The post-2012 negotiation process: Key actors, views and trends

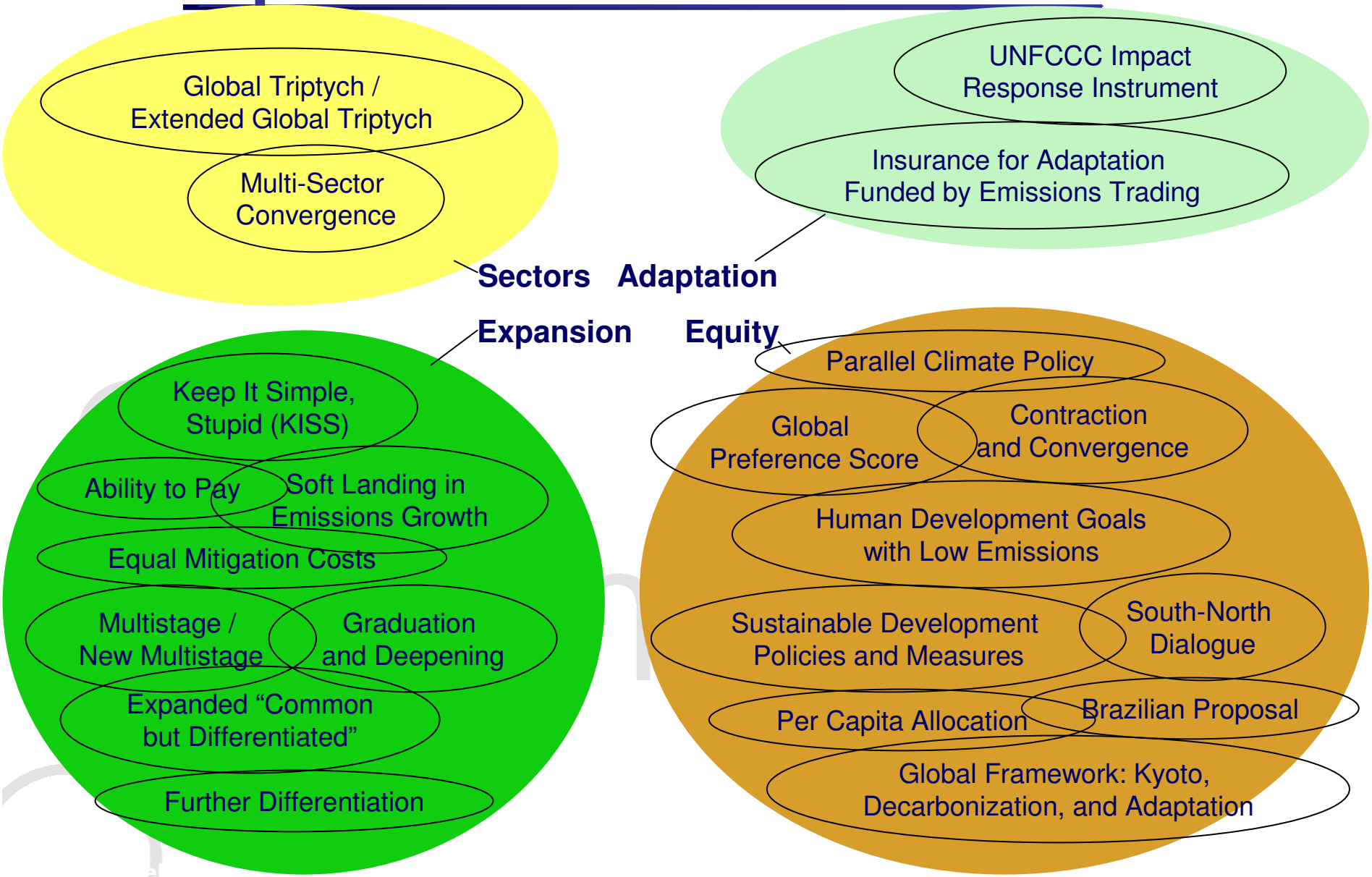
Axel Michaelowa

michaelowa@perspectives.cc

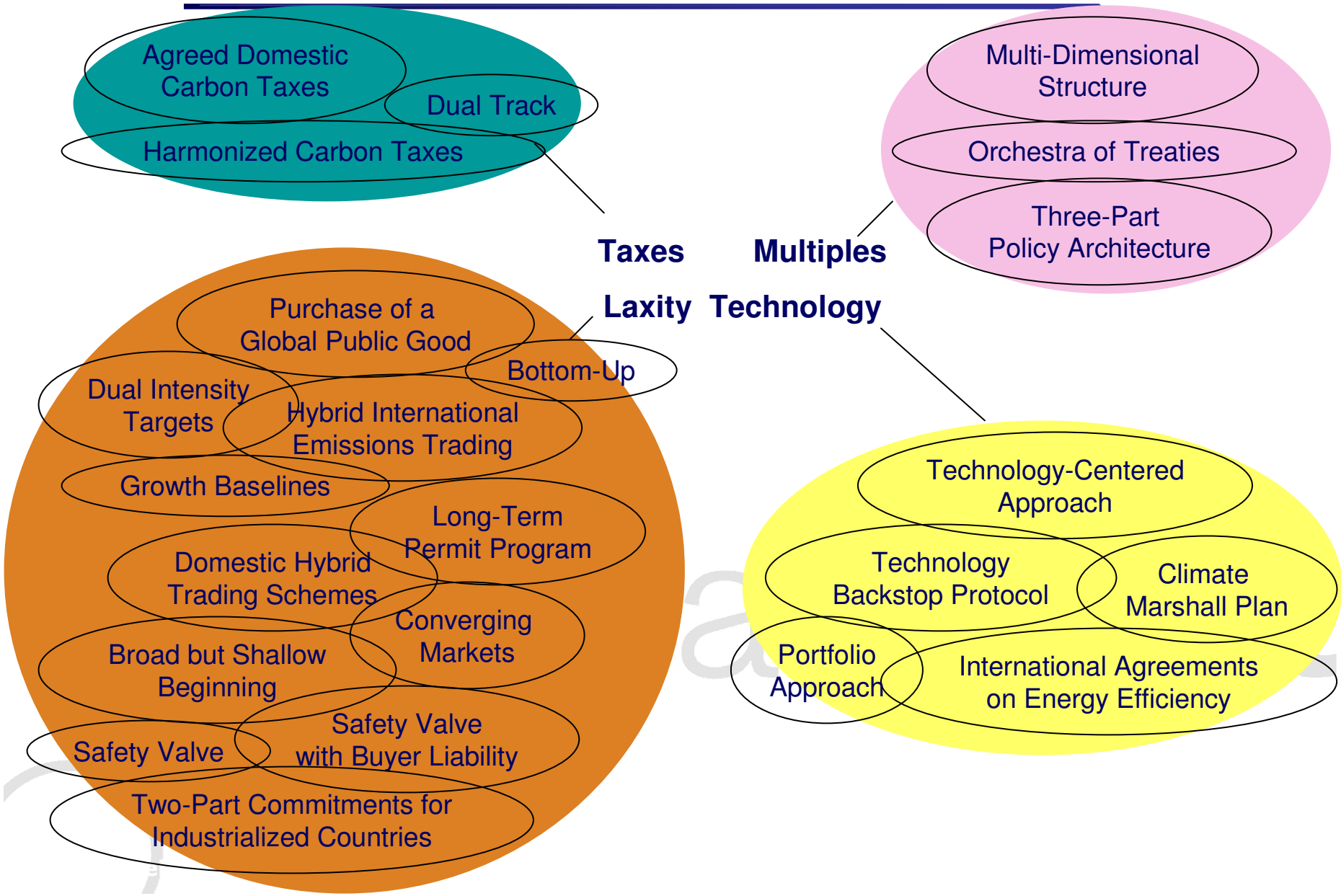
Structure of presentation

- Options on the table
- Emission targets
- Emission paths
- Policy scenarios
- Negotiation positions at Montreal
- Miracle technologies?

Options on the table



Options on the table II



Emission targets

Deriving targets

- Concentration target in ppm

Emissions path

- Tolerable rate of climate change
- Tolerable abatement costs

Absolute vs. relative (per capita, per € GDP)

- Absolute: anti-cyclical, see hot air of EITs
- Relative: pro-cyclical, see Bush proposal

Principles for differentiation

- Need for economic development
- Responsibility for the problem
- Capacity, i.e. ability to pay

Emissions path

What is dangerous climate change?

- Warming from preindustrial period <2°C (we have already reached +0.7°C!)
- Given higher climate sensitivity of most recent climate modelling results, stabilization at 450 ppm is necessary for <2°
- Stern Review asks for 500-550 ppm

When do global emissions have to peak?

- 2020?
- 2040?
- What are realistic reduction rates afterwards?
- Strong impact on medium-term policy path!

Principal design options

Basic modes of allocation of emissions budgets

- Grandfathering
- Equal per capita (current or historical)

Concrete target proposals

- Contraction and convergence: from grandfathering to per capita
- Preference scores: weighting grandfathering and per capita preferences
- Triptych or multi-sector convergence: sectoral convergence
- Brazilian proposal: cumulative emissions
- Multi-stage: Countries progressively take up differentiated targets

Policy scenarios

Graduation and deepening

- Core strengthens its targets and gets expanded in concentric circles. Combined with high flexibility

Market convergence

- EU, Japan and Canada link their emissions trading systems and thus start a bottom up return to a broader system. Low price

Orchestra of treaties

- Cap and trade treaty for some countries, technology treaty, transfer to DCs

Human development

- Differentiation of survival and luxury emissions for allocation of country emission budgets

Policy elements

- Global greenhouse gas tax with local recycling
- Coordinated efficiency standards
- Technology Marshall Plan to develop backstop technologies
- Subsidisation of mitigation action in developing countries
- Under Kyoto-type regime
  - Regional/sectoral CDM
  - Biofuel obligation
  - CER obligation

Country positions

EU

- <2°C, -15 to –30% for industrialised countries 2020
- Kyoto-style, ” committing all large emitters”, full flexibility, include aviation, shipping and forestry

Japan

- METI wants a very loose regime
  - no short-term targets
  - lower environmental integrity of the Kyoto mechanisms

Canada

- No clear position so far

US

- Technology first, targets only if relative

India and China

- No willingness to take up targets

Technology development

German wind power policy shows that it is possible to get a new technology into a mass market within a decade

- **Willingness to spend a lot of money**
  - **Spread the burden widely and concentrate the gains**
- **Get a coalition of technology developers, local population and policymakers**
  - **Interest groups from structurally weak regions profited**

Is it possible to change incentives from maximising market expansion to maximising cost reduction?

- **Lock-in of inadequate technology?**

Graduation: engaging developing countries

- Countries take up mitigation commitments once they cross thresholds defined by per capita income, per capita emissions and institutional affiliation
- System of concentric circles: the lower the threshold, the less stringent the commitment
- Large emitters below any threshold do not graduate but can participate in policy-based generation of emission credits

Graduation: coverage of emissions

	Graduation index	Emissions (million t CO_2 eq.)	Share of world emissions (%)	Emissions change 1990-2000 (%)
6 countries	5.1 to 1.9	117.2 to7.2		+142 to +26
Average Annex B	***1.8***	***305.6***	***0.9***	***+92***
8 countries	1.6 to 1.2	521.2 to 2.4		+81 to +0
Lowest Annex II	***1.2***	***1234***	***3.6***	***+72***
26 countries	1.1 to 0.5	849.9 to 1.5		+316 to -9
Lowest Annex B	***0.5***	***4109***	***12.0***	***+21***
Total	***-***	***5548***	***16.5***	***+36***

- **Large emitters (>50 million t CO_2 eq.) below any threshold: 26 countries with 29% of world emissions**
- **Total reductions of graduating countries by 2015: ~1 billion t CO_2 eq. p.a.**

Deepening: stronger commitments

- **Industrialised countries take strong mitigation commitments**

	Target (% change from 2008-2012)	Emissions gap 2000 (%) to target	Emissions gap 2000 (million t CO_2 eq.)
Ukraine[1]	-47	2.1	10
Russia[1]	-42	15.5	257
Australia	-12	24.8	95
EU-28		16.8	827
Canada	-6	42.1	213
New Zealand		15.2	11
US		31.3	1653
Iceland	-3	0	0
Japan		19.8	217
Norway		14.9	7
Switzerland		5.9	3
Sum (compared to 1990)	**-23.3**	**17.9**	**2293**

- **Need for flexibility: accept all types of sinks!**
  - **Terrestrial, marine and geological**

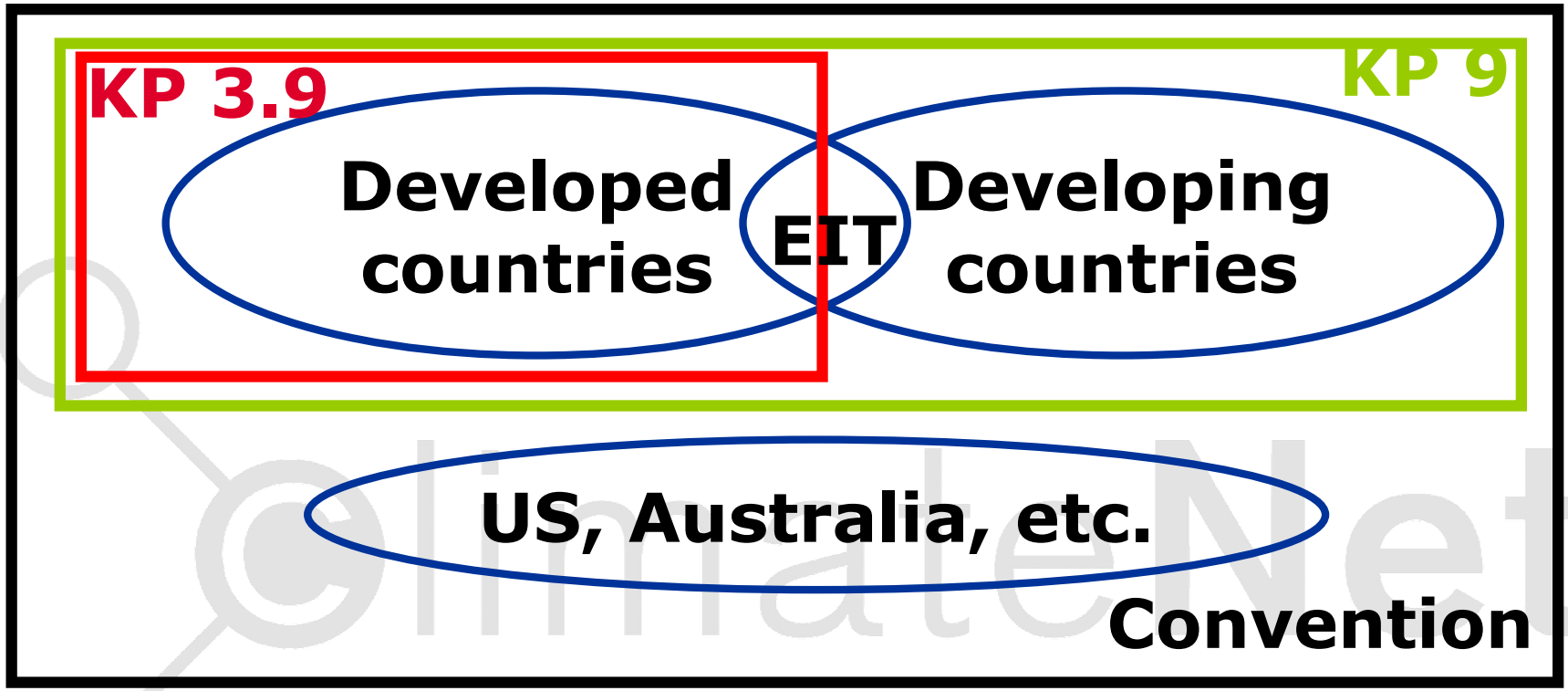
Political strategies

- Extreme weather events create public willingness for action even in those countries reticent to engage in climate policies
  - The window of opportunity is short as public memory fades quickly
  - Lock in policy decisions quickly
- Apply balanced menu of carrots and sticks
  - Countries need to have incentives to graduate
- Market the increasing number of mitigation approaches available at decreasing costs, particularly at today's high fossil fuel prices

Post-2012 negotiation tracks

Kyoto track

Convention track



Negotiation positions at Montreal

Positions on different tracks:

		Developing countries	Developed countries	US
KP 3.9	End date	2008	"No gap"	-
	Process	Ad-hoc group	Joint WG of SB	
KP 9		Negative	Positive	-
Convention		Positive	Positive	Negative

Miracle technologies?

- Carbon capture and storage
  - Future Gen
  - EU research funding
  - IPCC special report essentially written by industry reps
  - Very optimistic cost estimates
  - Lifeline of coal industry
- Biofuels
  - Fashionable due to high oil price
  - Allows carmakers to divert attention from failure of low emission vehicle technology

Thank you!

Further information:

www.perspectives.cc

***or*: michaelowa@perspectives.cc**