

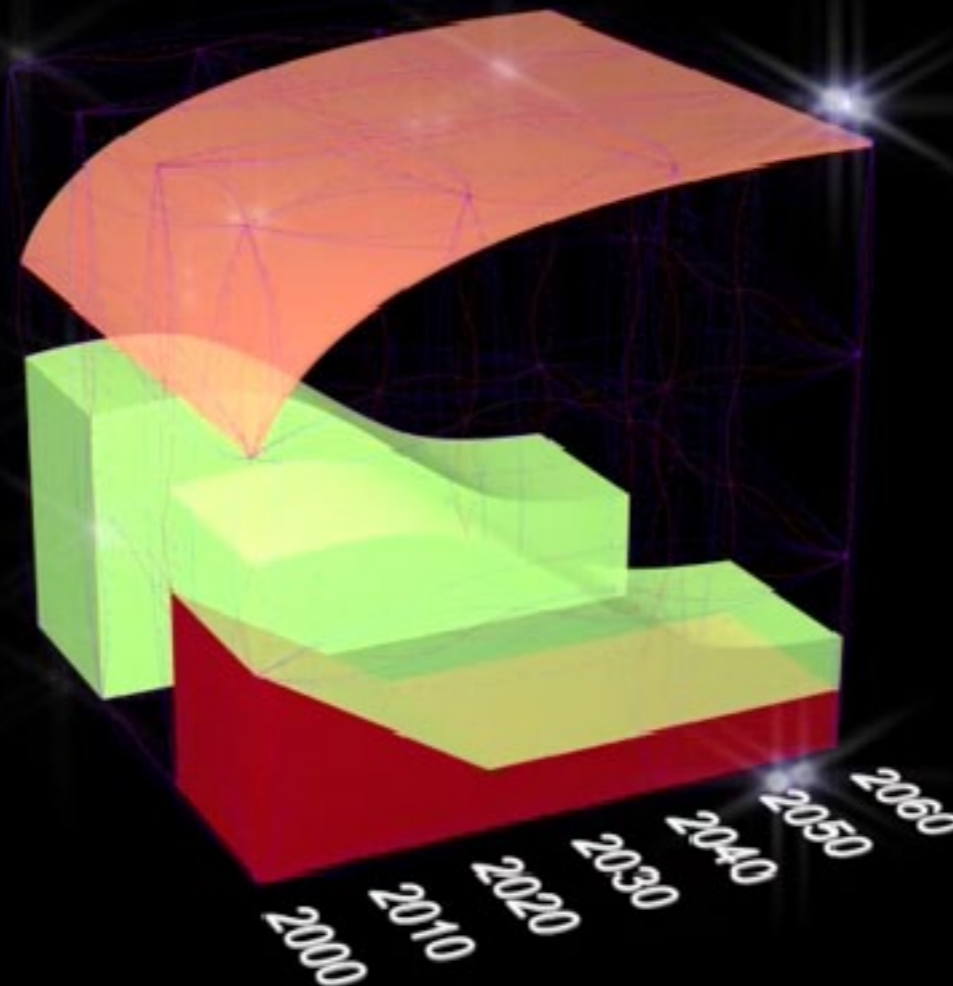
# While C&C is structured in the 'First Law of Physics', C&C is like a 'Well Tempered Climate Accord'.

**Contraction & Convergence or C&C is a proposal to the UNFCCC  
or the United Nations Framework Convention on Climate Change.  
The UNFCCC Executive says C&C is inevitably required for compliance: -**  
[http://www.gci.org.uk/UNFCCC\\_Submission.html](http://www.gci.org.uk/UNFCCC_Submission.html)

**While the UNFCCC process remains deeply divided, C&C is deeply and diversely supported: -**  
[http://www.gci.org.uk/UNFCCC\\_Submission\\_Co-Signatories.html](http://www.gci.org.uk/UNFCCC_Submission_Co-Signatories.html)  
<http://www.gci.org.uk/endorsements.html>

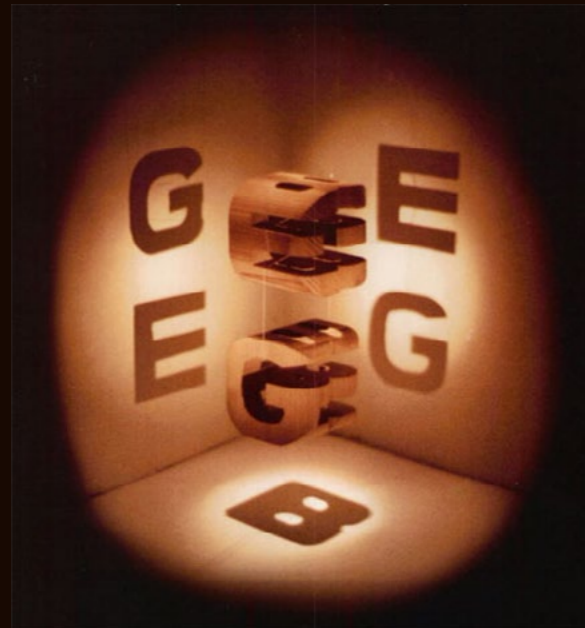
[http://www.gci.org.uk/UNFCCC\\_Submission.html](http://www.gci.org.uk/UNFCCC_Submission.html)

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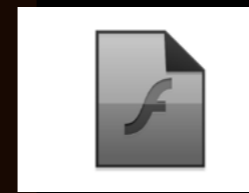




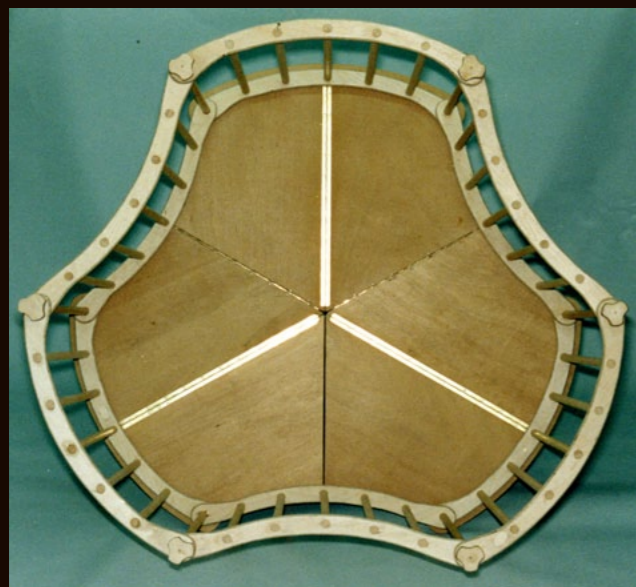
# Godel, Escher, BACH



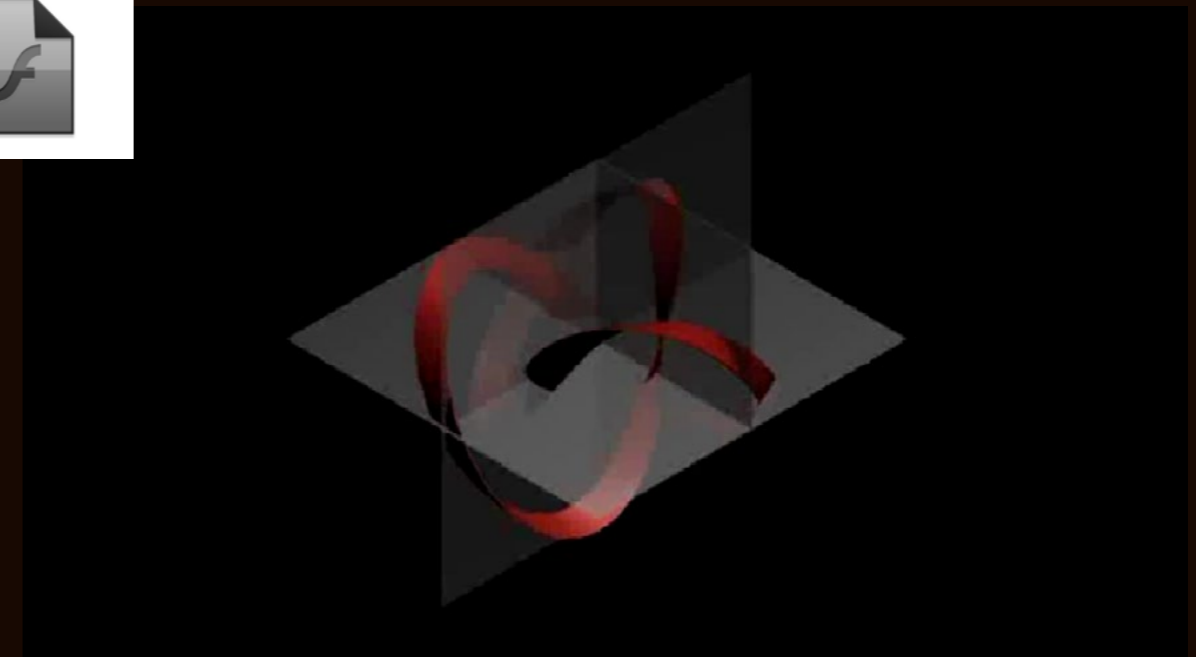
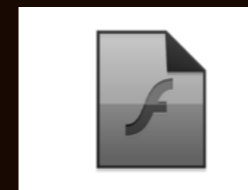
# 'Trefoil'



# Flexapen

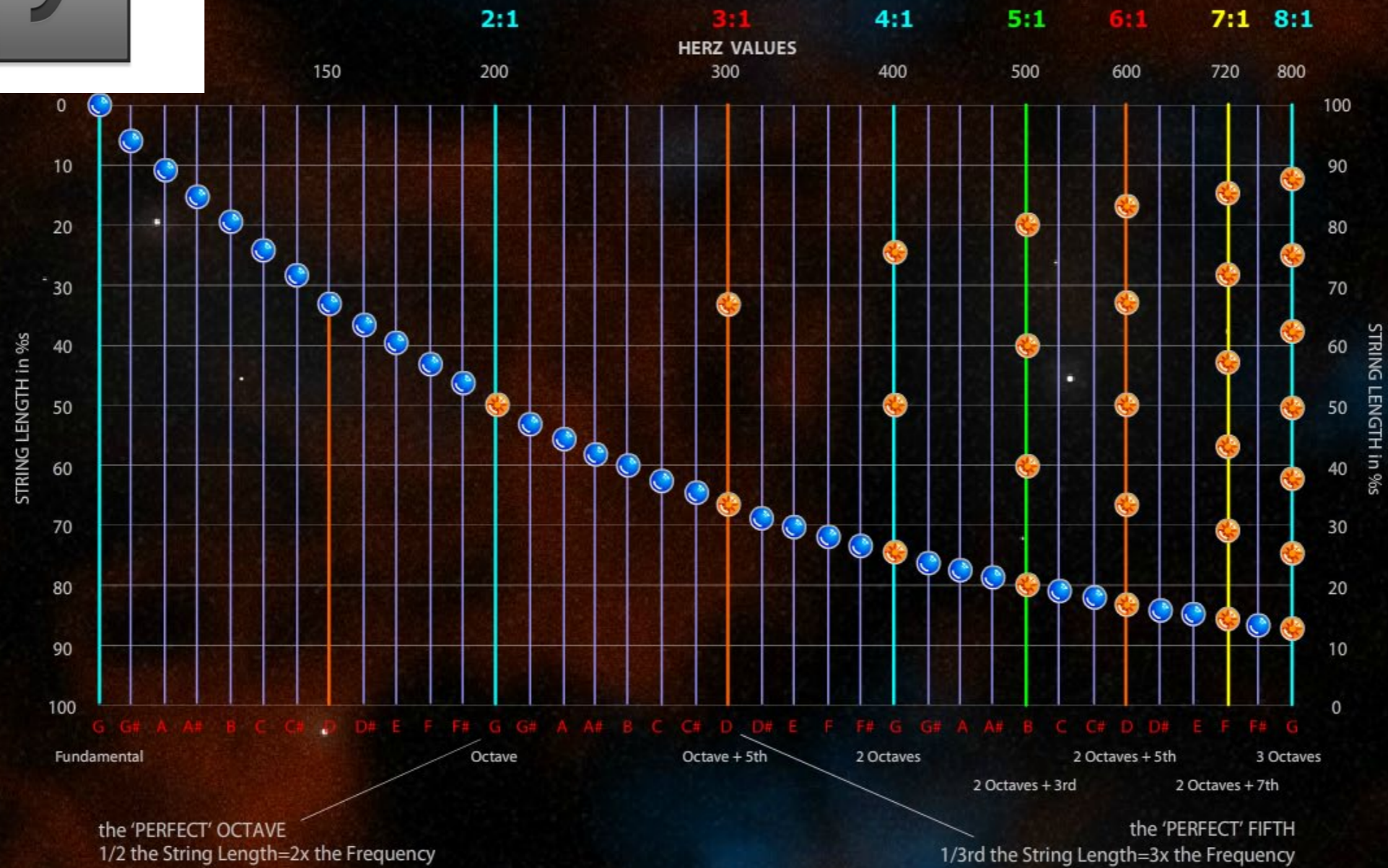


# 'Trefoil in CUBE Geometry'





NOTES on 'STRING' & 'OVERTONE SERIES' from its 'STANDING WAVES' at: -



FUNCTIONAL or 'DIATONIC' HARMONY



FULL STOP HALF STOP or HARMONIC 'NODE'

CLICK THESE BUTTONS TO 'HEAR' AND 'SEE' VIBRATIONS

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## 'Stringularity' - SEE & HEAR the 'First Law' - touch buttons

String at constant length and constant tension: - if you halve the length, you double the frequency - third the length, treble the frequency . . . . .

"According to legend, the first mathematical formulation of what we might today call a law of nature dates back to an Ionian named Pythagoras [who] is said to have discovered the numerical relationship between the length of the strings used in musical instruments and the harmonic combinations of the sounds. In today's language we would describe that relationship by saying that the frequency - the number of vibrations per second or 'Herz' value - of a string vibrating under fixed tension is inversely proportional to the length of the string. One could call that simple mathematical formula the first instance of what we now know as theoretical physics." [Hawking]

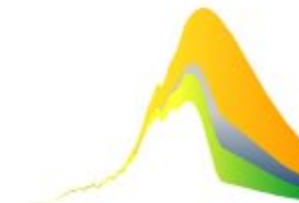


## Animation of all Rates of C&C



The simple mathematical logic of C&C shown here is 'incontestable'.  
Economic computations' & 'ideological assumptions' laid on top of it are contestable.

C1, C2, C3  
Compared



# UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

# GLOBAL DAMAGE COSTS/ DEVELOPMENT BENEFITS of CLIMATE CHANGE

## OBJECTIVE

Contraction &  
Concentrations

## PRINCIPLES Precaution Equity

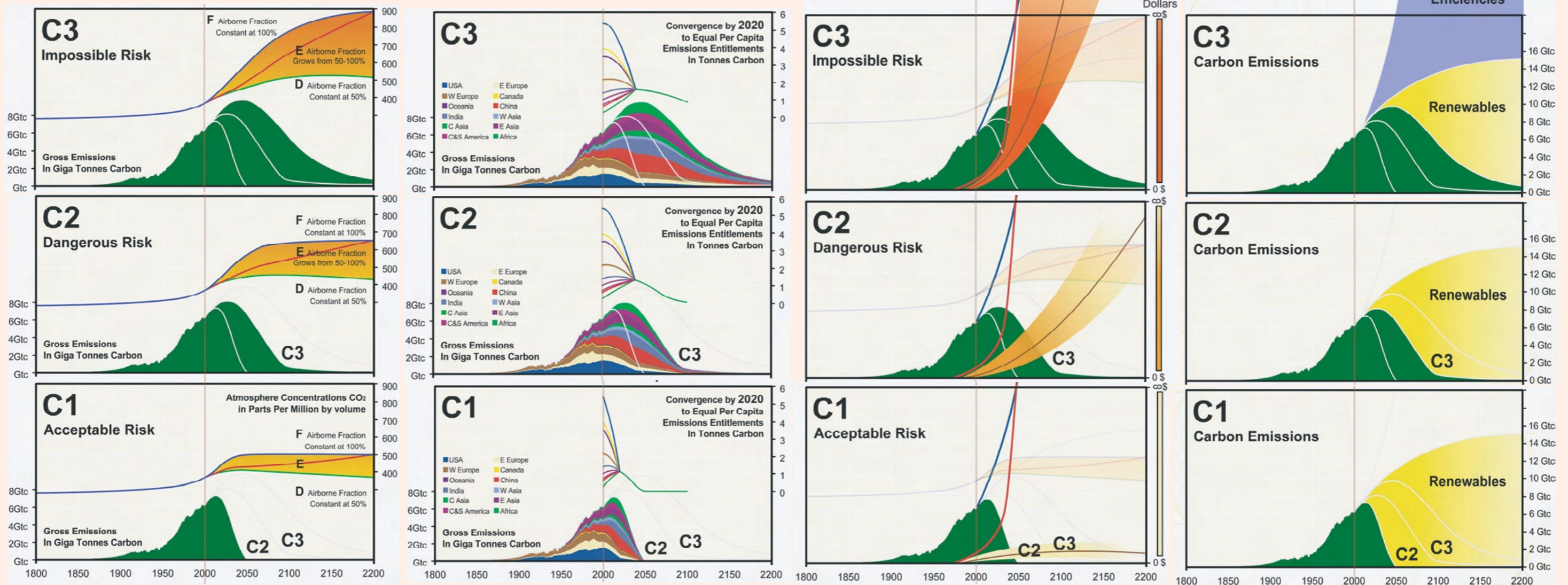
Contraction &  
Convergence


## DANGEROUS CLIMATE CHANGE

Damage Costs  
& Insecurity

## UN/SUSTAINABLE DEVELOPMENT

Contraction &  
Conversion

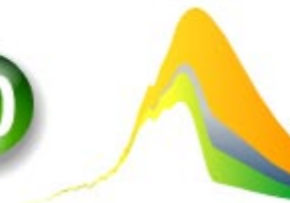


This entire animation is on-line at: - [www.gci.org.uk/images/Final\\_presentation.exe](http://www.gci.org.uk/images/Final_presentation.exe)  
Touch buttons to advance within scenes and logos  to advance between scenes

# Animating all Rates of C&C vis-a-vis IPCC AR4 science.



Global  
Commons  
Institute  
[www.gci.org.uk](http://www.gci.org.uk)





# *'Ave Maria'* - Invoking C&C as a 'Well Tempered Climate Accord'

The first Prelude of Johann Sebastian Bach's 48 Preludes and Fugues, the 'Well Tempered Clavichord', was dedicated to his wife Anna Magdalena Bach. These were written in all keys of the chromatic scale to show that with 'Well Tempered Tuning' playing in all 12 keys, major and minor, was 'in-tune'. Decades later, Charles Gunoud added the melody of 'Ave Maria' to Prelude 1 in C major, played here invoking C&C, a 'Well tempered Climate Accord'.

The 'overtone series' in music was discovered by Pythagoras. It results from the first law of theoretical physics and is true on any scale. It says, with a string of constant length and at constant tension, if you halve the length you double the frequency at which it vibrates, if you take a third of the length you treble the frequency at which it vibrates, and so on. As a unity it is 'stringularity'.

The orbits of Earth and Venus around the Sun show a synodic cycle which replicates the core values of this overtone series. The Golden Section proportionality of this cycle - 1,2,3,5,8,13 - within the pentagrammatic paradigm is fundamental to the 'Pythagorean view'.

The Well Tempered Climate Accord of a full-term C&C-event needs to complete within about the next 5 of these 'Eight-Earth-year-cycles', or about forty years, if UNFCCC-compliance is to be achieved and dangerous rates of climate change are yet to be avoided.

