Crossroads-World. ALTERNATIVE POLICIES FOR THE TRANSITION

TEAM	

For each option G1-G11 (goals), mark the selected option (a, b, c ...).
It is recommendable to read the entire form before starting to select choices.

As reference, past historical trends are indicated by underlining.

BRIEF EXPLANATION OF THE "NARRATIVE PLOT" CHOSEN UNTIL 2050-2080:

"BUSINESS AS USUAL": SPECIFIC GOALS

G1: Evolution of the population:

a) Lower growth than average forecast trends (~ 8,500 million people in 2050)
b) Average forecast trends (~ 9,200 million people in 2050)
c) Growth faster than average forecast trends (~ 10,000 million people in 2050)
d) Custom variation:_____% / year from the year_____.
e) Set target for 2050: _____million people. Extrapolation of historical trends until the year_____.

G2: Planned evolution of GDP per capita:

a) Lower growth than "standard" growth (+ 1% / person / year)
b) "Standard" growth (average 2015-2050: + 3% / person / year)
c) Higher growth than "standard" growth (average 2015-2050: 4.5% / person / year)
d) Custom variation: _____% / year from the year_____.
e) Set target for 2050:_____US $ per capita. Extrapolation of historical trends until the year_____.

G3: Economic structure's evolution:

a) Approximately same as last decade's.
b) Gradual evolution of initial's structure from year _____ to year_____ until the current Denmark's economic structure is reached.
c) Deep restructuration from year_____ to year _____ in order to achieve an economic structure more efficient and prioritizing less energy-intensive sectors.

G4: Global reforestation program to capture carbon from 2020?

a) No
b) Yes

From G5 to G12 the start year for each policy objective can be selected. Until the selected year, historical trends are extrapolated.

G5: Nuclear energy:

a) Constant installed capacity at current levels
b) No new nuclear power plants are installed, and the capacity currently in use is being withdrawn as it reaches the end of its lifetime.
c) Installed nuclear capacity variation:_____% / year from the year_____.

G6: Planned production of liquid biofuels:

a) Constant production at current levels
b) Growth following historical trends (+ 11% / year)
c) Growth at a higher rate than current trends (+ 25% / year) from the year.
d) Custom variation:_____% / year from the year_____.

G7: Planned installation of power plants for electricity generation using renewable sources:

a) Lower growth than historical trends (+ 10% / year[1]) from the year_____.
b) Growth following historical trends (+ 20% / year[1])
c) Higher growth than historical trends (+ 30% / year[1]) from the year_____.
d) Custom variation:_____% / year[1] from the year_____.
e) Indicate variation by technology in Table BAU1

G8: Planned heat production from renewable sources:

a) Lower growth than historical trends (+ 3% / year) from the year_____.
b) Growth following historical trends (+ 6% / year)
c) Higher growth than historical trends (+ 15% / year) from the year_____.
d) Custom variation:_____% / year from the year_____.
e) Indicate variation by technology in Table BAU1

G9: Inland transportation:

a) Continuity of dependence on oil (~ 80% in 2050)
b) Transition to gas and electric vehicles from the year _____(oil would still cover ~ 50% in 2050).

G10: Technological change. Trends in the evolution of energy efficiency by sector and fuel:

a) Constant energy efficiency at current values
b) Extrapolation of historical trends (+ 0.5% / year)
c) Higher improvement in energy efficiency than the historical trends (+ 1.1% / year) from the year_____.
d) Lower improvement in energy efficiency than the historical trends (+ 0.33% / year) from the year_____.

G11: Mineral recycling rates:

a) Constant current rates
b) Improvement of recycling rates to_____% / year for all minerals from the year_____.
c) Indicate specific rates for each mineral in Table BAU2

G12: Other greenhouse gas (GHG) emissions apart from CO2 from the combustion of fossil fuels (methane, changes in land use, etc.):

a) Continuation of the current trends
b) Rapid reduction of other GHG emissions
c) Slow reduction of other GHG emissions
d) Worsening of current trends

After the simulation: how would you describe the world situation in 2050-2080? Do current trends lead us to levels of final energy consumption and temperature increase that the group had set as desirable for the future?

1 Except hydroelectric, which due to the large installed power has grown at a slower pace in recent decades (+ 3% / year).

ADDITIONAL TABLES

Table BAU1: G7 & G8

Renewable technology	Customized variations (optional)
Electricity generation	
Hydroelectricity	
Geothermal	
Biomass	
Marine	
Earth wind	
Offshore wind	
Solar photovoltaic	
Solar CSP	
Heat generation	
Biomass for heat	
Solar for heat	
Geothermal for heat	

Table BAU2: G11

Mineral	Recycling rate in 2060 (optional)
Aluminium (Al)	
Cadmium (Cd)	
Chromium (Cr)	
Copper (Cu)	
Gallium (Ga)	
Indium (In)	
Iron (Fe)	
Lithium (Li)	
Magnesium (Mg)	
Manganese (Mn)	
Molybdenum (Mo)	
Nickel (Ni)	
Lead (Pb)	
Silver (Ag)	
Tin (Sn)	
Tellurium (Te)	
Titanium (Ti)	
Vanadium (V)	
Zinc (Zn)	