**Supplementary Materials**

Table S1: Summary of assessed independent variables

|  |  |  |
| --- | --- | --- |
| Independent Variables | Formal Definitiona | Brief Rationale for Inclusion |
| Gross Domestic Products (GDP) | An indicator reflects the total value of all goods and services produced less the value of goods and services used for intermediate consumption in their production. | Waste generation is expected to increase with the increase of GDP until achieving a certain level |
| Population | Number of persons having their usual residence in a country of the respective year | Waste generation is expected to increase with the increase of population until achieving a certain level |
| Energy consumption | All energy supplied to industry, transport, households, services and agriculture (it excludes deliveries to the energy transformation sector and the energy industries themselves) | Waste generation is expected to have a relationship with energy consumption, especially the waste collection activities and waste to energy process |
| Circular Material Use Rate | The ratio of the circular use of material to the overall material use | This variable is directly relating to the waste recycling activities |
| Environmental Tax Revenue | Tax whose tax base is a physical unit (or a proxy of a physical unit) of something that has a proven, specific negative impact on the environment, and which is identified in ESA 2010 as a tax. It comprises of Energy tax, Transport tax and tax on pollution and resources tax | The environmental tax revenue could reflect the environmental performance of a country, including waste management related issues |
| Global Innovation Indexes (GII) – Total Score | Metrics about the innovation performance where 80 indicators are considered under 7 main categories | There is a potential causal relationship between the GII, competitiveness and foreign trade, which closely related to GDP (proven to have a strong relationship with waste generation |
| * GII C1 | An index measuring institutions category of GII | As the rationale of GII |
| * GII C2 | An index measuring human capital and research category of GII | As the rationale of GII |
| * GII C3 | An index measuring infrastructure category of GII | As the rationale of GII |
| * G 3.1 | Indicator accounting the performance of Information and communication technologies (ICT) | ICT is expected to affect waste generation as it could stimulate impulsive buying and provide convenience. |
| * G 3.12 | A composite index that considers the percentage of individuals using the Internet, fixed (wired)-broadband, internet subscriptions per 100 inhabitants and active mobile broadband subscriptions per 100 inhabitants. |
| * G 3.3 | Ecological sustainability considering GDP per unit of energy use, environmental performance and ISO 14001 environment certificates |
| * GII C4 | An index measuring the Market sophistication category of GII | As the rationale of GII |
| * GII C5 | An index measuring business sophistication category of GII | As the rationale of GII |
| * GII C6 | An index measuring knowledge and technology outputs category of GII | As the rationale of GII |
| * GII C7 | An index measuring creative outputs category of GII | As the rationale of GII |

aThe respective references are provided in the in-text discussion (Section 2.0)

Table S2: Dataset

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EU27 | | Waste Amount (kt) | Energy Consumption (Mtoe) | GDP (10^6 EUR) | Population (person) | CE Indicator | Environmental Tax Revenues (10^6 EUR) | GII Score | GII C1 | GII C2 | GII C3 | GII C4 | GII C5 | GII C6 | GII C7 | G 3.1. | G 3.1.2. | G 3.3. |
| **2015** | Austria | 4,836 | 27.5 | 344,269 | 8,584,926 | 11 | 79.11 | 54.1 | 88.7 | 57.4 | 55.2 | 56.5 | 47 | 43 | 51.3 | 70.8 | 62.8 | 52.2 |
| Belgium | 4,643 | 35.9 | 416,701 | 11,237,274 | 18.4 | 497.3 | 50.9 | 83.3 | 51.4 | 52.5 | 54.9 | 51 | 36.1 | 50.4 | 68.7 | 61.8 | 41.9 |
| Bulgaria | 3,011 | 9.49 | 45,691 | 7,202,198 | 3.1 | 30.63 | 42.2 | 69.7 | 32.2 | 43.3 | 48.9 | 36.4 | 35.4 | 41.1 | 41.1 | 47.7 | 51.2 |
| Croatia | 1,654 | 6.59 | 44,612 | 4,225,316 | 4.3 | 7.16 | 41.7 | 71.8 | 36.9 | 44.6 | 47.1 | 37.9 | 31 | 40.5 | 52.3 | 56.2 | 55.1 |
| Cyprus | 525 | 1.67 | 17,884 | 847,008 | 2.4 | 0.9 | 43.5 | 79.8 | 40.6 | 37.8 | 64.3 | 39.2 | 24.7 | 44.6 | 47.8 | 43.4 | 46.1 |
| Czech Republic | 3,337 | 24.19 | 169,558 | 10,538,275 | 6.9 | 30.98 | 51.3 | 76.4 | 45.8 | 51 | 52.4 | 45.3 | 46.7 | 50.3 | 46.8 | 52.2 | 63 |
| Denmark | 4,671 | 14.2 | 273,018 | 5,659,715 | 8.4 | 624.73 | 57.7 | 93.1 | 62.4 | 55.7 | 68.3 | 49.7 | 46.1 | 53 | 74 | 87.1 | 54.5 |
| Estonia | 473 | 2.8 | 20,782 | 1,314,870 | 11.8 | 59.44 | 52.8 | 80.8 | 44.2 | 60.9 | 54.6 | 43.4 | 42.1 | 55.6 | 74.9 | 67.7 | 57.2 |
| Finland | 2,738 | 24.21 | 211,385 | 5,471,753 | 6.5 | 97 | 60 | 95.8 | 64.9 | 58.5 | 61.5 | 58.8 | 51.9 | 52.2 | 76.7 | 80.9 | 49.5 |
| France | 34,344 | 148.42 | 2,198,432 | 66,458,153 | 18.7 | 3051 | 53.6 | 81.7 | 55.5 | 60.8 | 59 | 49.3 | 41.1 | 50.8 | 87.5 | 67.4 | 47.1 |
| Germany | 51,625 | 212.68 | 3,026,180 | 81,197,537 | 11.6 | 10 | 57.1 | 83.2 | 56.6 | 56.7 | 59.2 | 49.2 | 53.4 | 52.8 | 72.9 | 62.1 | 52.1 |
| Greece | 5,277 | 16.56 | 176,110 | 10,858,018 | 1.9 | 0 | 40.3 | 68.2 | 45.9 | 47.9 | 51.2 | 30.8 | 26 | 37.5 | 65.7 | 46.5 | 52 |
| Hungary | 3,712 | 17.4 | 112,701 | 9,855,571 | 5.8 | 280.48 | 43 | 73.4 | 37.7 | 47.2 | 46 | 36.8 | 34.8 | 40.7 | 55.2 | 46.7 | 54.4 |
| Ireland |  | 11.28 | 262,853 | 4,677,627 | 1.9 | 47.22 | 59.1 | 87.2 | 50.1 | 54.9 | 64 | 58.4 | 55.7 | 55 | 69.3 | 62.4 | 57.4 |
| Italy | 29,524 | 116.22 | 1,655,355 | 60,795,612 | 17.3 | 645 | 46.4 | 73.8 | 41.3 | 57.6 | 53.6 | 40.6 | 41.2 | 37.6 | 70.8 | 53.8 | 66.4 |
| Latvia | 798 | 3.79 | 24,561 | 1,986,096 | 5.4 | 23.07 | 45.5 | 77.7 | 33.1 | 50.6 | 52.4 | 38.3 | 34.9 | 46.3 | 68.2 | 59.1 | 48.4 |
| Lithuania | 1,300 | 4.86 | 37,346 | 2,921,262 | 4.1 | 36.86 | 42.3 | 73.6 | 39.1 | 48.1 | 51.9 | 36.5 | 28.4 | 41 | 65.8 | 52.9 | 51.4 |
| Luxembourg | 346 | 3.99 | 52,066 | 562,958 | 9.7 | 14.73 | 59 | 83.5 | 40.8 | 54.2 | 56.2 | 60.3 | 49.1 | 69 | 72.1 | 76.6 | 52.1 |
| Malta | 285 | 0.58 | 9,997 | 439,691 | 4.6 | 22.09 | 50.5 | 80.7 | 39.3 | 48 | 50.3 | 40.8 | 38.5 | 59.8 | 58 | 54.8 | 57.5 |
| Netherlands | 8,866 | 48.82 | 690,008 | 16,900,726 | 25.8 | 3136 | 61.6 | 91.9 | 51.7 | 60.5 | 61.8 | 55.3 | 55.9 | 61.9 | 89.1 | 74.3 | 49.9 |
| Poland | 10,863 | 62.3 | 430,466 | 38,005,614 | 11.6 | 725.13 | 40.2 | 75.3 | 37.2 | 45.5 | 49 | 35.2 | 28.4 | 35.4 | 55.8 | 49.4 | 44.7 |
| Portugal | 4,769 | 16 | 179,713 | 10,374,822 | 2.1 | 36.12 | 46.6 | 80.6 | 47.6 | 50.3 | 55.4 | 35.3 | 33.2 | 45.7 | 62.8 | 46.1 | 55.7 |
| Romania | 4,904 | 21.85 | 160,150 | 19,870,647 | 1.7 | 8.21 | 38.2 | 69.7 | 27.8 | 42.4 | 45.3 | 34.7 | 32.8 | 32.1 | 49 | 38.7 | 52.3 |
| Slovakia | 1,784 | 10.06 | 79,768 | 5,421,349 | 5 | 31.47 | 43 | 75.1 | 33.2 | 49.3 | 50.4 | 36.7 | 33.7 | 40.4 | 58.7 | 52.8 | 57.2 |
| Slovenia | 926 | 4.71 | 38,853 | 2,062,874 | 8.4 | 60.83 | 48.5 | 79.5 | 48.3 | 49.4 | 46.9 | 42.1 | 38.1 | 49.4 | 53.2 | 52.1 | 56.5 |
| Spain | 21,158 | 80.59 | 1,077,590 | 46,449,565 | 7.5 | 879 | 49.1 | 75.2 | 45.9 | 61 | 64.7 | 38.2 | 39.9 | 42.4 | 77.6 | 60.4 | 67 |
| Sweden | 4,422 | 31.8 | 455,495 | 9,747,355 | 6.8 | 127.65 | 62.4 | 90 | 61.7 | 62.8 | 63.7 | 56.9 | 60.5 | 55.1 | 75.8 | 82.9 | 57 |
| **2016** | Austria | 4,928 | 28.07 | 357,608 | 8,700,471 | 11.4 | 81.26 | 52.6 | 87.6 | 60.8 | 57.1 | 51.3 | 47.6 | 39.4 | 49.5 | 71.1 | 64.7 | 53.3 |
| Belgium | 4,746 | 36.39 | 430,085 | 11,311,117 | 18.3 | 560.3 | 52 | 80.5 | 58.9 | 55.3 | 49.7 | 46.7 | 44 | 47.5 | 70.6 | 67.6 | 44.8 |
| Bulgaria | 2,881 | 9.65 | 48,640 | 7,153,784 | 4.4 | 32.68 | 41.4 | 67.8 | 32.1 | 46.7 | 43.7 | 36.2 | 32.1 | 43 | 42.5 | 52.2 | 59.4 |
| Croatia | 1,680 | 6.64 | 46,619 | 4,190,669 | 4.4 | 7.93 | 38.3 | 70.9 | 35.7 | 48.4 | 42.2 | 34.6 | 26.5 | 33.9 | 52.9 | 58.5 | 62.9 |
| Cyprus | 539 | 1.77 | 18,929 | 848,319 | 2.4 | 1.1 | 46.3 | 81.6 | 38.7 | 41.6 | 56.8 | 40.6 | 42.4 | 39.2 | 49.5 | 48.9 | 49.5 |
| Czech Republic | 3,580 | 24.82 | 177,439 | 10,553,843 | 7.6 | 25.97 | 49.4 | 76.1 | 48.3 | 53.7 | 50.5 | 42.9 | 42.8 | 46.2 | 49.9 | 62.9 | 61.6 |
| Denmark | 4,757 | 14.54 | 283,110 | 5,707,251 | 8.1 | 555.7 | 58.5 | 91.6 | 65.8 | 58.8 | 71.3 | 47.9 | 46.4 | 53.3 | 74.1 | 88.3 | 57.9 |
| Estonia | 494 | 2.84 | 21,932 | 1,315,944 | 12.2 | 65.38 | 51.7 | 81.2 | 41.2 | 61.6 | 46 | 40.7 | 43.9 | 54.7 | 77.2 | 76.6 | 59 |
| Finland | 2,768 | 25.18 | 217,518 | 5,487,308 | 5.3 | 73 | 59.9 | 94.3 | 68.1 | 60 | 62.7 | 57.3 | 52.1 | 50.6 | 77 | 82.1 | 51.7 |
| France | 35,356 | 150.35 | 2,234,129 | 66,638,391 | 19.4 | 3067 | 54 | 80.4 | 58.9 | 63.7 | 61.9 | 48 | 41.3 | 49.8 | 89 | 72.3 | 51.6 |
| Germany | 52,133 | 216.81 | 3,134,740 | 82,175,684 | 11.7 | 10 | 57.9 | 84.1 | 58.9 | 58.5 | 59.7 | 48.3 | 51.6 | 56.3 | 74.9 | 69.8 | 50.8 |
| Greece | 5,367 | 16.76 | 174,237 | 10,783,748 | 2.3 | 0 | 39.8 | 67.1 | 55.3 | 48.6 | 49 | 27.2 | 24.9 | 35.3 | 67.2 | 50.5 | 53.7 |
| Hungary | 3,721 | 17.78 | 116,130 | 9,830,485 | 6.5 | 290.14 | 44.7 | 71.3 | 41.2 | 51.1 | 41 | 40.1 | 44.4 | 36.5 | 57.1 | 51.9 | 58 |
| Ireland | 2,763 | 11.7 | 270,810 | 4,726,286 | 1.7 | 58.28 | 59 | 88.1 | 54 | 59.4 | 56.9 | 53.8 | 57.9 | 53.4 | 70.8 | 68.5 | 61.2 |
| Italy | 30,112 | 115.92 | 1,695,787 | 60,665,551 | 17.8 | 598 | 47.2 | 72.8 | 46.5 | 59.7 | 53.6 | 37.8 | 38.7 | 41.8 | 71.9 | 57.4 | 69 |
| Latvia | 802 | 3.82 | 25,360 | 1,968,957 | 6.5 | 19 | 44.3 | 77.7 | 31.4 | 54.3 | 48.6 | 36.6 | 31.6 | 46.2 | 69 | 62.9 | 54.6 |
| Lithuania | 1,272 | 5.1 | 38,890 | 2,888,558 | 4.6 | 37.02 | 41.8 | 73.3 | 49.1 | 52.9 | 45 | 35.7 | 25.7 | 39 | 67.9 | 61 | 58.6 |
| Luxembourg | 474 | 4.04 | 54,867 | 576,249 | 7 | 13.83 | 57.1 | 82.1 | 43.3 | 55.5 | 42.5 | 59.9 | 48.7 | 66.4 | 73.8 | 83.4 | 50.8 |
| Malta | 292 | 0.58 | 10,589 | 450,415 | 4.2 | 19.26 | 50.4 | 78.7 | 41.1 | 51.3 | 39.5 | 44.6 | 38.3 | 61.4 | 59.5 | 60.5 | 59.8 |
| Netherlands | 8,861 | 49.87 | 708,337 | 16,979,120 | 28.5 | 3231 | 58.3 | 91 | 55.3 | 62.1 | 58.1 | 53.7 | 44.1 | 61 | 90.1 | 76.9 | 49.8 |
| Poland | 11,654 | 66.6 | 427,092 | 37,967,209 | 10.2 | 594.98 | 40.2 | 75.3 | 39.6 | 47.6 | 46.5 | 34.6 | 27.2 | 36.3 | 57.8 | 56.2 | 46.3 |
| Portugal | 4,891 | 16.19 | 186,490 | 10,341,330 | 2.1 | 36.03 | 46.4 | 79.1 | 48.7 | 52.7 | 50.2 | 34.5 | 32.4 | 47.3 | 64.4 | 51.4 | 58 |
| Romania | 5,143 | 22.24 | 170,063 | 19,760,585 | 1.7 | 10.47 | 37.9 | 69 | 30.2 | 48.9 | 41.8 | 30.2 | 31 | 32.6 | 50.7 | 44.8 | 63.7 |
| Slovakia | 1,890 | 10.4 | 81,052 | 5,426,252 | 5.2 | 32.14 | 41.7 | 75 | 32.8 | 53.3 | 44.2 | 34.5 | 32.3 | 38.6 | 60.2 | 58.6 | 62 |
| Slovenia | 943 | 4.88 | 40,443 | 2,064,188 | 8.5 | 59.7 | 46 | 80.8 | 50.4 | 50.7 | 40.5 | 42.5 | 33.9 | 44 | 53.8 | 54.2 | 55.9 |
| Spain | 21,542 | 82.52 | 1,113,840 | 46,440,099 | 8.2 | 925 | 49.2 | 75.3 | 49.7 | 62.6 | 62.3 | 36.5 | 38.6 | 43.6 | 79.3 | 66.2 | 64.8 |
| Sweden | 4,439 | 32.26 | 466,267 | 9,851,017 | 7 | 127.58 | 63.6 | 88.3 | 64.8 | 66.3 | 66.2 | 56.8 | 63.9 | 53.4 | 75.7 | 83.2 | 59.3 |
| **2017** | Austria | 5,018 | 28.53 | 369,341 | 8,772,865 | 11.6 | 86.35 | 53.1 | 87.1 | 61 | 63 | 53.1 | 50.3 | 38.2 | 48.3 | 82.4 | 66.7 | 55.1 |
| Belgium | 4,672 | 36.09 | 444,991 | 11,351,727 | 20.4 | 540.8 | 49.9 | 80.5 | 59.7 | 57.2 | 51.8 | 48.5 | 33.2 | 47.1 | 72.5 | 71 | 47.3 |
| Bulgaria | 3,080 | 9.89 | 52,329 | 7,101,859 | 3.5 | 30.89 | 42.8 | 67.1 | 33.7 | 51.9 | 43.9 | 41.4 | 32 | 44.1 | 63.3 | 58.4 | 57.1 |
| Croatia | 1,716 | 6.92 | 49,239 | 4,154,213 | 5 | 7.58 | 39.8 | 69.3 | 37.4 | 55.9 | 42.1 | 35.1 | 25.4 | 37.9 | 72.4 | 61.3 | 62.4 |
| Cyprus | 537 | 1.87 | 20,120 | 854,802 | 2.4 | 1.2 | 46.8 | 81 | 39.9 | 48.1 | 57.9 | 42.7 | 41.3 | 38.2 | 57.7 | 54.6 | 63.2 |
| Czech Republic | 5,177 | 25.5 | 194,133 | 10,578,820 | 7.9 | 22.37 | 51 | 77.6 | 47.6 | 57.3 | 50.2 | 45.9 | 45.8 | 46.7 | 61 | 65.5 | 59.8 |
| Denmark | 4,728 | 14.55 | 294,808 | 5,748,769 | 8 | 508.6 | 58.7 | 91.4 | 66.1 | 63.2 | 70.2 | 52.5 | 43.9 | 53.5 | 83.3 | 89.1 | 63.2 |
| Estonia | 514 | 2.87 | 23,858 | 1,315,635 | 12.6 | 68.42 | 50.9 | 81.1 | 41.5 | 63.9 | 55 | 43.4 | 36.1 | 53.6 | 82.3 | 78.7 | 63.9 |
| Finland | 2,812 | 25.26 | 226,301 | 5,503,297 | 5.6 | 62 | 58.5 | 92.2 | 66.4 | 64.4 | 61.6 | 60.1 | 48.8 | 47.3 | 86.1 | 81.8 | 53.9 |
| France | 35,817 | 149.37 | 2,297,242 | 66,809,816 | 18.8 | 3095 | 54.2 | 80.7 | 58.1 | 63.4 | 64.3 | 50.6 | 38.5 | 51.4 | 86.8 | 76.1 | 53.1 |
| Germany | 51,790 | 218.57 | 3,259,860 | 82,521,653 | 11.5 | 9 | 58.4 | 83.5 | 60.1 | 61.5 | 60 | 51.4 | 51.1 | 55.9 | 81.5 | 74.9 | 53 |
| Greece | 5,415 | 16.42 | 177,152 | 10,768,193 | 2.8 | 0 | 38.8 | 65.2 | 56.4 | 48.2 | 50.2 | 28.8 | 20.4 | 35.5 | 63 | 54.6 | 56 |
| Hungary | 3,768 | 18.48 | 126,891 | 9,797,561 | 6.9 | 335.42 | 41.7 | 70.7 | 39.5 | 52.3 | 41.5 | 37.8 | 32.3 | 37.9 | 60.3 | 52.8 | 58.2 |
| Ireland | 2,768 | 11.86 | 300,387 | 4,784,383 | 1.7 | 45.56 | 58.1 | 87.6 | 55.1 | 62.1 | 55 | 54.5 | 55.9 | 50.9 | 74.8 | 73.8 | 64.3 |
| Italy | 29,572 | 115.19 | 1,736,593 | 60,589,445 | 18.4 | 640 | 47 | 71.9 | 46.3 | 61.8 | 52.6 | 39.6 | 36.1 | 42.9 | 79.5 | 62.5 | 67.2 |
| Latvia | 798 | 4.01 | 26,962 | 1,950,116 | 5.5 | 26.9 | 44.6 | 77.8 | 35.2 | 53.1 | 52.1 | 38.2 | 26.5 | 49.4 | 62.5 | 62.7 | 59.2 |
| Lithuania | 1,286 | 5.34 | 42,276 | 2,847,904 | 4.5 | 41.03 | 41.2 | 74.1 | 37.5 | 57.2 | 53 | 37.8 | 21.3 | 39.6 | 75.1 | 64 | 61.2 |
| Luxembourg | 476 | 4.18 | 56,814 | 590,667 | 10.6 | 10.13 | 56.4 | 82.6 | 42.9 | 60.1 | 43.4 | 57.8 | 45 | 65.8 | 79.3 | 80.5 | 56.9 |
| Malta | 312 | 0.62 | 11,704 | 460,297 | 6.5 | 25.36 | 50.6 | 77.6 | 41.9 | 60.6 | 45.4 | 49 | 36.6 | 56 | 78.9 | 67.5 | 61.5 |
| Netherlands | 8,792 | 50.23 | 738,146 | 17,081,507 | 29.7 | 3266 | 63.4 | 88.2 | 54.7 | 63.3 | 59 | 63.7 | 62.9 | 59 | 88.9 | 77.7 | 52.4 |
| Poland | 11,654 | 70.92 | 467,427 | 37,972,964 | 9.9 | 559.08 | 42 | 75.6 | 36.5 | 53.3 | 48.2 | 37.4 | 27.9 | 39.7 | 70.7 | 53.5 | 50.3 |
| Portugal | 5,007 | 16.56 | 195,947 | 10,309,573 | 2 | 37.22 | 46.1 | 80.8 | 47.6 | 54 | 51.1 | 35.4 | 29.9 | 46.7 | 69.2 | 56.7 | 59.5 |
| Romania | 5,333 | 23.33 | 187,773 | 19,643,949 | 1.7 | 9.78 | 39.2 | 69 | 30.5 | 55.1 | 44.2 | 33 | 31 | 32.9 | 57 | 50.8 | 70.1 |
| Slovakia | 2,058 | 11.13 | 84,532 | 5,435,343 | 5.1 | 28.59 | 43.4 | 74.5 | 34.4 | 55.3 | 45.8 | 38.3 | 33.5 | 40.8 | 58.6 | 63.8 | 66.4 |
| Slovenia | 974 | 4.95 | 43,009 | 2,065,895 | 9.7 | 55.27 | 45.8 | 80.9 | 49.2 | 55.4 | 43.1 | 43.4 | 28 | 46.4 | 73.5 | 57.1 | 55.9 |
| Spain | 22,018 | 84.9 | 1,161,867 | 46,528,024 | 8.9 | 952 | 48.8 | 75.9 | 48.9 | 64.3 | 59 | 38.4 | 36.3 | 44.4 | 83.3 | 69.3 | 65.1 |
| Sweden | 4,551 | 32.14 | 480,026 | 9,995,153 | 6.8 | 192.73 | 63.8 | 88.3 | 63.7 | 69.1 | 64.9 | 62.6 | 62.5 | 53.3 | 83.6 | 83.6 | 59 |
| **2018** | Austria | 5,119 | 27.83 | 385,362 | 8,822,267 | 11.4 | 104.02 | 51.3 | 85.6 | 61.1 | 62.8 | 52.6 | 51 | 34.3 | 45.8 | 84.3 | 73.9 | 50 |
| Belgium | 4,677 | 36.37 | 460,419 | 11,398,589 | 21.8 | 583.9 | 50.5 | 82.2 | 55.7 | 56.5 | 51.6 | 51.6 | 40.2 | 42.7 | 72.3 | 72.2 | 43.9 |
| Bulgaria | 2,862 | 9.91 | 56,112 | 7,050,034 | 2.5 | 31.94 | 42.6 | 68.3 | 30.9 | 50.2 | 47.4 | 41.3 | 36.1 | 39.2 | 64.2 | 62.3 | 52.4 |
| Croatia | 1,768 | 6.85 | 51,950 | 4,105,493 | 4.9 | 10.23 | 40.7 | 69.2 | 35.9 | 53.8 | 46.2 | 34.6 | 29.5 | 37.6 | 73.3 | 64.5 | 53.2 |
| Cyprus | 562 | 1.86 | 21,433 | 864,236 | 2.7 | 1.3 | 47.8 | 80.3 | 36 | 48.1 | 57.5 | 44.8 | 42.3 | 42.3 | 65.2 | 76.1 | 49.1 |
| Czech Republic | 5,248 | 25.33 | 210,928 | 10,610,055 | 8 | 25.03 | 48.7 | 78.5 | 41.7 | 55.2 | 50.3 | 45.7 | 42.3 | 44.1 | 60.3 | 66.2 | 53.1 |
| Denmark | 4,715 | 14.58 | 302,361 | 5,781,190 | 8.2 | 525.33 | 58.4 | 91.1 | 63 | 62.3 | 68.3 | 52.5 | 46.9 | 51.7 | 83 | 89.4 | 59 |
| Estonia | 535 | 2.96 | 25,938 | 1,319,133 | 13.8 | 71.98 | 50.5 | 81.2 | 41.5 | 60.2 | 53.9 | 41.5 | 35.9 | 54.9 | 83 | 79.7 | 49.3 |
| Finland | 3,041 | 25.84 | 233,696 | 5,513,130 | 5.9 | 65 | 59.6 | 92.8 | 64.2 | 62 | 59.8 | 60.6 | 53.5 | 49.3 | 84.8 | 79.9 | 46.8 |
| France | 35,889 | 146.84 | 2,360,687 | 67,026,224 | 19.6 | 2924 | 54.4 | 81.2 | 56.8 | 62.9 | 65 | 50.6 | 41.6 | 49.2 | 87.4 | 79.3 | 49.9 |
| Germany | 50,260 | 215.46 | 3,356,410 | 82,792,351 | 12 | 8 | 58 | 85.9 | 58.7 | 60.5 | 58.5 | 52.8 | 52.2 | 53.3 | 81.8 | 77.7 | 49.2 |
| Greece | 5,523 | 15.93 | 179,727 | 10,741,165 | 3.3 | 18 | 38.9 | 65.4 | 53.2 | 47 | 50 | 30 | 25.3 | 32.2 | 63.7 | 58.2 | 50.3 |
| Hungary | 3,729 | 18.51 | 135,931 | 9,778,371 | 7 | 330.93 | 44.9 | 70.4 | 41.2 | 49.6 | 42.9 | 40.7 | 45.3 | 36.6 | 61.8 | 57.1 | 49.3 |
| Ireland | 2,912 | 12.44 | 326,986 | 4,830,392 | 1.6 | 26.16 | 57.2 | 85.7 | 53.8 | 66.7 | 54.9 | 54.6 | 56.6 | 45.9 | 75.2 | 75.9 | 64.8 |
| Italy | 30,165 | 116.44 | 1,771,566 | 60,483,973 | 18.7 | 570 | 46.3 | 74.9 | 44.9 | 61.5 | 51 | 39.6 | 37.7 | 38.9 | 78.8 | 63.5 | 66.2 |
| Latvia | 785 | 4.18 | 29,143 | 1,934,379 | 4.8 | 31.4 | 43.2 | 76.5 | 34.4 | 50.2 | 55.8 | 38.6 | 25.9 | 44.6 | 63.5 | 66.5 | 48.8 |
| Lithuania | 1,301 | 5.57 | 45,491 | 2,808,901 | 4.3 | 51.94 | 41.2 | 73.6 | 36.2 | 54.6 | 49.9 | 38.8 | 23.7 | 39.8 | 75.8 | 66.3 | 51.8 |
| Luxembourg | 488 | 4.35 | 60,053 | 602,005 | 10.8 | 9.24 | 54.5 | 80.7 | 38.6 | 58.8 | 45.1 | 57.7 | 47.9 | 57.9 | 79.9 | 83 | 52.7 |
| Malta | 321 | 0.66 | 12,587 | 475,701 | 8.1 | 29.28 | 50.3 | 74.6 | 38.8 | 65.8 | 42.6 | 51.9 | 40 | 51.7 | 79.9 | 71.6 | 81.6 |
| Netherlands | 8,806 | 50.66 | 773,987 | 17,181,084 | 29 | 3313 | 63.3 | 90 | 56.5 | 62.4 | 58.3 | 65.1 | 63.7 | 56.7 | 89.2 | 82.8 | 47.6 |
| Poland | 11,969 | 71.82 | 497,842 | 37,976,687 | 9.7 | 538.54 | 41.7 | 74 | 36.9 | 51 | 48.1 | 37.3 | 30.2 | 37.7 | 72.2 | 54.7 | 41.8 |
| Portugal | 5,213 | 16.87 | 205,184 | 10,291,027 | 2.1 | 36.86 | 45.7 | 81.2 | 47.1 | 53 | 50.3 | 36.5 | 32.2 | 43.4 | 70.3 | 61.5 | 52.9 |
| Romania | 5,296 | 23.59 | 204,497 | 19,533,481 | 1.5 | 9.45 | 37.6 | 67.8 | 30.4 | 52.5 | 43.4 | 32.6 | 30.4 | 29.3 | 58.5 | 55.9 | 61.2 |
| Slovakia | 2,254 | 11.11 | 89,506 | 5,443,120 | 5 | 28.59 | 42.9 | 74 | 31.9 | 53.3 | 48.9 | 38.5 | 34.7 | 38.1 | 59.3 | 66.7 | 59.7 |
| Slovenia | 1,009 | 4.95 | 45,863 | 2,066,880 | 10 | 55.52 | 46.9 | 82.3 | 46.7 | 53.6 | 43.9 | 43 | 32.9 | 46.7 | 74.6 | 61.6 | 47.5 |
| Spain | 22,229 | 86.89 | 1,204,241 | 46,658,447 | 9.6 | 957 | 48.7 | 78.2 | 47.5 | 62.8 | 59.4 | 37.8 | 38.9 | 41.5 | 84.2 | 72.3 | 59.9 |
| Sweden | 4,416 | 31.95 | 470,673 | 10,120,242 | 6.7 | 248.58 | 63.1 | 89.6 | 62.2 | 67.1 | 64.7 | 62.5 | 60.1 | 53.8 | 83.4 | 84 | 53.5 |
| **2019** | Austria | 5,220 | 28.28 | 397,575 | 8,858,775 | 11.5 | 98.29 | 50.9 | 86 | 60.2 | 61.4 | 52.8 | 53.8 | 36.7 | 41.4 | 82.3 | 74.7 | 50.5 |
| Belgium | 4,779 | 35.76 | 476,203 | 11,455,519 | 24 | 546.4 | 50.2 | 82 | 55 | 57.2 | 55.3 | 54.1 | 40.8 | 38.5 | 77.1 | 75.6 | 44.1 |
| Bulgaria | - | 9.84 | 61,240 | 7,000,039 | 2.4 | 31.62 | 40.3 | 68.3 | 30.6 | 53.7 | 47.5 | 40.3 | 31.4 | 33.8 | 74.9 | 65.8 | 52.2 |
| Croatia | 1,812 | 6.91 | 54,238 | 4,076,246 | 4.9 | 17.18 | 37.8 | 69.3 | 35.6 | 51.6 | 46 | 34.3 | 25.6 | 31 | 71.1 | 63.4 | 52.9 |
| Cyprus | 566 | 1.89 | 22,287 | 875,899 | 2.9 | 1.3 | 48.3 | 80.3 | 35.8 | 55.9 | 58.2 | 47.6 | 41.2 | 41.1 | 79.9 | 79.6 | 57.8 |
| Czech Republic | 5,338 | 25.24 | 223,950 | 10,649,800 | 8.3 | 24.04 | 49.4 | 78.6 | 43.4 | 56.4 | 52.4 | 46.3 | 43.8 | 43.1 | 67.3 | 70 | 53.4 |
| Denmark | 4,907 | 14.33 | 312,747 | 5,806,081 | 7.8 | 495.14 | 58.4 | 91.7 | 63.1 | 65.8 | 66.9 | 59.1 | 46.4 | 48.6 | 93.1 | 90 | 60.1 |
| Estonia | 490 | 2.9 | 28,112 | 1,324,820 | 15.1 | 59.12 | 50 | 81.7 | 42.1 | 61.5 | 52.6 | 42.6 | 36 | 51.7 | 85.7 | 79.9 | 53.1 |
| Finland | 3,123 | 25.32 | 240,261 | 5,517,919 | 6.2 | 55 | 59.8 | 93.6 | 63.4 | 62.1 | 57.3 | 63.9 | 55.1 | 48.1 | 87.5 | 79.7 | 47 |
| France | 36,740 | 145.45 | 2,425,708 | 67,177,636 | 20.1 | 2840 | 54.2 | 83.2 | 55.8 | 62.3 | 62.9 | 53.3 | 45 | 45 | 89.6 | 80.3 | 49.9 |
| Germany | 50,612 | 214.54 | 3,449,050 | 83,019,213 | 12.2 | 8 | 58.2 | 86.4 | 63.2 | 62 | 58.6 | 56.1 | 52.7 | 49.6 | 88.2 | 77.2 | 50.1 |
| Greece | 5,613 | 16.19 | 183,414 | 10,724,599 | 4.2 | 9 | 38.9 | 67.2 | 49.5 | 51.7 | 50.3 | 32.4 | 25.1 | 30.1 | 78.2 | 63.2 | 51.5 |
| Hungary | 3,780 | 18.61 | 146,062 | 9,772,756 | 6.8 | 342.55 | 44.5 | 71.6 | 41 | 52.7 | 45.7 | 40.8 | 42.8 | 34.6 | 71.5 | 63.6 | 48.9 |
| Ireland | - | 12.36 | 356,051 | 4,904,240 | 1.6 | 19.55 | 56.1 | 85.5 | 48.4 | 66.3 | 54.6 | 55.8 | 56.9 | 43.3 | 83.8 | 77.9 | 69.6 |
| Italy | 30,079 | 115.5 | 1,790,942 | 59,816,673 | 19.3 | 549 | 46.3 | 75.3 | 45.4 | 59.4 | 51.4 | 42.2 | 38.9 | 36.8 | 82.6 | 65.3 | 58.3 |
| Latvia | 840 | 4.08 | 30,421 | 1,919,968 | 4.7 | 31.77 | 43.2 | 77.2 | 36.9 | 50.5 | 54.4 | 37.4 | 27.5 | 42.8 | 71.3 | 75.4 | 49.1 |
| Lithuania | 1,319 | 5.56 | 48,797 | 2,794,184 | 4 | 46.3 | 41.5 | 76 | 36.3 | 51.7 | 50.9 | 38 | 24.4 | 40.3 | 75.4 | 67.8 | 53.7 |
| Luxembourg | 491 | 4.39 | 63,516 | 613,894 | 11.9 | 10.62 | 53.5 | 80.7 | 41.7 | 58.7 | 46.9 | 60.7 | 42.2 | 56.2 | 90.7 | 82.4 | 53.3 |
| Malta | 350 | 0.7 | 13,592 | 493,559 | 7.1 | 32.66 | 49 | 75.2 | 36.6 | 61.1 | 45.2 | 54.9 | 31.9 | 55 | 84.6 | 78.1 | 72.8 |
| Netherlands | 8,806 | 49.89 | 810,247 | 17,282,163 | 28.5 | 3446 | 61.4 | 90.9 | 52.4 | 61.8 | 58.2 | 63.7 | 61.8 | 53.2 | 91.1 | 84.8 | 48.5 |
| Poland | 12,753 | 70.97 | 532,329 | 37,972,812 | 9.8 | 572.65 | 41.3 | 73.6 | 41.2 | 53.8 | 47.9 | 38.4 | 30.9 | 32.4 | 81.5 | 69.8 | 41.5 |
| Portugal | 5,281 | 17.13 | 213,949 | 10,276,617 | 2.2 | 53.72 | 44.6 | 81.8 | 47.7 | 56.8 | 49.8 | 37.3 | 29.8 | 39.4 | 82.5 | 66.8 | 52 |
| Romania | 5,430 | 23.88 | 222,998 | 19,414,458 | 1.5 | 8.85 | 36.8 | 67.1 | 29.1 | 54.5 | 43.2 | 33.6 | 30.3 | 25.8 | 67.6 | 62.4 | 60.6 |
| Slovakia | 2,299 | 11.17 | 93,865 | 5,450,421 | 6.1 | 28.69 | 42 | 73.1 | 32.4 | 54.2 | 47.4 | 35.6 | 34 | 37.1 | 74.4 | 69.1 | 53.5 |
| Slovenia | 1,052 | 4.85 | 48,393 | 2,080,908 | 10.4 | 55.68 | 45.3 | 82.3 | 46.6 | 53.9 | 43.6 | 44.1 | 30.7 | 42.1 | 76.9 | 65.7 | 47.5 |
| Spain | 22,438 | 86.3 | 1,244,772 | 46,937,060 | 10.2 | 975 | 47.9 | 78.1 | 47 | 63.1 | 59.5 | 38.7 | 37.2 | 39.7 | 87.4 | 77.2 | 58.8 |
| Sweden | 4,611 | 31.57 | 474,551 | 10,230,185 | 7 | 252.24 | 63.7 | 90.1 | 62.1 | 69.1 | 62.1 | 68.8 | 61.8 | 51.9 | 89.5 | 87.1 | 58.1 |