1. What are the session key findings? What are the new Lesson(s) learned / Scientific progress (since AR5 release, if relevant)?

- Budolfson et al. show that accounting for income inequalities and for the distributional impacts of climate change across income groups calls for aggressive mitigation to avoid damaging the most vulnerable groups.
- According to (Frumhoff et al.), major investor-owned fossil energy companies carry significant responsibility for climate change. Progress in reducing emissions could be thus achieved if: companies communicate of the climate risks resulting from the use of their products; reject contrary claims by industry trade associations and lobbying groups; and accelerate their transition to low-carbon energy. Historically the highest emitting firms are Chevron, ExxonMobil, Saudi Aramco, GazProm, BP, Royal Dutch Shell, National Iranian Oil. By determining this progress could be made in attributing damage.
- Michel presents the work of the high-level Commission on Global Security, Justice & Governance, to enhance global understanding and capacity and to advance practical recommendations for innovative collaborative action to address critical global challenges such as climate change.

They recommend:
- Strengthening links between the UNFCCC and other existing international regimes (eg. Montreal protocol, International Maritime Organization, etc.)
- Allowing sub-nation and non-state actors to endorse and enact climate rules.
- Establish an international carbon monitoring entity.
- Establish a geoengineering advisory board and experiments registry.

- Rocha et al. assess the INDCs put forward by countries according to a new methodology that rates a country’s current level of effort against their fair level of effort according to a number of fairness principles. Rather than developing their own principle of what is fair, they rely on published literature for the methodology. According to the results, the ambitions of a large number of countries (e.g. China, USA, EU) are inadequate. Effort sharing approaches demand a stronger change in trends in order to contribute in a fair manner to the global target.
- Rao et al. present a new basis for differentiating countries’ mitigation responsibilities by directly linking development needs to emissions through energy. At around 50 GJ/capita most access to basic needs is established, and very little further improvement beyond that. Africa as a region will not reach the proposed thresholds before 2050, whereas South Asia does. The proposal is to have an exemption threshold at which absolute targets replace intensity targets.

- Amerasinghe explores 4 potential legal avenues to hold major carbon producers responsible for their contributions to climate change: tort law, products liability, human rights law, and financial litigation. Big polluters as well as states could be possible defendants. But despite the recent success in the Urgenda vs the Netherlands case, such legal cases are very hard. Amerasinghe emphasizes that scientific research should be integrated into emerging legal strategies, i.e. good law needs good science, as science allows establishing a causal chain. Conversely, legal strategies can inform and shape litigation-relevant science.

- Klinsky proposes that peace and reconciliation processes like those used after the end of apartheid in South Africa and after the genocide in Rwanda could provide an alternative to burden-sharing. Approaching climate equity from this transitional justice angle could help address historical injustices while moving into a new, collective future.

2. What are the major knowledge Gaps and Research Needs identified in the session?

3. Did the session discuss/identify promising approaches in the fields of Adaptation and Mitigation, or both?

   Yes, see the proposed approaches by Frumhoff et al., Rao et al., and Klinsky (point 1 above).

4. Are there take-home messages from the session?

   (When relevant, please specify targeted group of stakeholders. For example, policy-makers / COP21 negotiators, practitioners (experts, etc.), NGOs, private sector, citizens, media, etc.)

   Cf. point 1.

5. Are there Important Quotes from the session?

6. Please include any other remark that you might have.