externalities cost created because it create pollution and plastic factory produce over the efficient level, which have a negative impact.

ii) case A

use coase theorem, if the property right is assigned to plastic company, the cost is borne by the villases (damages cost + payment to reduce the level of damage).

or if the property right is assigned to villases, the cost borne by plastic company.

iii)

the government should subsidy money to the villase because if the plastic can creat many jobs for people and help to increase GDP.

case B

ii) same as case A

iv) find policies to solve problem btw people and gov

iii) same as case A

Question 2

i) if wind farm have right $\rightarrow$ WTA for $\downarrow$ good
no right $\rightarrow$ WTP for $\uparrow$ good

right WTA $\rightarrow$ for measure what compensation
Ppl will accept to give
something up