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*Corrigendum to*

# "A synthesis of carbon in international trade" published in Biogeosciences, 9, 3247–3276, 2012

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In the paper "A synthesis of carbon in international trade" by Peters et al. (Biogeosciences 9, 3247–3276, doi:10.5194/bg-9-3247-2012, 2012), Table 6 presented incorrect EEBT (emissions embodied in bilateral trade) results. The corrected table appears below, and the related text from Sect. 3.2.3 on page 3259 should read as follows (changes in bold):

### 3.2.3 Differences due to the definition of consumption-based emissions

There are different ways to define the "carbon footprint" or "consumption-based emissions" (Wiedmann and Minx, 2008; Peters, 2008, 2010a; Kanemoto et al., 2012). Table 6 shows the top 10 emitters, and top 10 relative differences, in terms of consumption using two different definitions (Peters et al., 2011a). In the top 10 largest emitters, the differences **are generally small, with the largest being the UK (6.7 %) and France (5 %)**. The mean relative difference for the top 10 countries is 2 %.

The largest relative differences are around 50 %, and occur for either small countries or countries with poor data. It is not possible to know the magnitude or direction of the difference without performing specific calculations (Su and Ang, 2011; Kanemoto et al., 2012). Differences are generally larger for small and trade-exposed countries such as Singapore, Taiwan, Malaysia, and Belgium (Peters et al., 2011a). The average difference for the 112 countries and regions in the database is **6.2 %**, signifying that definitions could be **one of the reasons** for differences in results. While we have only compared two main definitions, other studies can use other different and less standard definitions (cf. Peters and Solli, 2010). Our results clearly show that to ensure robust comparisons between studies, it is important to control for different definitions.

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**Table 6.** The differences resulting from using different definitions for consumption-based inventories (2004), showing the top 10 emitters in terms of consumption **and the top 10 relative differences**. The differences are measured relative to the MRIO definition.

| | | Region | EEBT (MtC) | MRIO (MtC) | Difference (MtC) | Difference (%) |
|---|---|---|---|---|---|---|
| 1 | Top 10 emitters globally | United States of America | 1757 | 1818 | −61.4 | −3.4 |
| 2 | | China | 1044 | 1044 | 0.0 | 0.0 |
| 3 | | Japan | 406 | 411 | −5.0 | −1.2 |
| 4 | | Russian Federation | 347 | 349 | −2.5 | −0.7 |
| 5 | | India | 288 | 290 | −1.7 | −0.6 |
| 6 | | Germany | 287 | 288 | −1.8 | −0.6 |
| 7 | | Rest of Western Asia | 230 | 229 | 0.1 | 0.1 |
| 8 | | United Kingdom | 211 | 227 | −15.2 | −6.7 |
| 9 | | Italy | 166 | 170 | −3.5 | −2.1 |
| 10 | | France | 149 | 157 | −7.8 | −5.0 |
| 1 | Top 10 differences globally | Singapore | 32 | 21 | 11.2 | 54.4 |
| 2 | | Cambodia | 1.5 | 1.1 | 0.4 | 34.4 |
| 3 | | Rest of South African Customs Union | 2.7 | 2.0 | 0.7 | 33.4 |
| 4 | | Taiwan | 73 | 55 | 17.9 | 32.3 |
| 5 | | Malaysia | 34 | 26 | 8.0 | 30.6 |
| 6 | | Belgium | 59 | 47 | 11.3 | 24.0 |
| 7 | | Belarus | 18 | 15 | 3.3 | 22.6 |
| 8 | | Luxembourg | 5.9 | 4.9 | 1.0 | 20.5 |
| 9 | | Ireland | 20 | 17 | 2.8 | 15.9 |
| 10 | | Mozambique | 1.3 | 1.1 | 0.2 | 15.5 |