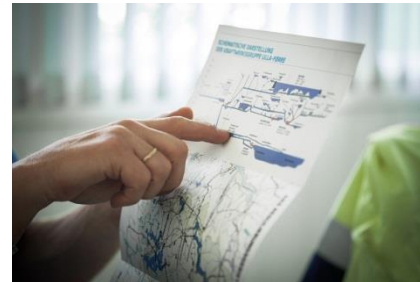


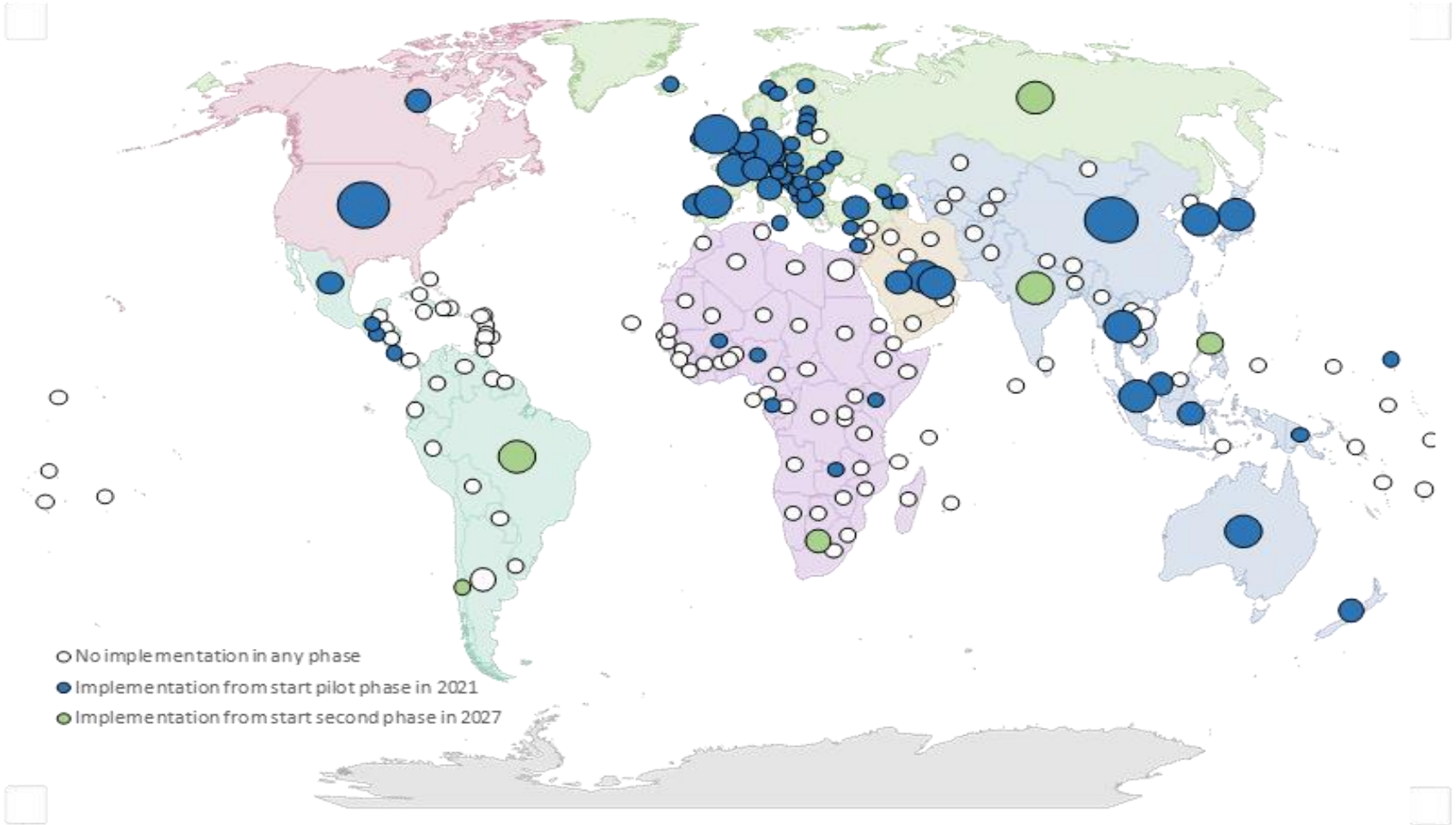
CORSIA: Quantification of the Offset Demand

Sean Healy

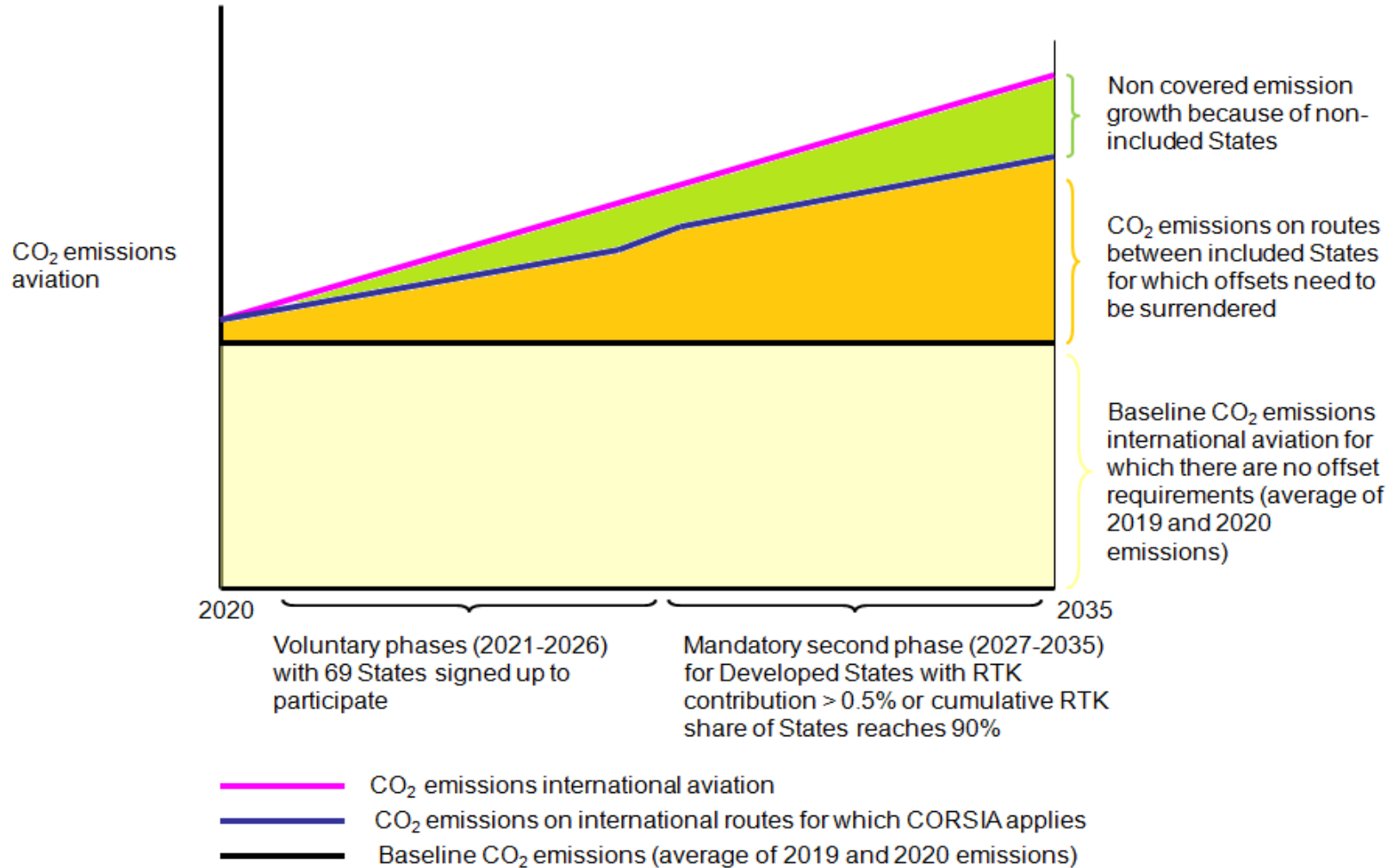
Berlin, June 2017



Participation in CORSIA



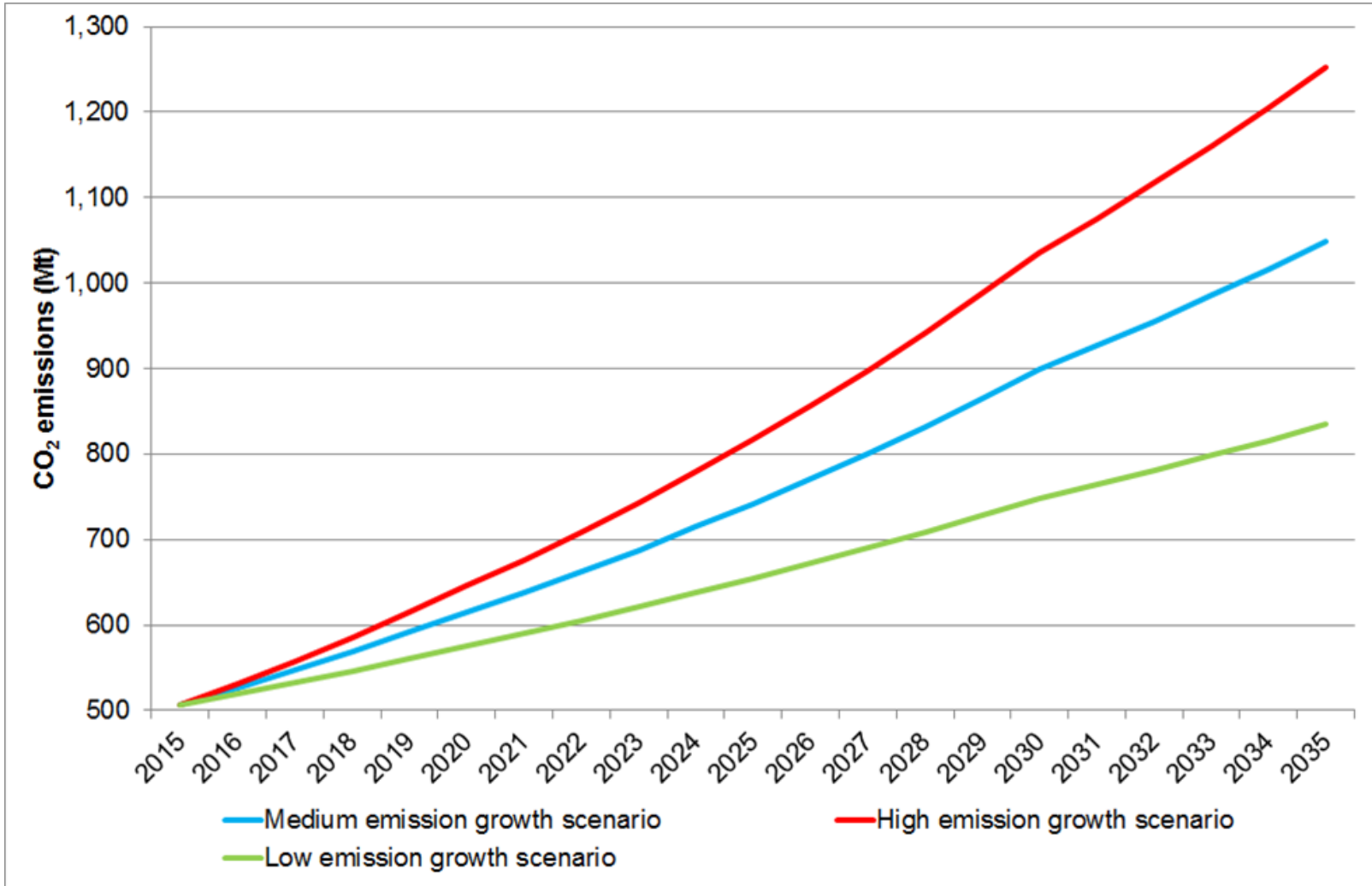
Overview of CORSIA (offset beyond 2020)



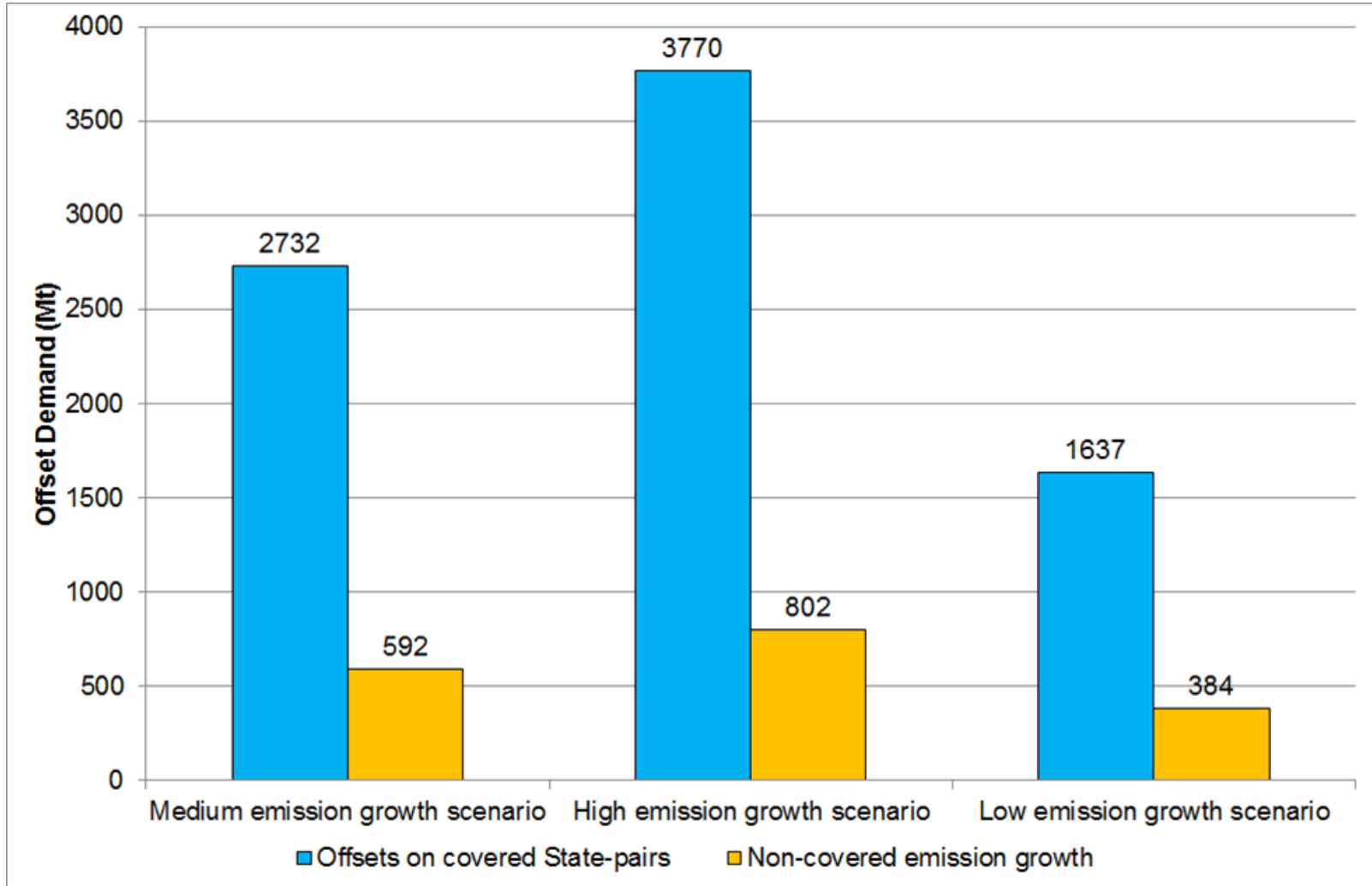
Previous assessments

- Offset demand (2021-35) ranges from 2.4 to 4.5 Gt due to
 - **Baseline emissions** (majority of assessments use the average of 2019/2020 emissions)
 - **Coverage** (country participation varies based on timing of assessment)
 - **Emission projection** (majority based on CAEP's most likely growth scenario)
 - **Modelling approach** (different models adopted)

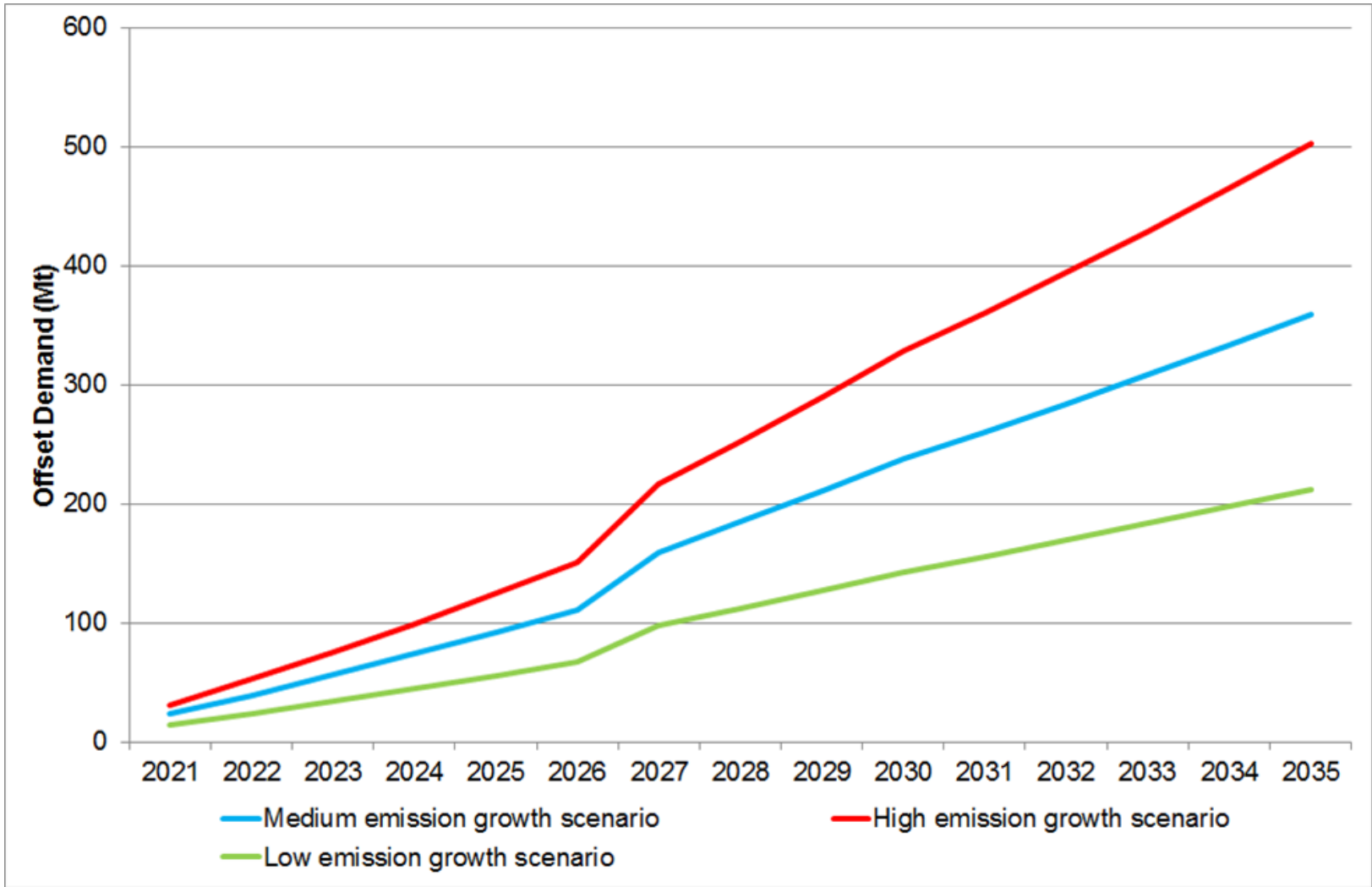
Building upon previous work



CORSIA offset demand (2021-35)



Timing of CORSIA offset demand ...



CORSIA impact on aviation emissions

	Medium emission growth scenario	High emission growth scenario	Low emission growth scenario
Carbon price: New policies scenario			
<i>Offset demand (no reduction in aviation sector)</i>	2 732	3 770	1 637
<i>Reduction in aviation sector</i>	81	115	47
<i>Resulting offset demand</i>	2 651	3 655	1 591
Carbon price: 450 scenario			
<i>Offset demand (no reduction in aviation sector)</i>	2 732	3 770	1 637
<i>Reduction in aviation sector</i>	209	292	122
<i>Resulting offset demand</i>	2 523	3 478	1 515

Conclusions

- CORSIA covers only emission growth of non-exempted routes and participation phased in, therefore it will not offset all emissions from international aviation above the baseline from 2021 onwards;
- Our estimates of offset demand from CORSIA (2021-2035) builds on previous assessments by considering different growth scenarios: Higher / lower growth in emissions leads inevitably to a greater / less demand for offsets (i.e. 3.7 Gt / 1.6 Gt);
- Timing of the demand for offsets important to consider with a considerable increase after the start of the Second Phase in 2027
- CORSIA expected to encourage abatement in the aviation sector, but majority of gap between actual and baseline emissions met by offsets