

# SUMMARY OF SOLUTIONS BY SECTOR

| Sector                      | Solution                          | TOTAL ATMOSPHERIC CO <sub>2</sub> -EQ REDUCTION (GT) | NET COST (BILLIONS US \$) | NET SAVINGS (BILLIONS US \$) |
|-----------------------------|-----------------------------------|--|---------------------------|------------------------------|
| <b>Buildings and Cities</b> | 27 District Heating               | 9.38   | \$457.07                  | \$3,543.50                   |
|                             | 31 Insulation                     | 8.27   | \$3,655.92                | \$2,513.33                   |
|                             | 33 LED Lighting - Household       | 7.81   | \$323.52                  | \$1,729.54                   |
|                             | 42 Heat Pumps                     | 5.20   | \$118.71                  | \$1,546.66                   |
|                             | 44 LED Lighting - Commercial      | 5.04   | -\$205.05                 | \$1,089.63                   |
|                             | 45 Building Automation            | 4.62   | \$68.12                   | \$880.55                     |
|                             | 54 Walkable Cities                | 2.92   | N/A                       | \$3,278.24                   |
|                             | 57 Smart Thermostats              | 2.62   | -\$74.16                  | \$640.10                     |
|                             | 58 Landfill Methane               | 2.50   | -\$1.82                   | \$67.57                      |
|                             | 59 Bike Infrastructure            | 2.31   | -\$2,026.97               | \$400.47                     |
|                             | 61 Smart Glass                    | 2.19   | \$74.20                   | \$325.10                     |
|                             | 71 Water Distribution             | 0.87   | \$137.37                  | \$903.11                     |
|                             | 73 Green Roofs                    | 0.77   | \$1,393.29                | \$988.46                     |
|                             | 79 Net Zero Buildings             | 0.00   | N/A                       | N/A                          |
|                             | 80 Retrofitting                   | 0.00   | N/A                       | N/A                          |
|                             | <b>Buildings and Cities Total</b> |  | <b>54.50</b>              | <b>\$4,778.30</b>            |
| <b>Energy</b>               | 2 Wind Turbines (Onshore)         | 84.60  | \$1,225.37                | \$7,425.00                   |
|                             | 8 Solar Farms                     | 36.90  | -\$80.60                  | \$5,023.84                   |
|                             | 10 Rooftop Solar                  | 24.60  | \$453.14                  | \$3,457.63                   |
|                             | 18 Geothermal                     | 16.60  | -\$155.48                 | \$1,024.34                   |
|                             | 20 Nuclear                        | 16.09  | \$0.88                    | \$1,713.40                   |
|                             | 22 Wind Turbines (Offshore)       | 14.10  | \$572.40                  | \$274.57                     |
|                             | 25 Concentrated Solar             | 10.90  | \$1,319.70                | \$413.85                     |
|                             | 29 Wave and Tidal                 | 9.20   | \$411.84                  | -\$1,004.70                  |
|                             | 30 Methane Digesters (Large)      | 8.40   | \$201.41                  | \$148.83                     |
|                             | 34 Biomass                        | 7.50   | \$402.31                  | \$519.35                     |
|                             | 41 Solar Water                    | 6.08   | \$2.99                    | \$773.65                     |
|                             | 48 In-Stream Hydro                | 4.00   | \$202.53                  | \$568.36                     |
|                             | 50 Cogeneration                   | 3.97   | \$279.25                  | \$566.93                     |
|                             | 64 Methane Digesters (Small)      | 1.90   | \$15.50                   | \$13.90                      |
|                             | 68 Waste-to-Energy                | 1.10   | \$36.00                   | \$19.82                      |
|                             | 76 Micro Wind                     | 0.20   | \$36.12                   | \$19.90                      |
|                             | 77 Energy Storage (Distributed)   | N/A  | N/A                       | N/A                          |
|                             | 77 Energy Storage (Utilities)     | N/A  | N/A                       | N/A                          |
| 77 Grid Flexibility         | N/A                               | N/A  | N/A                       |                              |
| 78 Microgrids               | N/A                               | N/A  | N/A                       |                              |
| <b>Energy Totals</b>        |                                   | <b>246.14</b>  | <b>\$4,923.36</b>         | <b>\$20,958.67</b>           |
| <b>Food</b>                 | 3 Reduced Food Waste              | 70.53  | N/A                       | N/A                          |
|                             | 4 Plant-Rich Diet                 | 66.11  | N/A                       | N/A                          |
|                             | 9 Silvopasture                    | 31.19  | \$41.59                   | \$699.37                     |
|                             | 11 Regenerative Agriculture       | 23.15  | \$57.22                   | \$1,928.10                   |
|                             | 14 Tropical Staple Trees          | 20.19  | \$120.07                  | \$626.97                     |
|                             | 16 Conservation Agriculture       | 17.35  | \$37.53                   | \$2,119.07                   |
|                             | 17 Tree Intercropping             | 17.20  | \$146.99                  | \$22.10                      |
| 19 Managed Grazing          | 16.34                             | \$50.48  | \$735.27                  |                              |

|                        |    |                                     |               |                    |                    |
|------------------------|----|-------------------------------------|---------------|--------------------|--------------------|
|                        | 21 | Clean Cookstoves                    | 15.81         | \$72.16            | \$166.28           |
|                        | 23 | Farmland Restoration                | 14.08         | \$72.24            | \$1,342.47         |
|                        | 24 | Improved Rice Cultivation           | 11.34         | N/A                | \$519.06           |
|                        | 28 | Multistrata Agroforestry            | 9.28          | \$26.76            | \$709.75           |
|                        | 53 | System of Rice Intensification      | 3.13          | N/A                | \$677.83           |
|                        | 60 | Composting                          | 2.28          | -\$63.72           | -\$60.82           |
|                        | 65 | Nutrient Management                 | 1.81          | N/A                | \$102.32           |
|                        | 67 | Farmland Irrigation                 | 1.33          | \$216.16           | \$429.67           |
|                        | 72 | Biochar                             | 0.81          | \$31.27            | N/A                |
|                        |    | <b>Food Totals</b>                  | <b>321.93</b> | <b>\$777.48</b>    | <b>\$10,017.44</b> |
| <b>Land Use</b>        | 5  | Tropical Forests                    | 61.23         | N/A                | N/A                |
|                        | 12 | Temperate Forests                   | 22.61         | N/A                | N/A                |
|                        | 13 | Peatlands                           | 21.57         | N/A                | N/A                |
|                        | 15 | Afforestation                       | 18.06         | 46.51              | 1,014.92           |
|                        | 35 | Bamboo                              | 7.22          | 18.35              | 234.64             |
|                        | 38 | Forest Protection                   | 6.20          | N/A                | N/A                |
|                        | 39 | Indigenous Peoples' Land Management | 6.19          | N/A                | N/A                |
|                        | 51 | Perennial Biomass                   | 3.33          | N/A                | N/A                |
|                        | 52 | Coastal Wetlands                    | 3.19          | N/A                | N/A                |
|                        |    | <b>Land Use Totals</b>              | <b>149.60</b> | <b>\$64.86</b>     | <b>\$1,249.56</b>  |
| <b>Materials</b>       | 1  | Refrigerant Management              | 89.74         | N/A                | -\$902.77          |
|                        | 36 | Alternative Cement                  | 6.69          | -\$273.90          | N/A                |
|                        | 46 | Water Saving - Home                 | 4.61          | \$72.44            | \$1,800.12         |
|                        | 47 | Bioplastic                          | 4.30          | \$19.15            | N/A                |
|                        | 55 | Household Recycling                 | 2.77          | \$366.92           | \$71.13            |
|                        | 56 | Industrial Recycling                | 2.77          | \$366.92           | \$71.13            |
|                        | 70 | Recycled Paper                      | 0.90          | \$573.48           | N/A                |
|                        |    | <b>Materials Totals</b>             | <b>111.78</b> | <b>\$1,125.01</b>  | <b>\$1,039.61</b>  |
| <b>Transport</b>       | 26 | Electric Vehicles                   | 10.80         | \$14,148.03        | \$9,726.40         |
|                        | 32 | Ships                               | 7.87          | \$915.93           | \$424.38           |
|                        | 37 | Mass Transit                        | 6.57          | N/A                | \$2,379.73         |
|                        | 40 | Trucks                              | 6.18          | \$543.54           | \$2,781.63         |
|                        | 43 | Airplanes                           | 5.05          | \$662.42           | \$3,187.80         |
|                        | 49 | Cars                                | 4.00          | -\$598.69          | \$1,761.72         |
|                        | 63 | Telepresence                        | 1.99          | \$127.72           | \$1,310.59         |
|                        | 66 | High-Speed Rail                     | 1.52          | -\$1,038.42        | \$368.13           |
|                        | 69 | Electric Bikes                      | 0.96          | \$106.75           | \$226.07           |
|                        | 74 | Trains                              | 0.52          | \$808.64           | \$313.86           |
|                        | 75 | Ridesharing                         | 0.32          | N/A                | \$185.56           |
|                        |    | <b>Transport Totals</b>             | <b>45.78</b>  | <b>\$15,675.92</b> | <b>\$22,665.87</b> |
| <b>Women and Girls</b> | 6  | Educating Girls                     | 59.60         | N/A                | N/A                |
|                        | 7  | Family Planning                     | 59.60         | N/A                | N/A                |
|                        | 62 | Women Smallholders                  | 2.06          | N/A                | \$87.60            |
|                        |    | <b>Women and Girls Totals</b>       | <b>121.26</b> | <b>N/A</b>         | <b>\$87.60</b>     |