

Environmental Trading Game

Sheep/beef Farm

- Your team manages a sheep/beef farm.
- The profit from your farm depends on how much meat you produce.
- The more you produce, the higher your emissions.

Profit Schedule

Meat produced	0	1	2	3	4	5	6	7	8	9
Profit from meat production	-\$10	\$0	\$7	\$14	\$19	\$23	\$25	\$26	\$27	\$26
Emissions	0	1	1	2	3	4	5	6	7	8

Scenario I

How much meat will your farm produce if there is no control on greenhouse gas emissions?

Based on the production schedule above, decide on how much your property will produce and fill in the table below.

	Meat produced	Profit	Emissions
Under no regulation			



Scenario 2

The Government has decided to reduce levels of greenhouse gas emissions. You cannot emit more than 6 units of greenhouse gases. Given this limit, how much meat will you produce?

Based on the production schedule above and this new regulation, decide on how much your property will produce.

With regulation limiting emissions	Meat produced	Profit	Emissions

Scenario 3

Now suppose that the Government implements a more flexible system where all farmers must cover their emissions with tradable allowances. One allowance covers one unit of emissions. You will receive 6 allowances. Now how much meat will your farm produce?

This time you may trade your allowances with the dairy farmer you are paired with. Negotiate to see whether you can achieve a higher level of profit by buying or selling allowances. Remember to note appropriate changes in your production and emissions levels.

Your total profit is the revenue from your meat plus the revenue from selling allowances (or minus the price you paid).

Under an emissions trading system	Meat produced	Allowances bought/sold	Allowance cost/revenue	Profit	Emissions

Scenario 3a

Do you think that you can do better? Try trading with a different group.

Under an emissions trading system	Meat produced	Allowances bought/sold	Allowance cost/revenue	Profit	Emissions

Environmental Trading Game

Dairy Farm

- Your team manages a dairy farm.
- The profit from your farm depends on how much milk you produce.
- The more you produce, the higher your emissions.

Profit Schedule

Milk produced	0	1	2	3	4	5	6	7	8	9
Profit from milk production	-\$10	\$0	\$7	\$14	\$19	\$23	\$25	\$26	\$27	\$26
Emissions	0	3	5	6	7	8	9	10	11	12

Scenario I

How much milk will your farm produce if there is no control on greenhouse gas emissions?

Based on the production schedule above, decide how much your property will produce and fill in the table below.

	Milk produced	Profit	Emissions
Under no regulation			



Scenario 2

The Government has decided to reduce levels of greenhouse gas emissions. You cannot emit more than 6 units of greenhouse gases. Given this limit, how much milk will you produce?

Based on the production schedule above and this new regulation, decide on how much milk to produce.

With regulation limiting emissions	Milk produced	Profit	Emissions

Scenario 3

Now suppose that the Government implements a more flexible system where all farmers must cover their emissions with tradable allowances. One allowance covers one unit of emissions. You will receive 6 allowances. Now how much milk will your farm produce?

This time you may trade your allowances with the sheep/beef farmer you are paired up with. Negotiate to see whether you can achieve a higher level of profit by buying or selling allowances, allowing changes in your production and emissions levels.

Remember that your total profit is the revenue from your milk plus the revenue from selling allowances (or minus the price you paid).

Under an emissions trading system	Milk produced	Allowances bought/sold	Allowance cost/revenue	Profit	Emissions

Scenario 3a

Do you think that you can do better? Try trading with a different group.

Under an emissions trading system	Milk produced	Allowances bought/sold	Allowance cost/revenue	Profit	Emissions