*Supplement Information for*

# The carbon footprint of the equity portfolios of China’s fund firms

**Jinglei Wang 1, Xiang Yu 2, Zengkai Zhang 3, Danbo Chen 4, Dabo Guan 5\***

1 Institute of Blue and Green Development, Shandong University, Weihai, 264209, PR China; (202117186@mail.sdu.edu.cn)

2 Research Institute for Eco-civilization, Chinese Academy of Social Sciences, Beijing, 100710, PR China; (yuxiang@cass.org.cn)

3 State Key Laboratory of Marine Environmental Science and College of Environment and Ecology, Xiamen University, Xiamen, 361102, PR China; (zengkaizhang@gmail.com)

4 School of Urban and Regional Science, Shanghai University of Finance and Economics, Shanghai, 200433, China; (danbo.chen@outlook.com)

5 Department of Earth System Science, Ministry of Education Key Laboratory for Earth System Modeling, Tsinghua University, Beijing, 100084, PR China; (guandabo@tsinghua.edu.cn)

Email address: guandabo@tsinghua.edu.cn

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**Supplementary Table 1.** List of carbon-intensive sectors

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Category | Sector | Category |
| Agriculture | Non-carbon-intensive | Medical and Pharmaceutical Products | Non-carbon-intensive |
| Coal Mining | Carbon-intensive | Rubber and Plastic Products | Non-carbon-intensive |
| Petroleum and Natural Gas Extraction | Non-carbon-intensive | Nonmetal Products | Carbon-intensive |
| Metals & Nonmetal Mining | Non-carbon-intensive | Metals Smelting | Carbon-intensive |
| Transportation and Telecommunication | Non-carbon-intensive | Metal Products | Non-carbon-intensive |
| Food Processing and Production | Non-carbon-intensive | Machinery | Non-carbon-intensive |
| Beverage and Tobacco | Non-carbon-intensive | Transportation Equipment | Non-carbon-intensive |
| Textile Industry | Non-carbon-intensive | Electric Equipment and Machinery | Non-carbon-intensive |
| Garments and Other Fiber Products | Non-carbon-intensive | Electronic and Telecommunications Equipment | Non-carbon-intensive |
| Leather, Furs, Down and Related Products | Non-carbon-intensive | Other Manufacturing | Non-carbon-intensive |
| Timber Processing, Bamboo, Cane, Palm Fiber & Straw Products | Non-carbon-intensive | Electricity, Gas and Water | Carbon-intensive |
| Papermaking and Paper Products | Non-carbon-intensive | Construction | Non-carbon-intensive |
| Petroleum Processing and Coking | Carbon-intensive | Wholesale, Retail Trade and Catering Services | Non-carbon-intensive |
| Raw Chemical Materials and Chemical Products | Carbon-intensive | Others | Non-carbon-intensive |

**Supplementary Table 2.** Trends in financed emissions and carbon intensities for overall and Top 10 fund firms (Units: Mt for Financed emissions; tonnes CO2/M$ for WACI and CERI)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Overall** | | | **Top 10** | | |
| Financed emissions | WACI | CERI | Financed emissions | WACI | CERI |
| 2010 | 100.26 | 374.55 | 356.49 | 44.73 | 637.56 | 587.22 |
| 2011 | 144.29 | 435.24 | 466.17 | 65.86 | 668.13 | 704.19 |
| 2012 | 183.11 | 624.76 | 654.36 | 76.50 | 767.49 | 784.57 |
| 2013 | 162.77 | 610.39 | 571.36 | 65.76 | 679.05 | 639.83 |
| 2014 | 115.93 | 499.27 | 484.14 | 47.11 | 583.13 | 513.09 |
| 2015 | 87.21 | 446.55 | 415.07 | 43.58 | 582.39 | 463.99 |
| 2016 | 93.57 | 588.06 | 488.72 | 40.84 | 559.77 | 428.68 |
| 2017 | 135.47 | 547.73 | 477.07 | 65.30 | 578.42 | 583.07 |
| 2018 | 168.40 | 577.45 | 608.06 | 87.37 | 657.53 | 641.57 |
| 2019 | 159.02 | 422.81 | 510.11 | 84.69 | 526.88 | 607.43 |
| 2020 | 159.00 | 361.13 | 493.42 | 88.77 | 401.75 | 673.86 |

**Supplementary Table 3.** Top 10 fund firms’ financed emissions by carbon-intensive sectors in 2010, 2015 and 2020 (Units: Mt)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Fund firms** | **Coal Mining** | **Petroleum Processing and Coking** | **Raw Chemical Materials and Chemical Products** | **Nonmetal Products** | **Metals Smelting** | **Electricity, Gas and Water** | **Year** |
| Fund 1 | 0.20 | 0.07 | 0.09 | 0.40 | 1.69 | 2.65 | 2010 |
| Fund 1 | 0.09 | 0.06 | 0.13 | 0.45 | 0.61 | 4.05 | 2015 |
| Fund 1 | 0.08 | 0.07 | 0.26 | 0.41 | 1.15 | 9.57 | 2020 |
| Fund 2 | 0.39 | 0.26 | 0.20 | 0.38 | 1.94 | 2.82 | 2010 |
| Fund 2 | 0.05 | 0.10 | 0.24 | 0.39 | 0.55 | 2.99 | 2015 |
| Fund 2 | 0.05 | 0.32 | 0.22 | 1.22 | 3.21 | 5.69 | 2020 |
| Fund 3 | 0.34 | 0.21 | 0.17 | 0.71 | 1.47 | 2.34 | 2010 |
| Fund 3 | 0.06 | 0.16 | 0.14 | 0.57 | 0.77 | 3.43 | 2015 |
| Fund 3 | 0.03 | 0.08 | 0.16 | 0.46 | 0.74 | 6.99 | 2020 |
| Fund 4 | 0.42 | 0.03 | 0.16 | 0.24 | 1.07 | 1.98 | 2010 |
| Fund 4 | 0.10 | 0.36 | 0.13 | 0.38 | 0.42 | 3.10 | 2015 |
| Fund 4 | 0.10 | 0.32 | 0.18 | 0.62 | 0.77 | 5.53 | 2020 |
| Fund 5 | 0.04 | 0.00 | 0.00 | 0.02 | 0.08 | 0.08 | 2010 |
| Fund 5 | 0.04 | 0.01 | 0.08 | 0.13 | 0.14 | 1.21 | 2015 |
| Fund 5 | 0.00 | 0.04 | 0.22 | 0.40 | 0.31 | 5.65 | 2020 |
| Fund 6 | 0.33 | 0.00 | 0.14 | 0.35 | 0.58 | 0.46 | 2010 |
| Fund 6 | 0.09 | 0.02 | 0.12 | 0.31 | 0.39 | 1.14 | 2015 |
| Fund 6 | 0.16 | 0.06 | 0.25 | 0.51 | 0.69 | 4.87 | 2020 |
| Fund 7 | 0.29 | 0.01 | 0.07 | 0.39 | 1.34 | 6.31 | 2010 |
| Fund 7 | 0.06 | 0.08 | 0.10 | 0.44 | 0.37 | 3.17 | 2015 |
| Fund 7 | 0.04 | 0.05 | 0.12 | 0.10 | 0.86 | 5.88 | 2020 |
| Fund 8 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.14 | 2010 |
| Fund 8 | 0.00 | 0.00 | 0.05 | 0.00 | 0.01 | 0.33 | 2015 |
| Fund 8 | 0.20 | 0.00 | 0.06 | 0.18 | 1.58 | 4.36 | 2020 |
| Fund 9 | 0.12 | 0.01 | 0.07 | 0.19 | 0.39 | 0.69 | 2010 |
| Fund 9 | 0.05 | 0.01 | 0.12 | 0.24 | 0.32 | 1.59 | 2015 |
| Fund 9 | 0.10 | 0.02 | 0.18 | 0.31 | 1.35 | 3.38 | 2020 |
| Fund 10 | 0.10 | 0.02 | 0.02 | 0.10 | 0.18 | 1.22 | 2010 |
| Fund 10 | 0.07 | 0.02 | 0.09 | 0.26 | 0.25 | 2.04 | 2015 |
| Fund 10 | 0.01 | 0.04 | 0.09 | 0.28 | 0.26 | 4.14 | 2020 |

**Supplementary Table 4.** Share of Investment in Top 10 fund firms by carbon-intensive sectors in 2010, 2015 and 2020 (Units: %)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Fund firms** | **Coal Mining** | **Petroleum Processing and Coking** | **Raw Chemical Materials and Chemical Products** | **Nonmetal Products** | **Metals Smelting** | **Electricity, Gas and Water** | **Year** |
| Fund 1 | 3.10 | 0.80 | 3.96 | 1.91 | 4.24 | 1.78 | 2010 |
| Fund 1 | 0.60 | 0.25 | 4.51 | 1.12 | 3.32 | 2.52 | 2015 |
| Fund 1 | 0.21 | 0.19 | 4.09 | 1.50 | 3.01 | 0.86 | 2020 |
| Fund 2 | 4.12 | 0.25 | 2.71 | 3.37 | 5.58 | 2.77 | 2010 |
| Fund 2 | 0.85 | 0.28 | 3.24 | 1.24 | 3.18 | 4.06 | 2015 |
| Fund 2 | 0.43 | 0.24 | 4.33 | 1.11 | 2.03 | 1.67 | 2020 |
| Fund 3 | 4.24 | 0.66 | 5.93 | 3.95 | 3.42 | 1.80 | 2010 |
| Fund 3 | 0.48 | 0.40 | 4.23 | 2.11 | 3.15 | 3.22 | 2015 |
| Fund 3 | 0.22 | 0.19 | 4.60 | 2.09 | 1.13 | 1.70 | 2020 |
| Fund 4 | 6.98 | 0.41 | 5.33 | 1.83 | 3.46 | 1.92 | 2010 |
| Fund 4 | 0.53 | 0.36 | 3.16 | 1.14 | 1.66 | 2.58 | 2015 |
| Fund 4 | 0.27 | 0.08 | 2.90 | 1.19 | 1.70 | 0.72 | 2020 |
| Fund 5 | 12.94 | 0.06 | 3.15 | 3.91 | 4.61 | 1.49 | 2010 |
| Fund 5 | 0.78 | 0.60 | 6.05 | 1.13 | 1.60 | 4.49 | 2015 |
| Fund 5 | 0.04 | 0.10 | 7.17 | 2.99 | 2.49 | 0.96 | 2020 |
| Fund 6 | 6.20 | 0.10 | 8.10 | 3.15 | 2.82 | 0.49 | 2010 |
| Fund 6 | 1.27 | 0.24 | 4.47 | 1.99 | 2.44 | 2.29 | 2015 |
| Fund 6 | 0.77 | 0.16 | 3.59 | 1.68 | 0.93 | 1.47 | 2020 |
| Fund 7 | 5.10 | 0.16 | 2.34 | 2.80 | 3.93 | 3.80 | 2010 |
| Fund 7 | 0.86 | 0.30 | 2.43 | 2.15 | 3.25 | 3.97 | 2015 |
| Fund 7 | 0.44 | 0.23 | 5.63 | 1.26 | 2.74 | 3.00 | 2020 |
| Fund 8 | 0.00 | 0.78 | 9.76 | 0.71 | 1.37 | 1.71 | 2010 |
| Fund 8 | 0.00 | 0.21 | 9.95 | 0.00 | 1.94 | 4.75 | 2015 |
| Fund 8 | 1.30 | 0.05 | 2.34 | 1.87 | 3.50 | 0.32 | 2020 |
| Fund 9 | 5.02 | 0.28 | 6.50 | 3.21 | 2.76 | 1.07 | 2010 |
| Fund 9 | 0.57 | 0.10 | 4.52 | 2.21 | 2.66 | 1.40 | 2015 |
| Fund 9 | 0.45 | 0.12 | 4.68 | 1.95 | 1.89 | 0.76 | 2020 |
| Fund 10 | 3.90 | 0.26 | 2.55 | 1.79 | 2.41 | 2.69 | 2010 |
| Fund 10 | 0.97 | 0.61 | 3.54 | 3.16 | 2.66 | 3.65 | 2015 |
| Fund 10 | 0.06 | 0.19 | 5.03 | 2.30 | 1.99 | 0.93 | 2020 |

**Supplementary Table 5.** Share of Revenue in Top 10 fund firms by carbon-intensive sectors in 2010, 2015 and 2020 (Units: %)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Fund firms** | **Coal Mining** | **Petroleum Processing and Coking** | **Raw Chemical Materials and Chemical Products** | **Nonmetal Products** | **Metals Smelting** | **Electricity, Gas and Water** | **Year** |
| Fund 1 | 2.05 | 3.30 | 2.17 | 0.86 | 7.34 | 0.96 | 2010 |
| Fund 1 | 0.65 | 1.28 | 3.89 | 1.25 | 3.60 | 1.93 | 2015 |
| Fund 1 | 0.44 | 2.33 | 2.14 | 2.64 | 8.02 | 1.48 | 2020 |
| Fund 2 | 1.87 | 1.52 | 1.67 | 1.60 | 11.30 | 1.59 | 2010 |
| Fund 2 | 1.09 | 0.78 | 2.05 | 1.43 | 4.02 | 2.60 | 2015 |
| Fund 2 | 1.24 | 0.80 | 3.86 | 1.39 | 4.43 | 3.84 | 2020 |
| Fund 3 | 3.22 | 4.76 | 3.29 | 2.90 | 10.00 | 1.43 | 2010 |
| Fund 3 | 0.76 | 2.37 | 2.44 | 1.98 | 5.48 | 2.41 | 2015 |
| Fund 3 | 0.47 | 1.07 | 2.71 | 1.72 | 3.18 | 3.14 | 2020 |
| Fund 4 | 5.03 | 0.76 | 3.96 | 1.21 | 9.24 | 1.53 | 2010 |
| Fund 4 | 0.94 | 3.81 | 1.63 | 0.96 | 2.19 | 1.58 | 2015 |
| Fund 4 | 1.00 | 2.43 | 1.78 | 1.38 | 1.96 | 1.47 | 2020 |
| Fund 5 | 11.40 | 0.08 | 1.77 | 2.48 | 16.40 | 1.38 | 2010 |
| Fund 5 | 1.53 | 0.56 | 3.93 | 1.21 | 2.63 | 2.26 | 2015 |
| Fund 5 | 0.09 | 0.63 | 4.55 | 1.91 | 1.69 | 3.22 | 2020 |
| Fund 6 | 5.01 | 0.16 | 4.38 | 2.28 | 6.33 | 0.45 | 2010 |
| Fund 6 | 2.14 | 0.46 | 3.56 | 1.87 | 4.86 | 1.39 | 2015 |
| Fund 6 | 2.32 | 0.67 | 3.64 | 1.65 | 2.59 | 1.90 | 2020 |
| Fund 7 | 2.58 | 0.23 | 1.37 | 1.52 | 8.69 | 3.66 | 2010 |
| Fund 7 | 1.07 | 1.41 | 2.05 | 1.89 | 3.31 | 2.76 | 2015 |
| Fund 7 | 0.86 | 0.95 | 2.91 | 0.52 | 5.16 | 3.69 | 2020 |
| Fund 8 | 0.00 | 1.96 | 9.13 | 0.42 | 0.97 | 2.10 | 2010 |
| Fund 8 | 0.00 | 0.62 | 8.48 | 0.00 | 0.78 | 2.47 | 2015 |
| Fund 8 | 5.94 | 0.05 | 1.79 | 1.22 | 12.05 | 3.46 | 2020 |
| Fund 9 | 2.98 | 0.38 | 3.38 | 2.02 | 6.78 | 1.09 | 2010 |
| Fund 9 | 1.09 | 0.18 | 3.67 | 1.44 | 3.96 | 1.93 | 2015 |
| Fund 9 | 1.86 | 0.31 | 3.23 | 1.28 | 6.38 | 1.67 | 2020 |
| Fund 10 | 3.33 | 1.46 | 1.34 | 1.42 | 4.49 | 2.68 | 2010 |
| Fund 10 | 1.73 | 0.44 | 3.03 | 1.65 | 3.32 | 2.64 | 2015 |
| Fund 10 | 0.12 | 0.78 | 2.17 | 1.44 | 1.58 | 2.59 | 2020 |