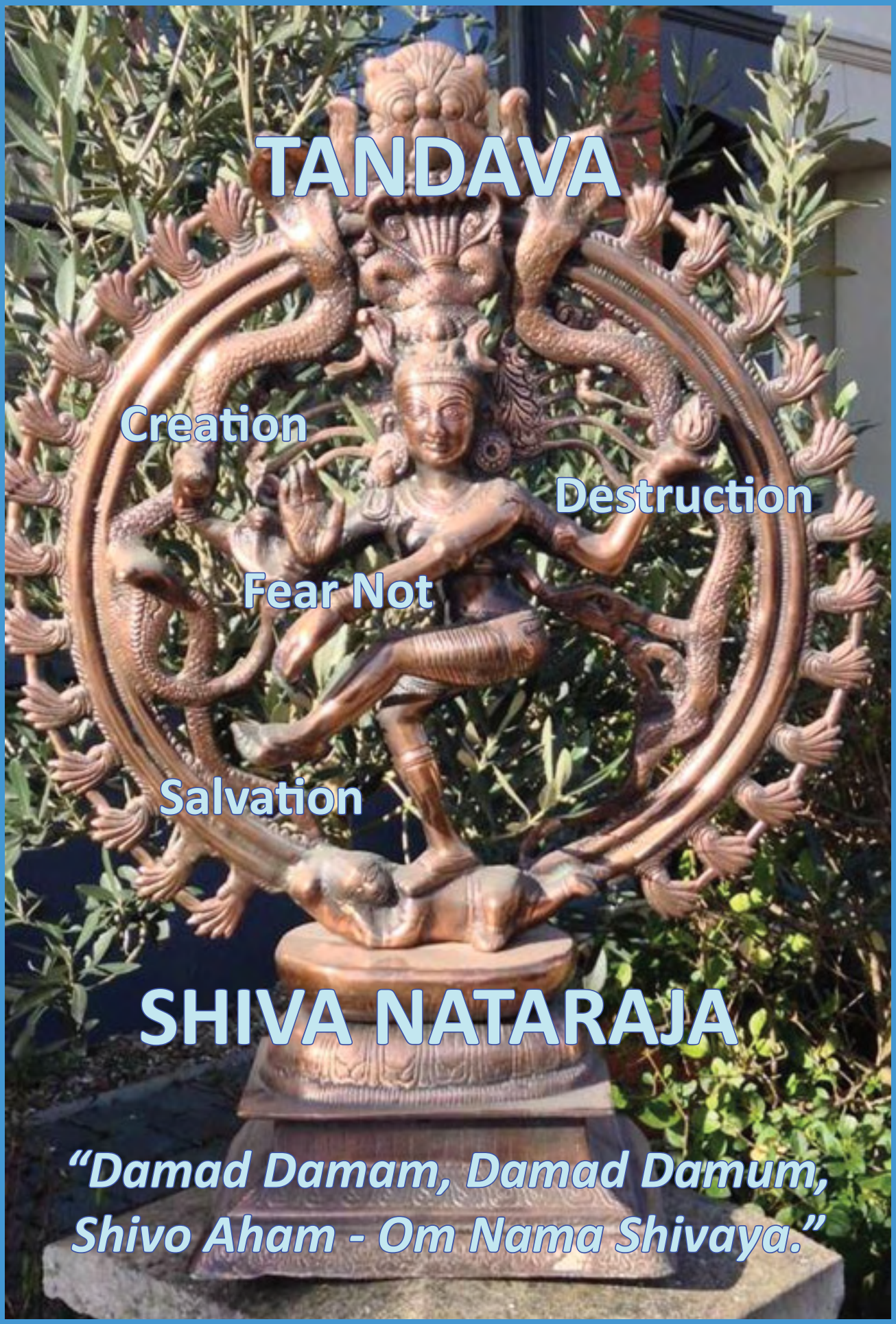
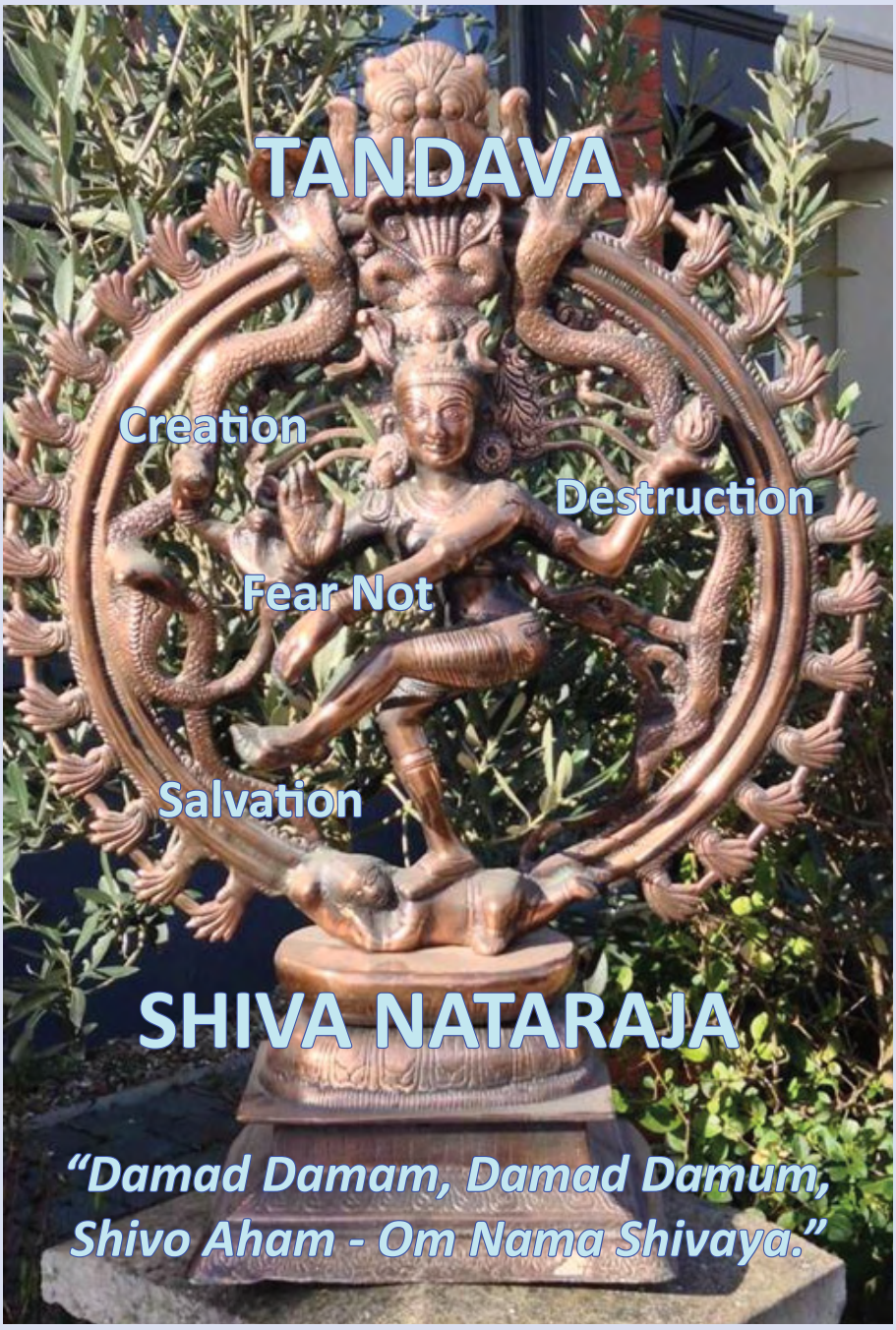

TANDAVA
Creation
Destruction
Fear Not
Salvation
SHIVA NATARAJA
“Damad Damam, Damad Damum,
Shivo Aham - Om Nama Shivaya.”


TANDAVA
Creation
Destruction
Fear Not
Salvation
SHIVA NATARAJA
“Damad Damam, Damad Damum,
Shivo Aham - Om Nama Shivaya.”

As ‘Nataraja’ - the King of Dancers
Lord Shiva’s TANDAVA Dance
is the dance of creation & destruction.

Lord Shiva’s four arms show us: -

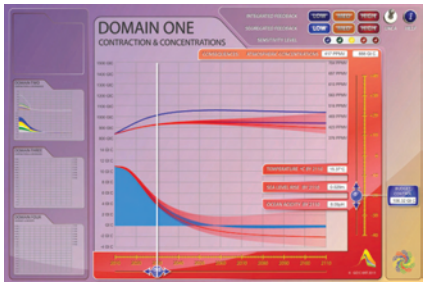
1. the drum of creation
   beating out the time of the dance

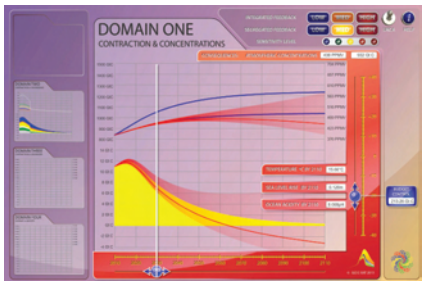
2. the fire of destruction
   burning the world to ashes

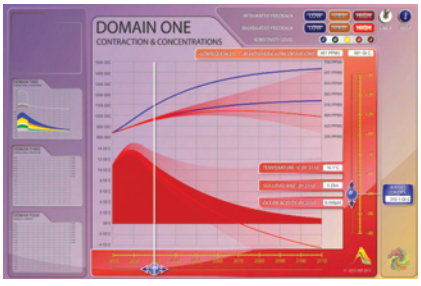
3. the ‘mudra’ [hand seal] of courage
   where he says, ‘Abhaya’ or Fear Not and

4. the way to salvation
   pointing to his foot on which he dances
   & where we must be in-time/in-tune.

Global emissions cut of >60% + 77% renewables by 2030 needed.
-30% +55% renewables risks uncontrollable damage rates;
returning to 2010 levels +34% renewables guarantees runaway.



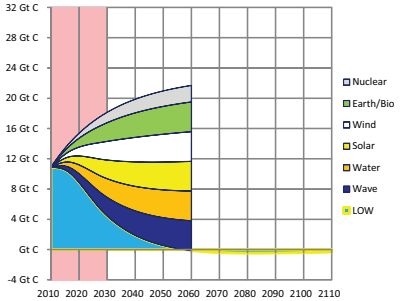




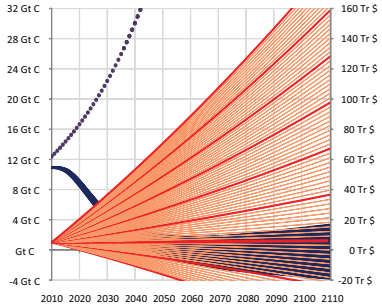
'CARBON BUDGET ANALYSIS TOOL' [CBAT]
Results show that for keeping under 2 Degrees there is . . . . .

SOME CHANCE

-60% Fossil Fuel Globally by 2030
+77% of Total Renewable by 2030



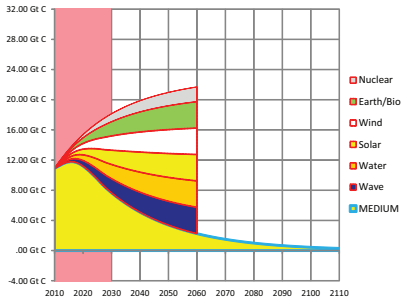
LOW; Sensitivity 1 (Parameter 460)



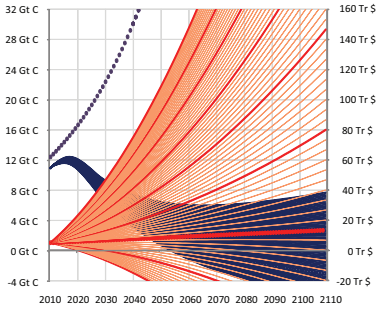
DAMAGES Accelerating

POOR CHANCE

-30% Fossil Fuel Globally by 2030
+55% of Total Renewable by 2030



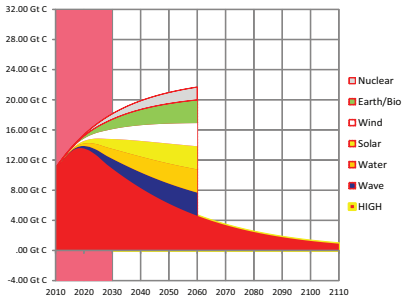
MEDIUM; Sensitivity 3 (Parameter 60)



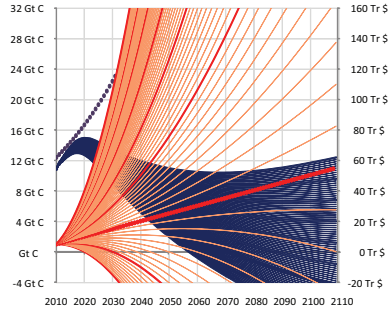
DAMAGES Rapidly Accelerating

NO CHANCE

2010 levels Fossil Fuel Globally by 2030
+34% of Total Renewable by 2030

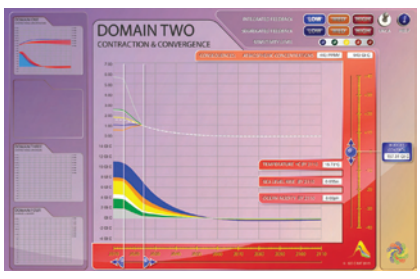


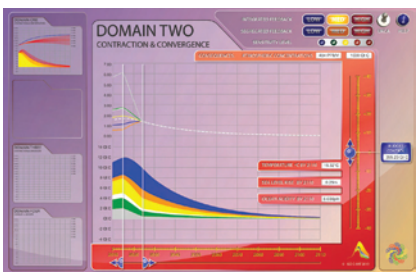
HIGH; Sensitivity 5 (Parameter 10)

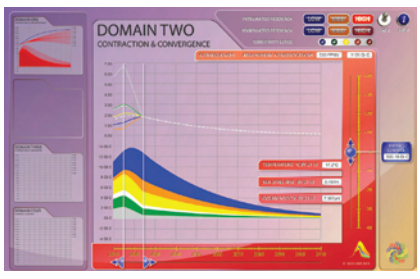


DAMAGES Runaway

CBAT DOMAIN TWO 'Contraction and Convergence' (C&C)
says the Carbon-Budget sized/shaped/shrunk in DOMAIN ONE
has to be internationally shared on a rational basis, if it is to occur.







DRAFT INTERIM NOTE ON CBAT CLIMATE-SENSITIVITY & CLIMATE DAMAGES

CBAT DOMAIN ONE plots the future of different rates of diminsishing fossil fuel dependency against different rates of conversion to a range of alternative sources for renewable energy, as shown opposite: -
Nuclear, Earth/Bio, Wind, Solar, Water, Wave.

This is CBAT DOMAIN THREE, Contraction and Conversion.
http://www.gci.org.uk/cbat-domains/Domains.swf

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However, the longer we cling to fossil fuel dependency, the higher: -

- the transient temperature trend will be, but also the higher
- the 'Climate Sensitivity' - the ultimate 'equilibrium' response -
- and therefore the 'economic-value' of damage trends can become.

This is CBAT DOMAIN FOUR Damages and Growth.
http://www.gci.org.uk/cbat-domains/Domains.swf

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In CBAT Domain Four the damage curves show that extreme rates of climate change can manifest with high climate-sensitivity, and these clearly have the potential to destroy the human economy if not civilization itself. The dotted red line in the 'damage footprint' corresponds with vertical slider position '-20': - http://www.gci.org.uk/cbat-domains/Domains.swf

As CBAT also shows, to avert this all means that somehow - aided by renewable energy sources and coordinated Government intervention - we must create this 'sustainable future' faster than we threaten to destroy it by clinging too long to fossil fuel use, as we do at present.

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Fundamental to this 'Science-Policy' challege is the 'concept-constitution' of CBAT DOMAIN TWO Contraction and Convergence (C&C). This says that the likelihood of negotiating an international agreement to expedite any finite Carbon- Budget is impossible without a rational sharing basis for that.
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CBAT DOMAIN FOUR - DAMAGES & GROWTH

Climate-Damage curves are shown as a 'Damage-Footprint'. The formula for this footprint is the same in all the positions arising in CBAT Domain 4. In all 15 different 'footprints' arise from the: -

[a] Single Uniform Module [SUM] calculating Damage-Footprints [described separately below] &
[b] Three 'Carbon-Budgets' ['LOW, MEDIUM, HIGH] times &
[c] Five 'Climate-Sensitivity' positions [Buttons 1,2,3,4,5] where points [b] & [c] are as set up in and controlled from the control panel originating in CBAT DOMAIN ONE.

As before, for each of the 3 Budgets, using the Vertical Slider ranges the damage-footprint in 'stepped-positions' [41 in all] from - 40 to + 40, centering on 'zero'. 5 Climate-Sensitivity' settings are available for each 'Carbon-Budget' giving a total of 1200 different footprint positions. However, NB, ALL these differences result from changing JUST ONE SINGLE 'PARAMETER VALUE' in SUM for each, as shown in column 9 in this FYI-table; SUM &/or these values can be in the xml datasheet: -

LOW BUDGET	SENSITIVITY LEVEL	Start Temp [2010]	for D4 Damages 'Straight-Line'	End Temp [2110]	Difference Start End	Year-on-Year Step	Sensitivity Parameter
Temperature Sensitivity	1	15.01	15.13	15.48	0.47	0.0059	210
Temperature Sensitivity	2	15.01	15.25	15.97	0.96	0.0120	180
Temperature Sensitivity	3	15.01	15.37	16.46	1.45	0.0181	140
Temperature Sensitivity	4	15.01	15.50	16.95	1.94	0.0243	100
Temperature Sensitivity	5	15.01	15.62	17.43	2.42	0.0303	60

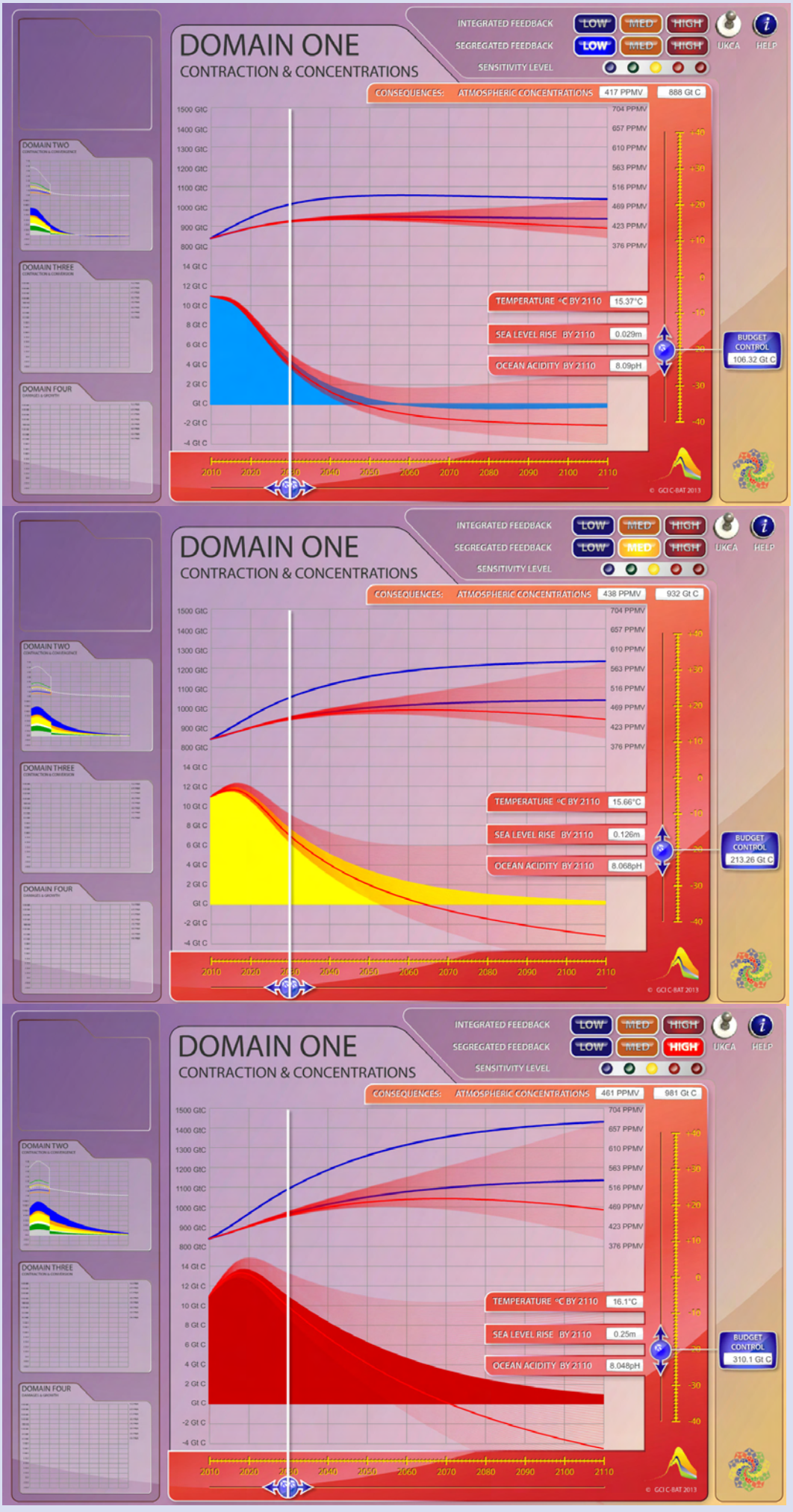
MEDIUM BUDGET	SENSITIVITY LEVEL	Start 2010	for D4 Damages 'Straight-Line'	End 2110	Diff	Step	Parameter
Temperature Sensitivity	1	15.01	15.20	15.78	0.77	0.0096	90
Temperature Sensitivity	2	15.01	15.45	16.75	1.74	0.0218	75
Temperature Sensitivity	3	15.01	15.67	17.63	2.62	0.0328	60
Temperature Sensitivity	4	15.01	15.89	18.51	3.50	0.0438	45
Temperature Sensitivity	5	15.01	16.11	19.39	4.38	0.0548	30

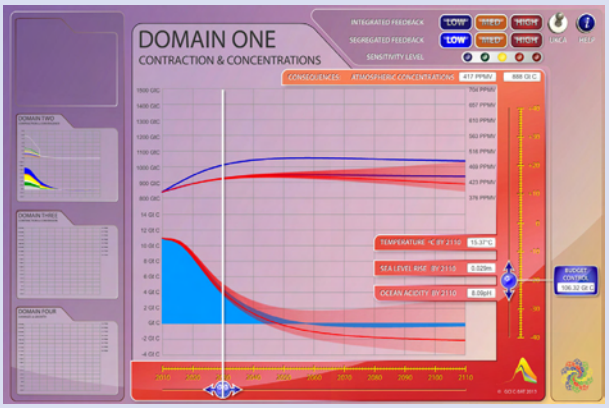
HIGH BUDGET	SENSITIVITY LEVEL	Start 2010	for D4 Damages 'Straight-Line'	End 2110	Diff	Step	Parameter
Temperature Sensitivity	1	15.01	15.37	16.46	1.45	0.0181	50
Temperature Sensitivity	2	15.01	15.74	17.92	2.91	0.0364	40
Temperature Sensitivity	3	15.01	16.11	19.39	4.38	0.0548	30
Temperature Sensitivity	4	15.01	16.47	20.85	5.84	0.0730	20
Temperature Sensitivity	5	15.01	17.09	23.31	8.30	0.1038	10

For the damage curves in Domain 4, the axis is on the right in Trillions of Dollars [$Tr] going from -20 $Tr to +160 $Tr. The Vertical Slider position at -20 always coincides with the Climate Damages 'FLAT-LINE' [marked as a dotted line]. In every case, this Climate Damages 'FLAT-LINE' separates the 60 Slider positions above it, [which progressively 'accelerate' or curve upwards], from the 40 positions below it [which progressively 'decelerate' or curve downwards] from year 2010 to year 2110.

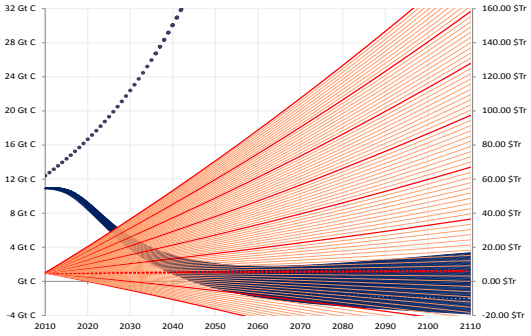
In Domain Four the Emissions-Lines are programmed the same as in Domain One from selecting the 'Segregated Feedback' Option. The axis is on the left in Gt C from -4Gt C to +32 Gt C. However, from 16 Gt C to 32 Gt C the axis values substitutes the right-hand axis [80-160 $Tr] for the dotted 'Economic Growth-as-usual' line [top left] where Global GDP is shown constantly rising @ 3%/year.

For each Budget the Emissions-Lines remain the same for each of the 5 Sensitivity settings. Only damage lines get steeper with each setting of 'Climate-Sensitivity' [1-5 as shown alongside]. The Emission-Line at Vertical Slider position -20 is also a dotted line. This is to assist understanding that it corresponds with the Climate-Damages Line at -20. In each case the Climate Damages Line selected with the Slider in the 'Footprint', moves in lock-step with the corresponding Emission-Line.

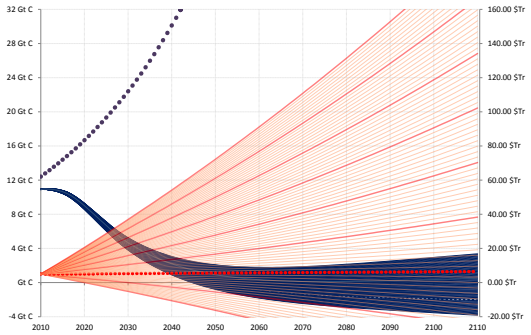

DOMAIN ONE
CONTRACTION & CONCENTRATIONS
INTEGRATED FEEDBACK
SEGREGATED FEEDBACK
SENSITIVITY LEVEL
LOW
MED
HIGH
UKCA
HELP
CONSEQUENCES: ATMOSPHERIC CONCENTRATIONS 417 PPMV 888 Gt C
TEMPERATURE °C BY 2110 15.37°C
SEA LEVEL RISE BY 2110 0.029m
OCEAN ACIDITY BY 2110 8.09pH
BUDGET CONTROL 106.32 Gt C
DOMAIN TWO
DOMAIN THREE
DOMAIN FOUR
DOMAIN ONE
CONTRACTION & CONCENTRATIONS
CONSEQUENCES: ATMOSPHERIC CONCENTRATIONS 438 PPMV 932 Gt C
TEMPERATURE °C BY 2110 15.66°C
SEA LEVEL RISE BY 2110 0.126m
OCEAN ACIDITY BY 2110 8.068pH
BUDGET CONTROL 213.26 Gt C
DOMAIN ONE
CONTRACTION & CONCENTRATIONS
CONSEQUENCES: ATMOSPHERIC CONCENTRATIONS 461 PPMV 981 Gt C
TEMPERATURE °C BY 2110 16.1°C
SEA LEVEL RISE BY 2110 0.25m
OCEAN ACIDITY BY 2110 8.048pH
BUDGET CONTROL 310.1 Gt C

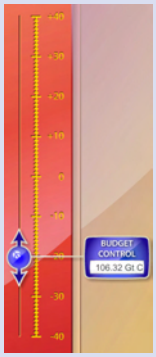


LOW Sensitivity 1 (Parameter 460)

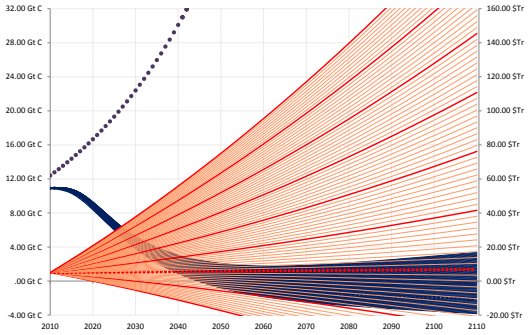


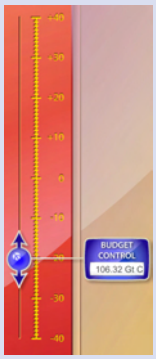
LOW Sensitivity 2 (Parameter 360)



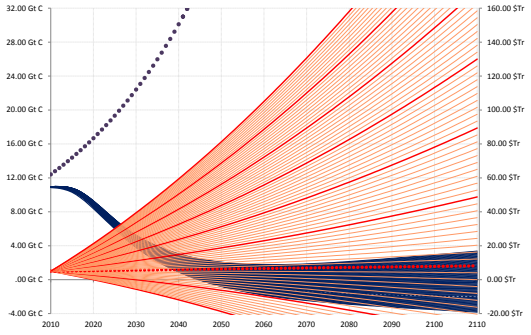


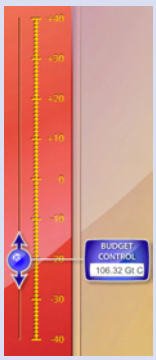
LOW Sensitivity 3 (Parameter 260)



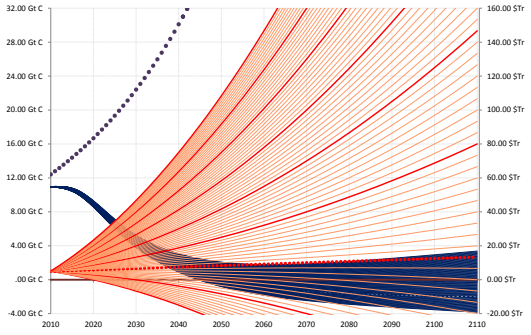


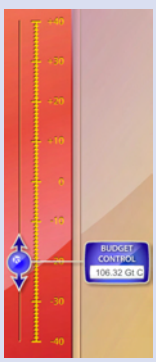
LOW Sensitivity 4 (Parameter 160)

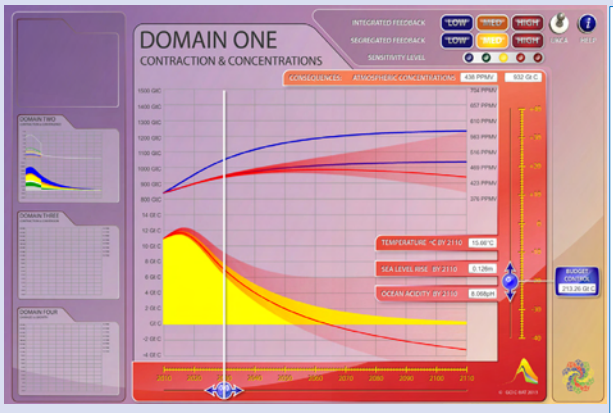




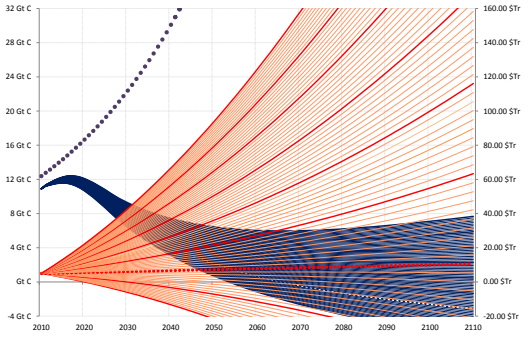
LOW Sensitivity 5 (Parameter 60)

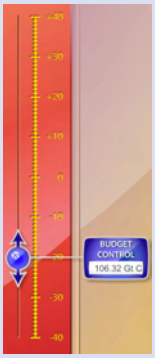




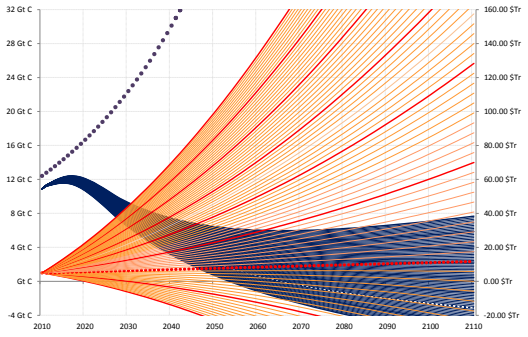


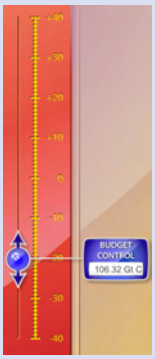
MEDIUM Sensitivity 1 (Parameter 90)



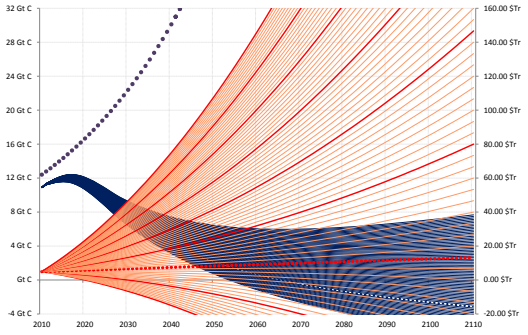


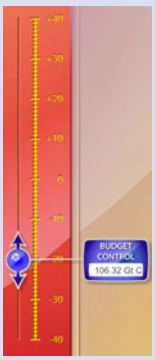
MEDIUM Sensitivity 2 (Parameter 75)



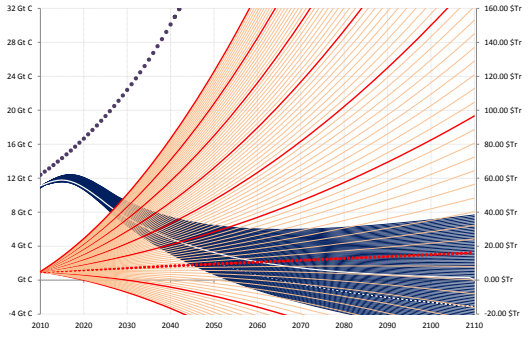


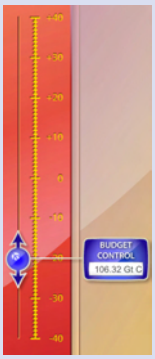
MEDIUM Sensitivity 3 (Parameter 60)



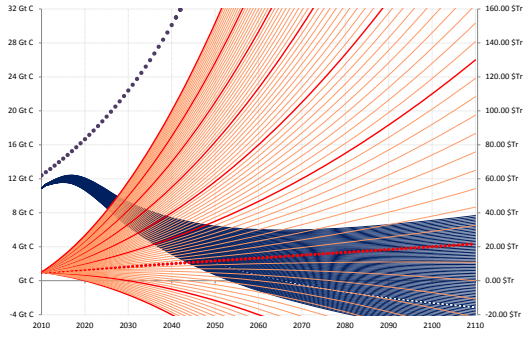


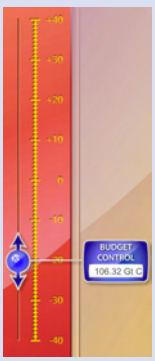
MEDIUM Sensitivity 4 (Parameter 45)

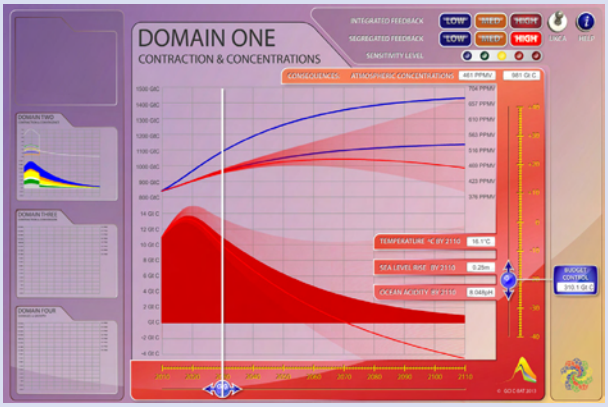




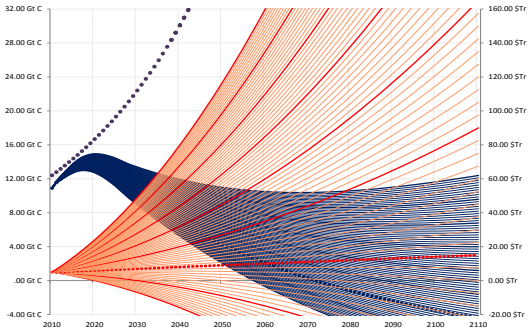
MEDIUM Sensitivity 5 (Parameter 30)

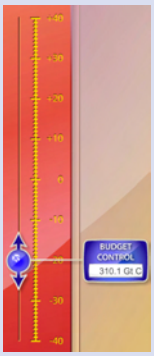




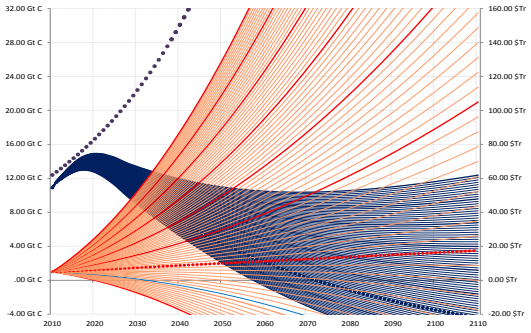


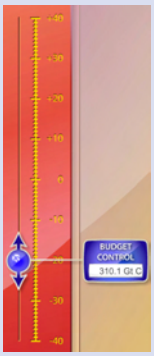
HIGH Sensitivity 1 (Parameter 50)



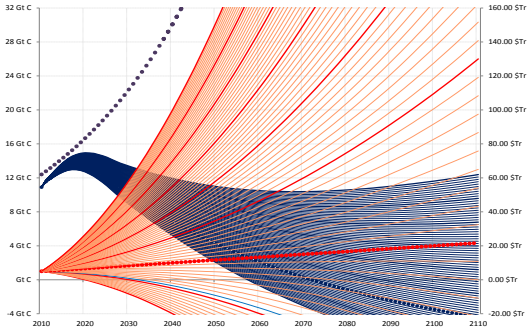


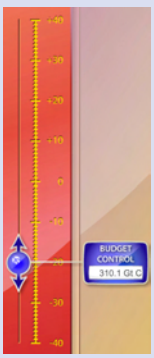
HIGH Sensitivity 2 (Parameter 40)



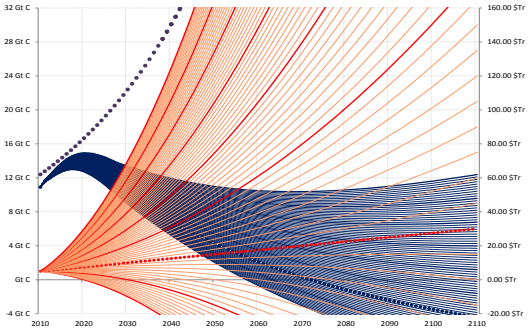


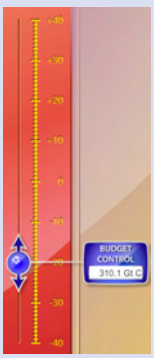
HIGH Sensitivity 3 (Parameter 30)



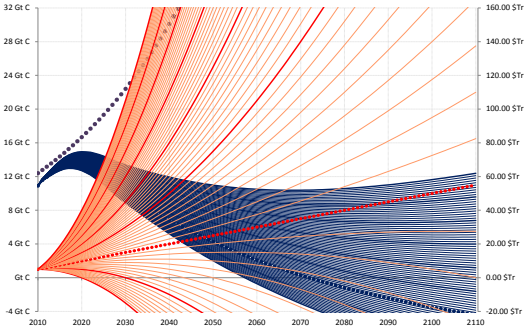


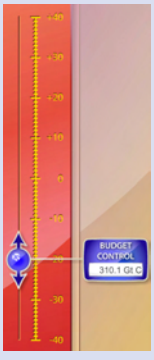
HIGH Sensitivity 4 (Parameter 20)





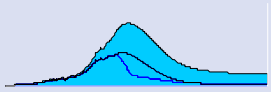
HIGH Sensitivity 5 (Parameter 10)

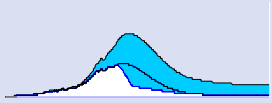


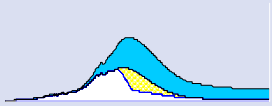


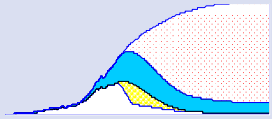
Climate Change in the Light of the Four Noble Truths of Buddhism

1. There is a problem
   Global climate change is a global problem.
2. There is a cause of the problem
   Systemically driven over-consumption and inequality are the cause of the problem.
3. The problem can be overcome
   A global solution is needed to overcome the problem.
4. There is a way to overcome the problem
   A global framework for "Contraction and Convergence" based on

One:
Precaution  *Global contraction of carbon emissions*

Two:
Equity  *Convergence to equal shares per head*

Three:
Efficiency  *Global trading of shares ease transition to*

Four:
Prosperity  *with zero-emissions life-style and techniques*

Tao says: - "*from 1 comes 2, from 2 comes 3 & from 3 come the 10,000 things.*"

From, ***"Contraction & Convergence, the Global Solution to Climate Change"***

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