

The Art of a Deal: A Kyoto Protocol Simulation

by

Richard Cowlshaw, Biology Department, Southwestern College, Winfield, KS

Charles Hunter, Biology Department, Southwestern College, Winfield, KS

Jason Coy, History Department, College of Charleston, Charleston, SC

Michael Tessmer, Chemistry Department, Southwestern College, Winfield, KS



In this simulation, you will represent one of several countries attempting to barter an international agreement to lower global carbon dioxide (CO_2) emissions. For simplicity, there will only be three countries that need to lower their CO_2 emissions (Countries A, B, and C). To add a bit of realism, there will be one developing nation (Country D) that is exempt from any reduction agreement.

The goal of each country is to maximize its “score” as computed below. At the end of the simulation, each member of the highest-scoring country will have their names thrown into a hat for a \$50 campus bookstore gift certificate.

Rules

1. Countries A, B, and C will begin the simulation with 100 CO_2 units and \$100 per country. Country D has 50 CO_2 units for sale and \$20 to start.
2. An agreement must be reached that lowers global CO_2 emissions of Countries A, B, and C by 100 CO_2 units. The 100 could include CO_2 purchased from Country D. If an agreement is not reached, no names go in the drawing for the gift certificate.
3. Countries A, B, and C must approve any agreement unanimously. Country D has no vote.
4. Each country will designate two representatives that may speak to any other country or address the countries as a whole.
5. Country D has 50 CO_2 units available for sale. Any country can purchase these units with their dollars. These 50 units can be sold in smaller blocks to separate countries. *Any money used to purchase CO_2 units is given directly to Country D.*
6. Any CO_2 unit sales or reductions must be done in whole units.

Scoring: Determining the Winner

Countries A, B, and C

At the beginning of the simulation, Countries A, B, and C all have 200 points (\$100 + 100 CO_2 units). *However, at the end of the simulation if the CO_2 units of A, B, or C are below 100, their economies suffer.* If the CO_2 emissions are below 100, the economy must go down by one-half the amount below 100 units. For example, if Country A ends up with 80 CO_2 units and \$100, their economy will end up at \$90. Their total score will then be 170.

Country D

The final score will be three times the economic size in dollars. Your starting economy size is \$20, for a starting score of 60. *No credit will be given for unsold CO_2 units.*

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