

IMPACT ACCOUNTING · METHODOLOGY NOTE

# IVSB-aligned value factors

A second value factor set in impactaccounting.ai, and the choices made to fit it to the software.

INTERMEDIATE SET V2.0 · AUGUST 2026

266 GEOGRAPHIES · ALL VALUES IN USD 2025

VALUE OF A LIFE  
YEAR**\$95,846**\$62,082 in the default  
set

CARBON

**\$0.262**per kg CO<sub>2</sub>e

MONEY CONVERSION

**×1**

costs at face value

FACTORS CHANGED

**7 / 19**5 adopted, 2 derived, 12  
retained

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## What is new

The software now carries a second set of value factors, aligned with the value factors published by the IVSB, the [Impact Value Standards Board](#) hosted by the Capitals Coalition and building on the earlier IFVI and VBA work.

The set is selected per model, and the valuation logic is unchanged. Pathways, impact drivers, outcomes and the single wellbeing unit all behave exactly as before. What changes is the set of factors that convert physical flows and monetary outcomes into societal value.

This is an intermediate set, and it is versioned. The IVSB has finalised greenhouse gases, water consumption and occupational health and safety, and has interim or draft methodologies for air pollution, water pollution, land use and waste. Wages are being reworked into a Core Working Conditions value factor. Where a published factor exists it is adopted. Where none exists the default factor is retained and labelled as an interim value, so a result stays complete rather than silently dropping impacts the IVSB has simply not reached yet. Each new IVSB publication triggers a new version of the set.

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## The value of a life year

The most consequential single number in an impact valuation is the value placed on a year of healthy life, because most health and environmental damages reduce to it in the end. The two sets reach a similar figure by different routes. The default set values a healthy life year at \$62,082, derived from global income per capita on the WHO-CHOICE convention. The IVSB starts instead from a value of a statistical life drawn from an OECD meta-analysis and divides it by the remaining life expectancy of the people in that study.

| STEP                              | VALUE           | SOURCE                                                          |
|-----------------------------------|-----------------|-----------------------------------------------------------------|
| Value of a statistical life       | \$2,895,021     | OECD meta-analysis, \$2.7m in 2022 prices, updated to 2024      |
| Remaining life expectancy         | 31 years        | Global life expectancy 72.6 years less mean respondent age 41.6 |
| Value of a life year, 2024        | \$93,388        | IVSB Water Consumption methodology, Appendix B                  |
| <b>Value of a life year, 2025</b> | <b>\$95,846</b> | Adjusted for inflation, used throughout the set                 |

A life year is worth about 54 per cent more in the IVSB set than in the default set. Both figures apply equally to every country, on the principle that a life year is worth the same everywhere. The value sits in its own column in the factor file and can be edited.

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## Money is counted at face value

The default set does something the IVSB approach does not. When an impact first appears as money, such as a damage cost, a wage or a tax payment, the default set converts that money into wellbeing using a country factor that reflects how much a dollar actually achieves at that income level. The IVSB treats a dollar of damage as a dollar of societal cost, with no further conversion.

#### THE SINGLE MOST IMPORTANT COMPATIBILITY CHOICE

To reproduce IVSB results faithfully, the software switches this conversion off in the IVSB set, giving it a multiplier of one. Leaving the conversion on would produce numbers belonging to neither system. It also has a visible consequence for human and social pathways, described further below.

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## One value of life, or one per country

The June 2026 database publishes two perspectives. The Global perspective applies one worldwide value of a life year to every country, which is what this set uses. The Local perspective scales that value by income, using gross national income per capita at purchasing power parity relative to the United States, so a life year in a lower-income country is valued lower.

The set keeps the Global perspective, for three reasons. It matches the equal-value-of-life principle the software already applies to every other pathway. The IVSB own occupational health and safety methodology argues for it, on the grounds that a single value avoids distortionary results that unintentionally favour one population over another when decisions cross country lines. And the choice is explicitly left to the preparer in the general methodology. The practical effect of the alternative is stark: under the Local perspective the same fatality is valued at 2.6 per cent as much in Afghanistan as in the United States, so a company would report far less harm for identical physical damage simply because the people affected are poorer.

#### IF YOU NEED A LOCAL VARIANT

The income ratio behind the Local perspective is carried in the dataset, so a local variant can be produced if a client requires one. Anyone doing so should first note a technical concern recorded with the dataset, namely that the published local values appear to apply the income adjustment twice and therefore understate local values by roughly a factor of three.

## How each environmental factor is handled

Every indicator falls into one of four treatments, and the treatment is stored against the factor, so it can be stated for every number in a result.

| TREATMENT | WHAT IT MEANS                                                                                                    | COUNT |
|-----------|------------------------------------------------------------------------------------------------------------------|-------|
| ADOPTED   | The IVSB country factor is imported directly, with a unit conversion and an inflation adjustment to 2025 prices. | 5     |
| DERIVED   | Built from IVSB substance-level values using the characterisation factors the software already applies.          | 2     |
| MODELLED  | No factor is imported. The software models the activity and values the resulting flows with the factors above.   | –     |
| RETAINED  | The IVSB has no factor, so the default value is kept and labelled as an interim value.                           | 12    |

### THE FULL LIST

| INDICATOR                       | UNIT                       | TREATMENT | SOURCE AND STATUS                                     |
|---------------------------------|----------------------------|-----------|-------------------------------------------------------|
| Climate change                  | USD/kg CO <sub>2</sub> e   | ADOPTED   | GHG methodology, final                                |
| Water consumption               | USD/m <sup>3</sup>         | ADOPTED   | Water Consumption methodology, final                  |
| Freshwater eutrophication       | USD/kg P-eq                | ADOPTED   | Water Pollution, interim                              |
| Particulate matter              | USD/kg PM2.5-eq            | ADOPTED   | Air Pollution, interim                                |
| Land use, occupation            | USD/m <sup>2</sup> · a     | ADOPTED   | Land Use, interim                                     |
| Human toxicity, cancer          | USD/kg 1,4-DCB             | DERIVED   | Water Pollution, interim, mapped via characterisation |
| Human toxicity, non-cancer      | USD/kg 1,4-DCB             | DERIVED   | Water Pollution, interim, mapped via characterisation |
| Marine eutrophication           | USD/kg N-eq                | RETAINED  | No IVSB marine nitrogen factor                        |
| Terrestrial acidification       | USD/kg SO <sub>2</sub> e   | RETAINED  | No IVSB ecosystem acidification factor                |
| Freshwater ecotoxicity          | USD/kg 1,4-DCB             | RETAINED  | No IVSB ecotoxicity endpoint                          |
| Marine ecotoxicity              | USD/kg 1,4-DCB             | RETAINED  | No IVSB ecotoxicity endpoint                          |
| Terrestrial ecotoxicity         | USD/kg 1,4-DCB             | RETAINED  | No IVSB ecotoxicity endpoint                          |
| Photochemical ozone, health     | USD/kg NO <sub>x</sub> -eq | RETAINED  | Superseded by the particulate matter route            |
| Photochemical ozone, ecosystems | USD/kg NO <sub>x</sub> -eq | RETAINED  | No IVSB factor                                        |

| INDICATOR          | UNIT           | TREATMENT | SOURCE AND STATUS                                 |
|--------------------|----------------|-----------|---------------------------------------------------|
| Ozone depletion    | USD/kg CFC-11e | RETAINED  | No IVSB factor                                    |
| Ionising radiation | USD/kBq Co-60e | RETAINED  | No IVSB factor                                    |
| Marine plastics    | USD/kg plastic | RETAINED  | IVSB covers plastics only inside the waste factor |
| Metal depletion    | USD/kg Cu-eq   | RETAINED  | No IVSB factor                                    |
| Fossil depletion   | USD/kg oil-eq  | RETAINED  | No IVSB factor                                    |

Nineteen indicators. Seven change value under the IVSB set and twelve are retained from the default set.

## What moves, and by how much

The table compares the two sets for three reference geographies. Water and land use move the most, carbon rises by about half, and particulate matter falls sharply because the June 2026 database revised the IVSB air pollution values down by around 40 per cent in real terms.

| INDICATOR                  | WORLD DEFAULT | WORLD IVSB | CHANGE | US CHANGE | INDIA CHANGE |
|----------------------------|---------------|------------|--------|-----------|--------------|
| Climate change             | 0.165         | 0.262      | ×1.6   | ×1.6      | ×1.6         |
| Water consumption          | 0.030         | 2.63       | ×88    | ×8.5      | ×211         |
| Land use                   | 0.081         | 0.570      | ×7.0   | ×11       | ×4.9         |
| Freshwater eutrophication  | 13.9          | 94.5       | ×6.8   | ×4.2      | ×16          |
| Human toxicity, non-cancer | 0.014         | 0.069      | ×4.9   | ×1.4      | ×16          |
| Human toxicity, cancer     | 0.206         | 0.069      | ×0.33  | ×0.09     | ×1.1         |
| Particulate matter         | 167           | 21.1       | ×0.13  | ×0.47     | ×0.44        |

Values in USD 2025 per unit of the indicator. A ratio above one means the IVSB factor is higher.

Two of these deserve a word of explanation. Water rises steeply because the default factor counted only the cost of replacing water, while the IVSB factor also counts the ecosystem services lost, the malnutrition caused when agriculture loses water, and the water-borne disease that follows reduced access. The rise is larger still in water-scarce countries, where the cost of securing future supply dominates. Land use rises because the IVSB values the full loss of ecosystem services across the biome, where the default factor covered soil functions alone.

Toxicity behaves differently from everything else. The default factors are global constants, the same everywhere, while the derived factors are country-specific and range from \$0.002 to \$0.45 per unit. That range follows the IVSB exposure model, in which countries with extensive drinking-water treatment and high dilution show much lower values than countries without. Toxicity results therefore vary between geographies in a way they did not before. This is also the factor carrying the most uncertainty, for reasons set out in section C of the appendix.

## Health, wages, taxes and the other pathways

Human and social pathways are handled by the valuation logic rather than a lookup table, and the IVSB covers them unevenly, so each is treated on its own terms.

| PATHWAY                           | DEFAULT TREATMENT                                                                                                     | IN THE IVSB SET                                                                                                                                                                                                  | STATUS         |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Occupational health and safety    | Health loss valued in wellbeing units, from incident records where available or sector burden data where not.         | Incidents valued as fractions of the IVSB value of a statistical life, plus healthcare cost. A lost workday to injury is 0.0334 per cent of a life, a long-term incapacity 19 per cent, a fatality 100 per cent. | IVSB final     |
| Wages and income                  | Wage change converted to wellbeing with a country factor, with a separate negative term for any gap to a living wage. | Counted at face value, which is the IVSB own current guidance. The earlier wages methodology is being replaced by a Core Working Conditions value factor covering wages.                                         | Being replaced |
| Taxes and public revenue          | Tax paid converted to wellbeing with a country factor reflecting what public spending delivers.                       | Counted at face value. The IVSB has no tax methodology.                                                                                                                                                          | No IVSB factor |
| Education and training            | Earning premium converted to wellbeing with the same country factor as income.                                        | Counted at face value. The IVSB has no methodology here.                                                                                                                                                         | No IVSB factor |
| Health outcomes from risk factors | Burden of disease rates multiplied by the value of a life year.                                                       | Identical logic, using the IVSB value of a life year.                                                                                                                                                            | Aligned        |
| Waste                             | Modelled as a treatment process, with the resulting emissions and land use valued by the environmental factors.       | Unchanged, and consistent with the IVSB, which builds its per-tonne waste value from the same components.                                                                                                        | Draft          |
| Job creation                      | A baseline probability used in additivity.                                                                            | Unchanged. Not a value factor.                                                                                                                                                                                   | Not a factor   |
| Wage inequality                   | Not currently modelled.                                                                                               | On the IVSB workplan for 2026.                                                                                                                                                                                   | Upcoming       |

### TWO CONSEQUENCES WORTH KNOWING

**Counting money at face value is a value choice, not a technicality.** In the default set a dollar of wage in a low-income country produces more wellbeing than the same dollar in a high-income country, because it buys more health and security. At face value the two count the same. Wage, tax and training results therefore flatten across geographies in the IVSB set, and the effect is largest for operations in low-income countries.

**The IVSB value of a statistical life already includes lost earnings.** Where a health and safety result is valued this way, the software does not add an income effect on top, because the earnings loss is already inside the number.

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## Countries, gaps and prices

The set covers the same 266 geographies as before. Water factors come from the IVSB own published country table, which covers 208 of the 217 individual countries directly, and the remaining nine use the gap-filling rule the methodology itself specifies, namely an average across the same region and income class. The other factors come from the IVSB country database. The 49 regional and income aggregates are not published by the IVSB and are built from their member countries instead, using explicit membership for regions, income groups, the European Union, the Euro area, the OECD and the Arab World. Every row records which method produced it, both as a flag in the factor sheet and in full on a separate sheet.

| ROWS                                                      | HOW THE VALUE IS PRODUCED                                                     | COUNT |
|-----------------------------------------------------------|-------------------------------------------------------------------------------|-------|
| Individual countries                                      | Published IVSB country values                                                 | 217   |
| Regions, income groups, EU, Euro area, OECD, Arab World   | Median of explicitly defined member countries                                 | 24    |
| Lending, fragility, small-state and demographic groupings | Documented income or region proxy, since membership is not in the source data | 25    |

All values are expressed in 2025 US dollars. The IVSB publishes in 2023 and 2024 prices depending on the topic, and these are brought forward with the US consumer price index, with the original year kept alongside each factor.

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## Using the set

Selecting the IVSB set changes the factors and nothing else. Every factor in the dataset carries its source and its status, so a report annex can be written stating, for each number, whether it comes from a final IVSB methodology, an interim or draft one, a value derived from IVSB data, or a retained default value. The set is reissued whenever the IVSB publishes a new value factor database or finalises a topic, and each reissue carries a changelog. Waste, land use and the forthcoming Core Working Conditions factor are the next expected changes.

Version 2.0 was rebuilt on the June 2026 database. That rebuild confirmed the corrected water values independently and revised the air pollution values down by around 40 per cent in real terms. The value of a life year was confirmed unchanged in correspondence with the IVSB.

## Appendix · Technical detail

### A. Unit conversions and aggregation

The IVSB publishes in units that differ from the ones the software reports against. The conversions below are applied once, when the set is built.

| INDICATOR                 | IVSB SOURCE UNIT                        | SOFTWARE UNIT            | CONVERSION APPLIED                                                                                                                                                                                                                                                                    |
|---------------------------|-----------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Climate change            | USD per tonne CO <sub>2</sub> e         | USD/kg CO <sub>2</sub> e | Divide by 1,000. The published database value is used; alternative emission years are tabulated in the dataset.                                                                                                                                                                       |
| Water consumption         | USD per m <sup>3</sup> , national table | USD/m <sup>3</sup>       | The published national value factor is used directly. It is built as access cost plus the largest of ecosystem services, malnutrition and water-borne disease. Taken from the final methodology, not from the value factor database, which still carries exposure-draft water values. |
| Particulate matter        | USD per tonne PM2.5                     | USD/kg PM2.5-eq          | Divide by 1,000. Peri-urban setting, which the IVSB treats as the default where the emission location is unknown. Values were revised down by about 40 per cent in the June 2026 database.                                                                                            |
| Freshwater eutrophication | USD per kg phosphorus                   | USD/kg P-eq              | Direct, units already equivalent.                                                                                                                                                                                                                                                     |
| Land use                  | USD per hectare-year, 18 categories     | USD/m <sup>2</sup> · a   | Median across the 18 categories, divided by 10,000.                                                                                                                                                                                                                                   |
| Human toxicity            | USD per kg of each substance            | USD/kg 1,4-DCB           | Mapped through characterisation factors and pooled across both water compartments, see section C.                                                                                                                                                                                     |
| All of the above          | Source price year                       | USD 2025                 | Multiplied by 1.02631. The June 2026 database is entirely in 2024 prices, so a single inflation factor applies to every value.                                                                                                                                                        |

The particulate matter factor is applied to the whole indicator, which already includes precursor gases through characterisation. Since the IVSB value covers primary fine particles, this slightly overstates the precursor contribution, and the alternative was rejected to keep the reporting structure intact.

### B. Parameters and constants

| PARAMETER                         | VALUE       | NOTE                                                                 |
|-----------------------------------|-------------|----------------------------------------------------------------------|
| Value of a statistical life       | \$2,895,021 | 2024 prices, OECD meta-analysis                                      |
| Value of a life year, IVSB set    | \$95,846    | 2025 prices, \$93,388 in 2024 prices; confirmed by IVSB, August 2026 |
| Value of a life year, default set | \$62,082    | For reference                                                        |
| Money conversion multiplier       | 1.00        | IVSB set only                                                        |

| PARAMETER                                | VALUE                 | NOTE                                                               |
|------------------------------------------|-----------------------|--------------------------------------------------------------------|
| Greenhouse gas value factor              | \$261.83              | Per tonne, 2025 prices, from the published \$255.12 in 2024 prices |
| Trajectory by emission year              | 236 / 239 / 244 / 248 | 2023, 2024, 2025, 2026 emissions, in 2023 prices                   |
| Consumer price index 2024                | 313.689               | US CPI-U annual average                                            |
| Consumer price index 2025                | 321.943               | US CPI-U annual average                                            |
| Inflation factor applied                 | 1.02631               | Single factor, 2024 to 2025 prices                                 |
| Substance-compartment pairs for toxicity | 172                   | See section C                                                      |
| Discount rate in IVSB methodologies      | 2%                    | Applied inside the published factors                               |

### C. Mapping toxicity

The IVSB prices individual pollutants one by one, in dollars per kilogram of each substance released to water, while the software reports toxicity as a single indicator in a common reference unit. Bridging the two uses the characterisation factors that already sit behind that indicator.

For each substance the published IVSB value is divided by its characterisation factor, which gives the value implied per unit of the common indicator. Doing this for every substance present in both datasets gives a distribution, and the median of that distribution becomes the country factor. Eighty-six substances matched in each of the two water compartments, giving 172 substance-compartment pairs, covering metals in their speciated forms, pesticides, industrial organics and pharmaceuticals.

Both compartments are pooled deliberately. Deriving the factor from freshwater releases alone and from seawater releases alone produces answers that differ by as much as a factor of five, so neither compartment on its own gives a stable result. Pooling narrows the country range from roughly three orders of magnitude to two.

| SENSITIVITY CHECK                       | RESULT        |
|-----------------------------------------|---------------|
| Substance-compartment pairs per country | 172           |
| Freshwater-only median                  | 0.152         |
| Seawater-only median                    | 0.031         |
| <b>Pooled median, adopted</b>           | <b>0.068</b>  |
| Disagreement between compartments       | 0.20× to 5.0× |
| Country range, pooled                   | 0.002 to 0.45 |
| Default factors for comparison          | 0.206 / 0.014 |

Values in USD per kg 1,4-DCB equivalent. The default figures are the cancer and non-cancer constants in the default set.

#### LIMITATIONS OF THIS FACTOR

This is the one factor in the set that is neither published by the IVSB nor retained from the default set, and it should be read with three qualifications. It is a Valuing Impact derivation that the IVSB has not endorsed. It rests on the IVSB water pollution methodology, which carries interim rather than final status. And the IVSB prices releases to water only, while the indicator the factor is applied to also aggregates releases to air and soil, so the factor is extrapolated beyond the scope the IVSB has actually valued.

The factor is labelled as derived wherever it appears, so any result that depends materially on toxicity can be identified and, if preferred, recalculated with the default constants instead. The construction will be replaced if the IVSB publishes a toxicity endpoint of its own.

#### D. A worked example

A site in India releasing 1,000 tonnes of CO<sub>2</sub>e, consuming 5,000 cubic metres of water, occupying two hectares of land for a year and emitting 50 kilograms of fine particulate matter, valued under both sets.

| FLOW                        | QUANTITY                  | DEFAULT SET        | IVSB SET           |
|-----------------------------|---------------------------|--------------------|--------------------|
| Greenhouse gases            | 1,000 t CO <sub>2</sub> e | (164,600)          | (261,833)          |
| Water consumption           | 5,000 m <sup>3</sup>      | (421)              | (88,742)           |
| Land occupation             | 20,000 m <sup>2</sup> · a | (1,916)            | (9,467)            |
| Particulate matter          | 50 kg PM2.5-eq            | (10,229)           | (4,514)            |
| <b>Total societal value</b> |                           | <b>Σ (177,166)</b> | <b>Σ (364,555)</b> |

Values in USD 2025, in parentheses because they represent value destroyed. The IVSB set gives a result about 2.1 times larger here. Water dominates the difference because India is water-scarce and the IVSB prices the cost of securing future supply.

#### E. Sources

- IVSB topic methodologies for greenhouse gases, water consumption and occupational health and safety, all final, together with the waste exposure draft. OECD (2025), Mortality Risk Valuation in Policy Assessment, for the value of a statistical life.
- IVSB Global Value Factors Database version 4, published 18 June 2026 in 2024 prices, covering greenhouse gases, water consumption, air pollution, water pollution, land use, waste and occupational health and safety at country level. Published methodologies and the database are available from the Impact Value Standards Board at [capitalcoalition.org/impact-value-standards-board-ivsb](https://capitalcoalition.org/impact-value-standards-board-ivsb).
- ReCiPe 2016 characterisation factors version 1.1, used for the toxicity mapping.
- US Bureau of Labor Statistics consumer price index, for the price year adjustment.
- The default factor set is the eQALY value factor set published by Valuing Impact in 2026, which remains the software's default selection.