

# Counting who gets left behind:

## The consequences of countries' current trajectories on the Sustainable Development Goals

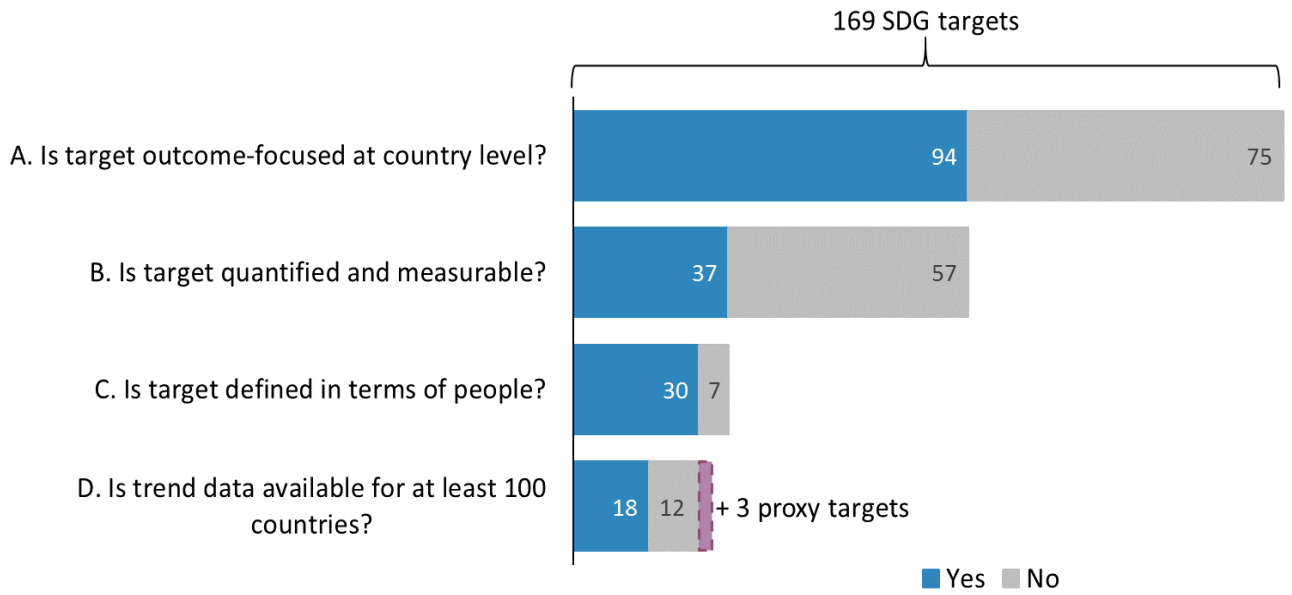
Homi Kharas, John W. McArthur, Krista Rasmussen  
Forthcoming

*Preliminary summary of results*

*DRAFT AS OF 13 JULY 2018*  
*ALL RESULTS POTENTIALLY SUBJECT TO REVISION*

# I. Methods

# Fig 1. We examine 21 people-focused SDG targets



# Fig 2. We segment the 21 targets by type

## Life and death

## Basic needs

### Absolute outcomes

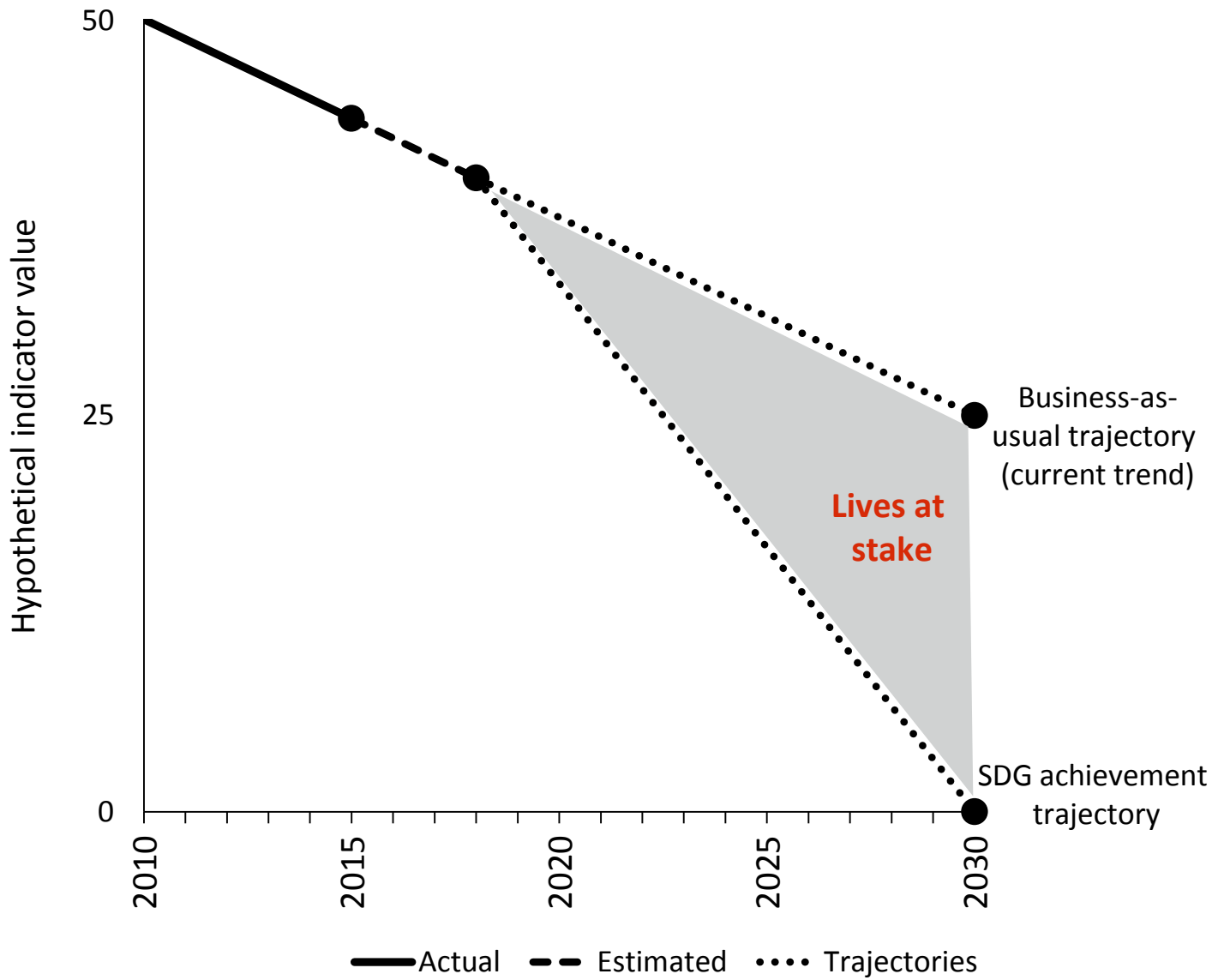
|   |   |
|---|---|
| <p>(3.1) Maternal mortality down to 70 per 100,000 live births;</p> <p>(3.2) Under-5 child mortality to no more than 25 per 1,000 live births</p> | <p>(1.1) End extreme poverty</p> <p>(2.1) End undernourishment;</p> <p>(2.2) End stunting;<br/>End wasting;<br/>End child obesity</p> <p>(3.7) Universal access to family planning</p> <p>(4.1) Universal primary school completion</p> <p>(4.2) Universal pre-primary enrollment</p> <p>(4.5) Gender parity in primary and secondary enrollment</p> <p>(5.1) Gender parity in income</p> <p>(5.2) End violence against women</p> <p>(5.5) Gender equality in government (proxy)</p> <p>(6.1) Universal access to water</p> <p>(6.2) Universal access to sanitation</p> <p>(7.1) Universal access to electricity</p> <p>(16.9) Birth registration for all</p> |
|---|---|

### Relative outcomes

|   |   |
|---|---|
| <p>(3.4) Reduce non-communicable disease (NCD) mortality by one-third;<br/>Reduce suicide deaths by one-third</p> <p>(3.6) Reduce traffic deaths by half</p> <p>(16.1) Reduce homicides by half (proxy)</p> | <p>(3.3) Reduce new HIV infections by 90%;<br/>Reduce tuberculosis incidence 80%;<br/>Reduce malaria incidence by 90%;<br/>Reduce neglected tropical disease; prevalence by 90%; (WHO targets)<br/>Reduce Hep B incidence 50% (proxy)</p> <p>(11.6) Reduce people living with air pollution by half (proxy)</p> |
|---|---|

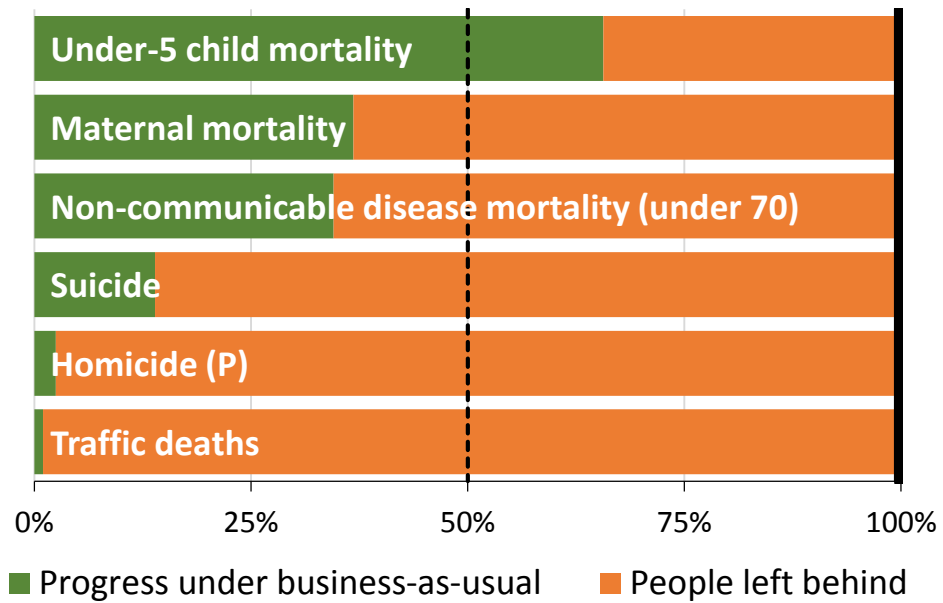
Note: Targets 2.2, 3.3, and 3.4, use multiple indicators. We establish proxy outcomes to quantify targets 5.5, 11.6, 16.1, and for one indicator under 3.3 (Hepatitis B).

# Fig 3. Calculating lives (and needs) at stake



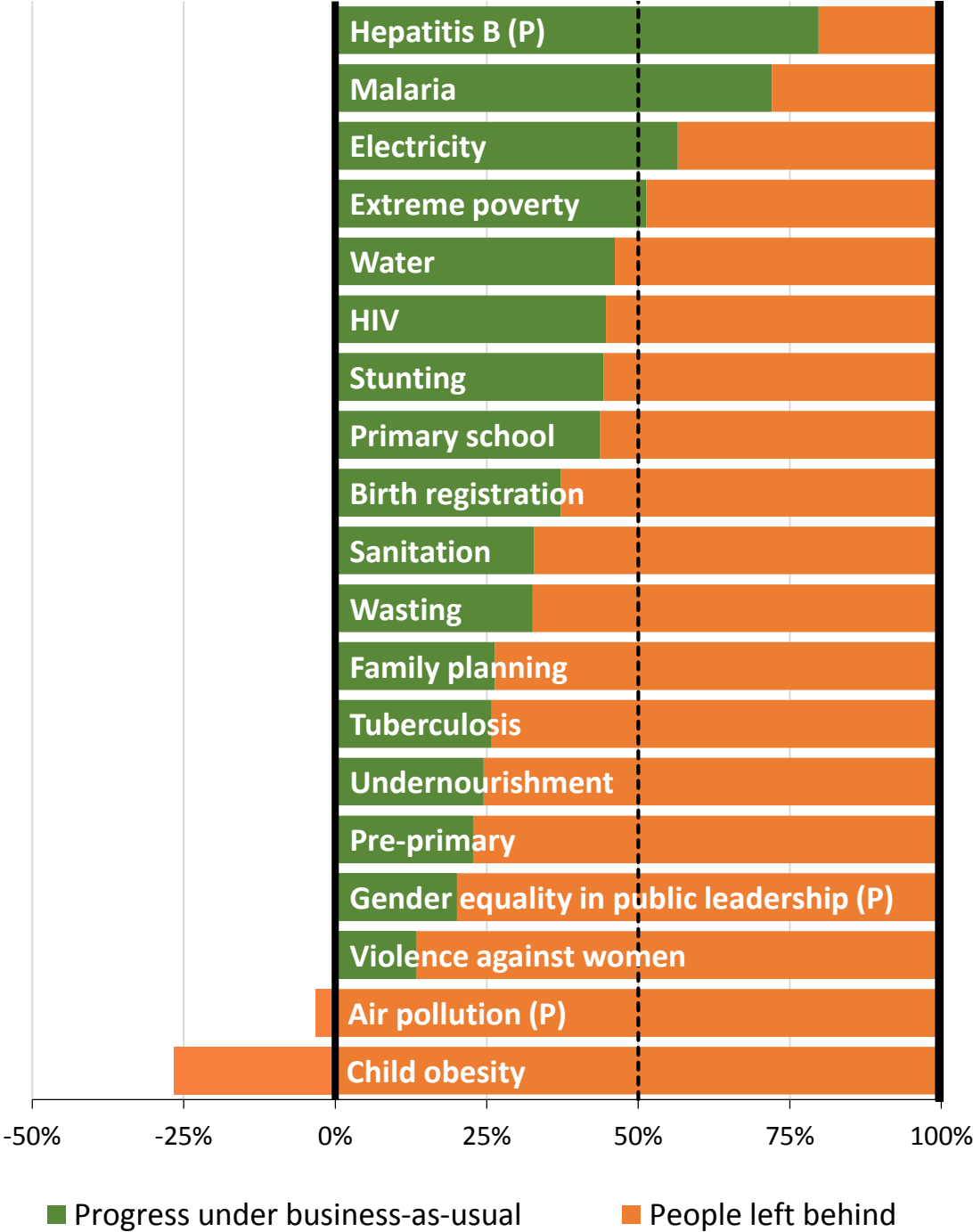
## II. Which issues face the biggest challenges?

# Fig 4. World performance on life-and-death SDG targets by 2030 under business-as-usual



Note: (P) = Proxy target

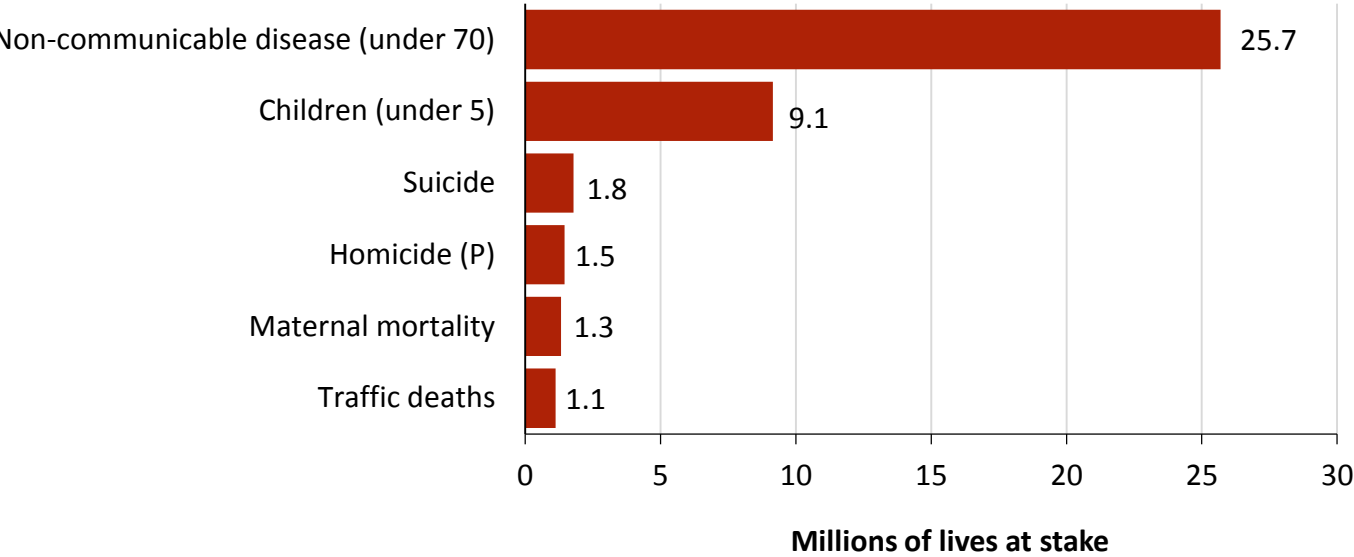
# Fig 5. World performance on basic needs SDG targets by 2030 under business-as-usual



Note: (P) = Proxy target

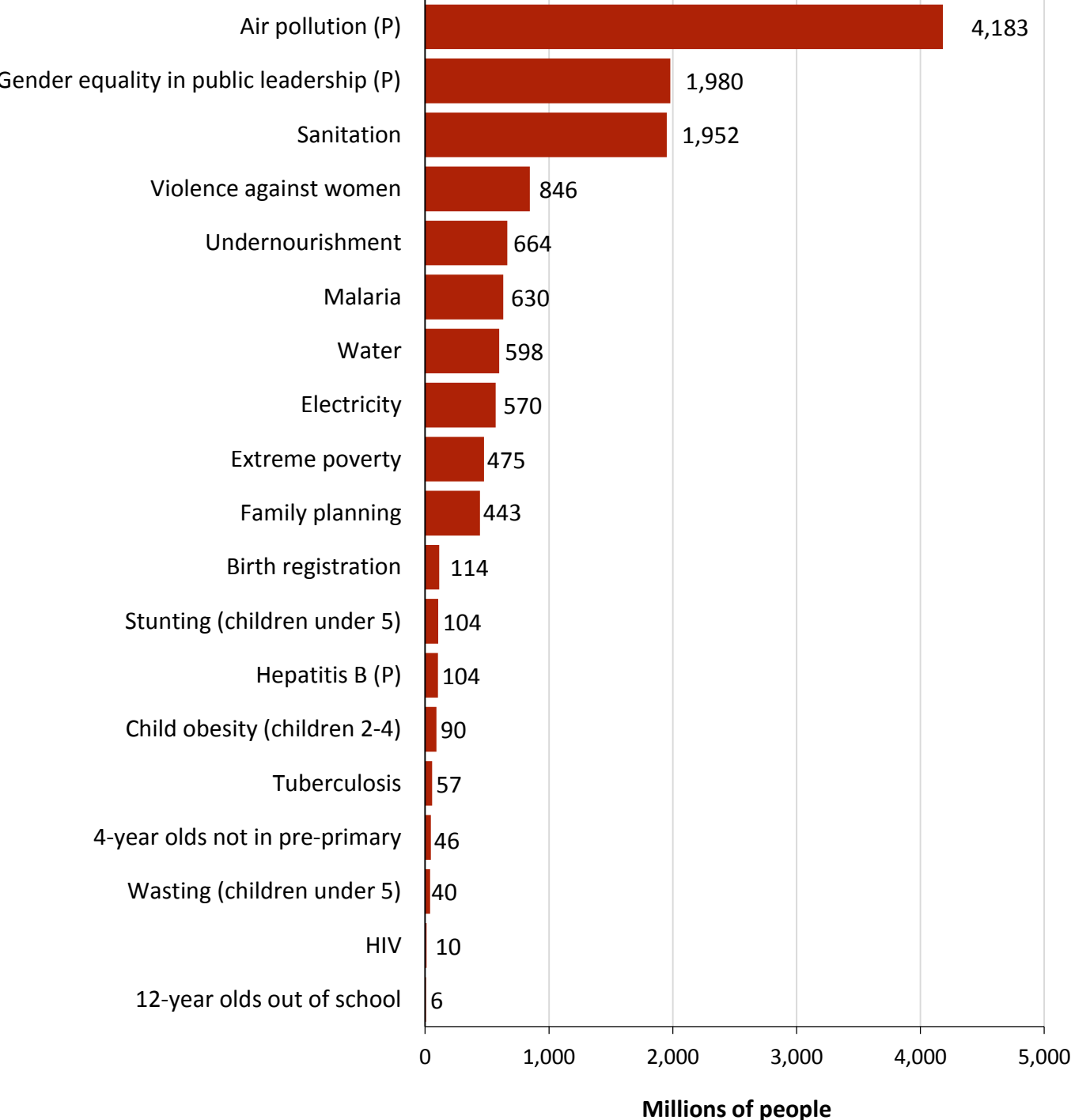


# Fig 6. Life-and-death targets: forty million lives at stake, cumulative 2018-2030



Note: (P) = Proxy target

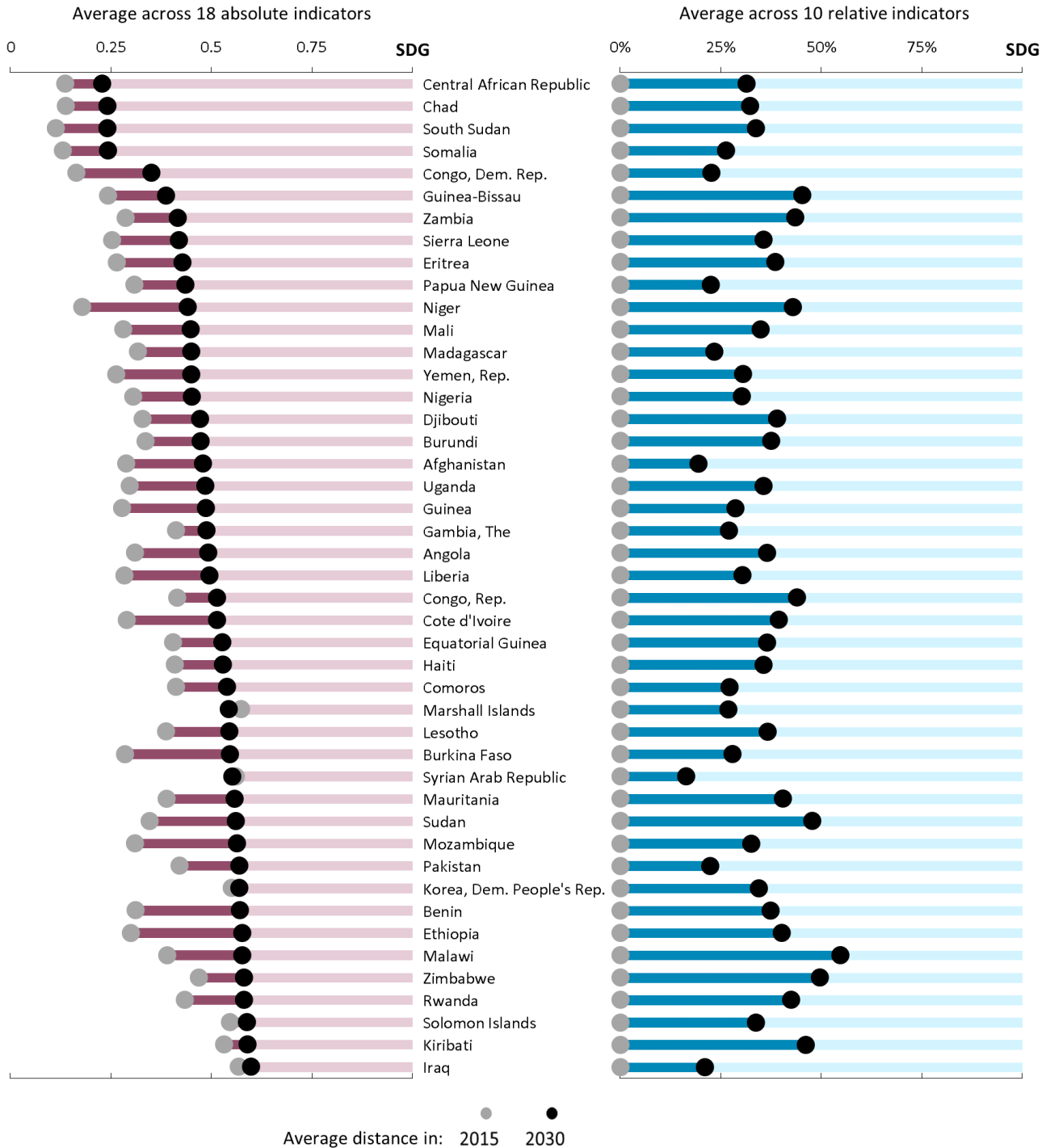
# Fig 7. Basic needs targets: millions of people's basic needs at stake by 2030



Note: (P) = Proxy target

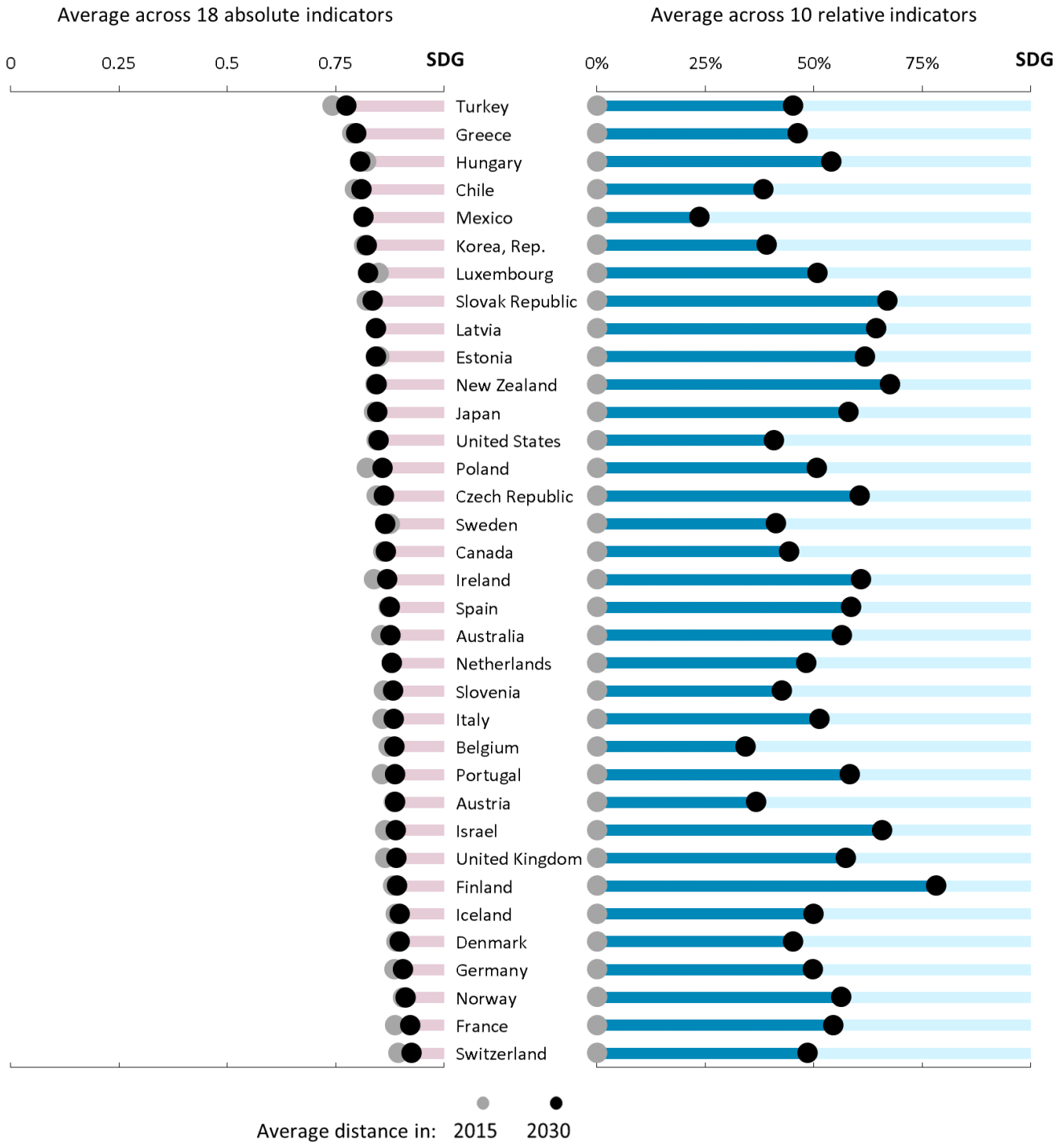
## II. Results part 2: Which countries face the biggest challenges?

# Fig 8. The most off-track countries' progress by 2030 under business-as-usual



Note: For absolute targets, “distance to the frontier” ranges from index of 0 (worst score in 2015) to 100 (SDG target). For relative targets, share of distance traveled is from each country’s 2015 starting value.

# Fig 9. OECD countries' progress by 2030 under business-as-usual



Note: For absolute targets, “distance to the frontier” ranges from index of 0 (worst score in 2015) to 100 (SDG target). For relative targets, share of distance traveled is from each country’s 2015 starting value.

# Fig 10. Share of lives (and needs) at stake on each absolute indicator, by country

|                  | Extreme poverty | Undernourishment | Child obesity | Stunting | Wasting | Maternal mortality | Child mortality | Family planning | Primary school | Pre-primary | Violence against women | Gender equal. In leadership (P) | Water | Sanitation | Electricity | Birth registration |
|------------------|-----------------|------------------|---------------|----------|---------|--------------------|-----------------|-----------------|----------------|-------------|------------------------|---------------------------------|-------|------------|-------------|--------------------|
| Nigeria          | 25%             | 5%               | 5%            | -        | 10%     | 34%                | 30%             | 8%              |                |             | 3%                     | 6%                              | 6%    | 10%        | 7%          | 25%                |
| India            | -               | 26%              | 15%           | 33%      | 21%     | 3%                 | -               | 20%             | -              | 41%         | 23%                    | 25%                             | 14%   | 26%        | -           | -                  |
| Congo, Dem. Rep. | 15%             |                  | 2%            | 5%       | 3%      | 11%                | 12%             | 3%              | -              | 7%          | 2%                     | 3%                              | 10%   | 5%         | 15%         | 15%                |
| Pakistan         | -               | 6%               | <1%           | 6%       | 8%      | 1%                 | 14%             | 5%              | 10%            | 2%          | 4%                     | 4%                              | 5%    | 2%         | -           | 10%                |
| China            | -               | 6%               | 12%           | 5%       | 3%      | -                  | -               | 3%              | -              | -           | 12%                    | 15%                             | -     | 8%         | -           |                    |
| Ethiopia         | -               | 4%               | 2%            | 6%       | 4%      | <1%                | <1%             | <1%             | 15%            | 2%          | 3%                     | -                               | 9%    | 6%         | 4%          | 15%                |
| Uganda           | 2%              | 6%               | 1%            | 2%       | <1%     | 2%                 | -               | 1%              | 13%            | 4%          | <1%                    | <1%                             | 6%    | 3%         | 5%          |                    |
| Indonesia        | -               | -                | 4%            | 3%       | 6%      | -                  | -               | 3%              | -              | <1%         | 3%                     | 3%                              | -     | 2%         | -           | -                  |
| United States    | -               | -                | 4%            | <1%      | <1%     | -                  | -               | 3%              |                | 3%          | 2%                     | 4%                              | <1%   | <1%        | -           | -                  |
| Bangladesh       | -               | 3%               | <1%           | 2%       | 3%      | -                  | -               | 2%              | -              | 2%          | 3%                     | 2%                              | <1%   | 3%         | -           | 7%                 |
| Mozambique       | 3%              | 1%               | 1%            | <1%      | <1%     | 2%                 | <1%             | 1%              | 6%             |             | <1%                    | <1%                             | 2%    | 1%         | 4%          |                    |
| Sudan            | 2%              |                  | <1%           | 2%       | 2%      | 1%                 | 3%              | 2%              | 9%             | <1%         | <1%                    | <1%                             | 2%    | 1%         | 5%          | -                  |
| Brazil           | -               | -                | 4%            | <1%      | <1%     | -                  | -               | 1%              |                | -           | 2%                     | 4%                              | -     | <1%        | -           | -                  |
| Chad             | 2%              | <1%              | <1%           | <1%      | <1%     | 2%                 | 4%              | <1%             | 4%             |             | <1%                    | <1%                             | 2%    | <1%        | 3%          | 3%                 |
| Cote d'Ivoire    | <1%             | <1%              | <1%           | <1%      | <1%     | 3%                 | 3%              | 1%              | 1%             | 2%          | <1%                    | <1%                             | 1%    | 1%         | 1%          | <1%                |
| Madagascar       | 5%              | 4%               | <1%           | 2%       | 3%      | <1%                | -               | 1%              | 2%             | 1%          | <1%                    | <1%                             | 2%    | 2%         | 4%          | <1%                |
| Malawi           | 2%              | 2%               | <1%           | <1%      | <1%     | 3%                 | -               | -               | -              |             | <1%                    | <1%                             | <1%   | <1%        | 4%          | -                  |
| Mexico           | -               | <1%              | 2%            | <1%      | <1%     | -                  | -               | 2%              | -              | 3%          | 1%                     | -                               | -     | -          | -           | <1%                |
| Niger            | 2%              | <1%              | <1%           | 2%       | 3%      | 2%                 | 3%              | <1%             | -              | 2%          | <1%                    | <1%                             | 3%    | 1%         | 5%          | -                  |
| Somalia          | 2%              |                  | <1%           | <1%      | 2%      | 2%                 | 4%              | <1%             |                |             | <1%                    | <1%                             | 1%    | 1%         | 2%          |                    |
| South Sudan      | 4%              |                  | <1%           | <1%      | <1%     | 2%                 | 1%              | <1%             |                |             | <1%                    | <1%                             |       |            | 2%          |                    |
| Tanzania         | 2%              | 3%               | 1%            | 2%       | 1%      | 2%                 | 2%              | 1%              | -              | 3%          | 1%                     | <1%                             | 4%    | 3%         | 4%          | 6%                 |
| Other countries  | 36%             | 33%              | 42%           | 26%      | 25%     | 27%                | 22%             | 40%             | 40%            | 26%         | 35%                    | 32%                             | 32%   | 24%        | 35%         | 19%                |

Legend:  Top 5 country for relevant indicator  
 Country is not in Top 5  
 Country is on track for SDG  
 No data  
(P) Proxy target

Note: Percentages indicate country's share of the global lives or needs at stake for each indicator; countries are included in the figure if they are in the Top 5 most lives at stake for at least one indicator.

# Fig 11. Share of lives (and needs) at stake on each relative indicator, by country

|                  | HIV | Hepatitis B (P) | Malaria | Tuberculosis | Non-communicable disease | Suicide | Traffic deaths | Air pollution (P) | Homicide (P) |
|------------------|-----|-----------------|---------|--------------|--------------------------|---------|----------------|-------------------|--------------|
| India            | 8%  | 1%              | -       | 22%          | 21%                      | 11%     | 24%            | 18%               | 7%           |
| China            | 2%  | 12%             | -       | 6%           | 13%                      | 23%     | 17%            | 17%               | -            |
| Nigeria          | 6%  | 8%              | 46%     | 6%           | 5%                       | 4%      | 2%             | 3%                | 2%           |
| Indonesia        | 1%  | 3%              | -       | 11%          | 7%                       | <1%     | 2%             | 4%                | <1%          |
| Pakistan         | 1%  | 6%              | -       | 6%           | 4%                       | <1%     | 2%             | 3%                | 9%           |
| United States    | 3%  | 2%              | -       | <1%          | 7%                       | 13%     | 2%             | 4%                | <1%          |
| Brazil           | 3%  | 2%              | -       | <1%          | <1%                      | 3%      | 4%             | 3%                | 23%          |
| Kenya            | 7%  | 2%              | 8%      | <1%          | <1%                      | <1%     | 1%             | <1%               | 2%           |
| Philippines      | 4%  | 3%              | -       | 8%           | 3%                       | <1%     | 3%             | 1%                | 6%           |
| Bangladesh       | -   | 6%              | -       | 4%           | 2%                       | <1%     | 1%             | 2%                | 1%           |
| Congo, Dem. Rep. | 3%  | 5%              | -       | 4%           | 2%                       | 2%      | 2%             | 1%                | 3%           |
| Ethiopia         | 5%  | 3%              | -       | <1%          | 1%                       | 2%      | 3%             | 2%                | <1%          |
| Mali             | <1% | <1%             | 7%      | <1%          | <1%                      | <1%     | <1%            | <1%               | <1%          |
| Mexico           | 2%  | <1%             | -       | <1%          | 1%                       | 3%      | <1%            | 2%                | 17%          |
| Niger            | <1% | 2%              | 6%      | <1%          | <1%                      | <1%     | <1%            | <1%               |              |
| Rwanda           | -   | <1%             | 6%      | <1%          | <1%                      | <1%     | <1%            | <1%               | <1%          |
| South Africa     | 6%  | <1%             | <1%     | 3%           | <1%                      | 1%      | <1%            | <1%               | 1%           |
| Sri Lanka        | <1% | <1%             | -       | <1%          | <1%                      | 3%      | <1%            | <1%               | -            |
| Ukraine          | 5%  | <1%             | -       | <1%          | <1%                      | <1%     | <1%            | <1%               |              |
| Venezuela, RB    | <1% | <1%             | -       | <1%          | <1%                      | -       | 1%             | <1%               | 9%           |
| Other countries  | 42% | 42%             | 26%     | 25%          | 30%                      | 35%     | 32%            | 36%               | 19%          |

Legend:

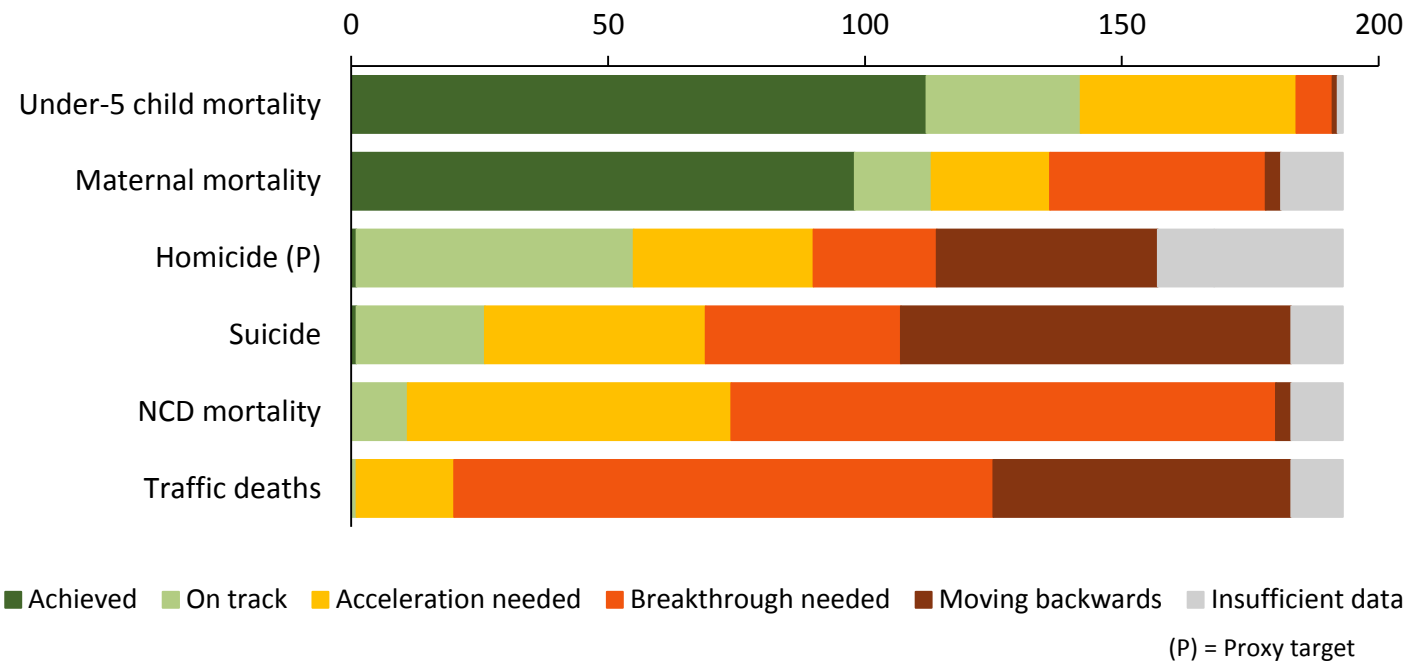
- Top 5 country fo relevant indicator
- Country is not in Top 5
- Country is on track for SDG
- No data
- (P) Proxy target

Note: Percentages indicate country's share of the global lives or needs at stake for each indicator; countries are included in the figure if they are in the Top 5 most lives at stake for at least one indicator.

# Appendixes

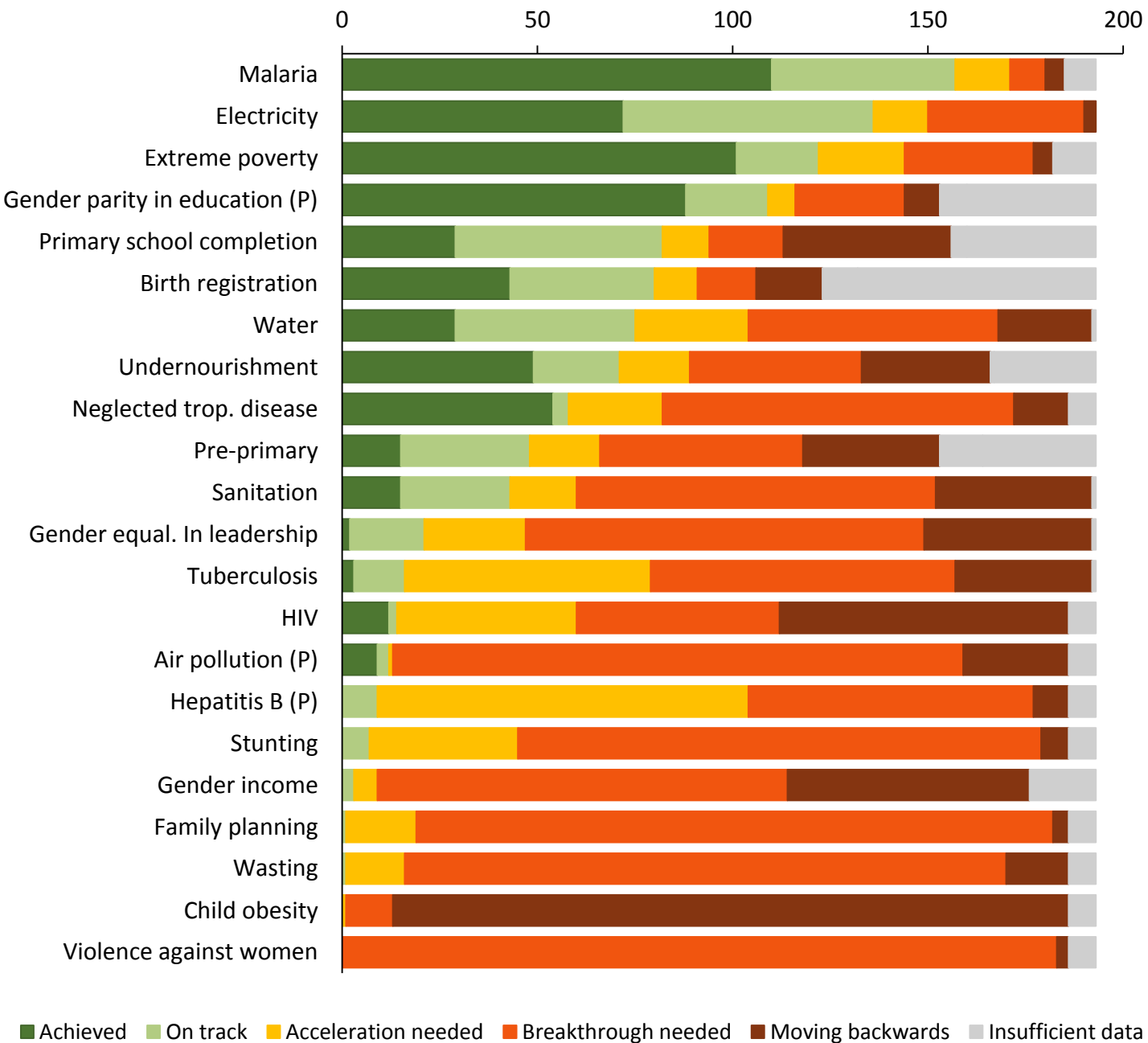


# Appendix 1. Number of countries on track for life-and-death targets



Note: "Acceleration needed" = on course to cover from 50 to 99 percent of 2015 distance to target. "Breakthrough needed" = on course to cover between 0 to 49 percent of 2015 distance to target

# Appendix 2. Number of countries on track for basic needs targets



Note: "Acceleration needed" = on course to cover from 50 to 99 percent of 2015 distance to target. "Breakthrough needed" = on course to cover between 0 to 49 percent of 2015 distance to target

# Appendix 3. Notes for figures

- Fig 2. Notes: for three indicators, we calculate countries' business-as-usual trajectories but do not calculate lives affected: 3.3 neglected tropical disease; 4.5 gender parity in primary and secondary enrollment; and 5.1 gender parity in income.
- Fig 4. Notes: homicide assumes proxy target of 50% reduction; traffic deaths are cumulative from 2015-2020; maternal mortality applies global target of 70 to each country
- Fig 5. Notes: air pollution and Hepatitis B assume proxy target of 50% reduction; malaria, neglected tropical disease, tuberculosis, and HIV apply WHO global target to each country; Hepatitis B, malaria, HIV, and Tuberculosis are cumulative from 2015-2030; gender equality in public leadership assumes proxy target of parity and applies the parity gap in national public officials to the female population.
- Fig 6. Notes: traffic deaths are cumulative for 2018-2020, the target end year; homicides assumes proxy target of 50% reduction; maternal mortality applies global target of 70 to each country
- Fig 7. Notes: air pollution and Hepatitis B assume proxy target of 50% reduction; malaria, neglected tropical disease, tuberculosis, and HIV apply WHO global target to each country; Hepatitis B, malaria, HIV, and Tuberculosis are cumulative from 2018-2030; gender equality in public leadership assumes proxy target of parity and applies the parity gap in national public officials to the female population.
- Fig 8. Notes: the 45 countries listed are on average at least 0.4 from the absolute targets in 2030 on business-as-usual. Data for other countries available upon request.
- Fig 9. Notes: the 35 countries listed are OECD members as of June 2018.
- Fig 10. Notes: maternal mortality applies global target of 70 to each country; maternal mortality and child mortality are cumulative deaths from 2018-2030; gender equality in public leadership assumes proxy target of parity and applies the parity gap in national public officials to the female population.
- Fig 11. Notes: malaria, Tuberculosis, and HIV apply WHO global target to each country; air pollution and Hepatitis B assume proxy target of 50% reduction; Hepatitis B, malaria, HIV, NCD mortality, Tuberculosis, suicide, and homicide are cumulative from 2018-2030; traffic deaths are cumulative from 2018-2020.

## Appendix 3. notes for figures (cont.)

- Appendix 1. Notes: homicide assumes proxy target of 50% reduction maternal mortality applies global target of 70 to each country
- Appendix 2. Notes: air pollution and Hepatitis B assume proxy target of 50% reduction; gender equality in public leadership assumes proxy target of parity; malaria, neglected tropical disease, Tuberculosis, and HIV apply WHO global target to each country

# Key references

## **Extreme poverty 2030 trajectory:**

World Data Lab. 2018. “The World Poverty Clock” <http://worldpoverty.io/> (accessed: May 30, 2018).

## **Lives at stake methodology:**

McArthur, John W., Krista Rasmussen, and Gavin Yamey. 2018. “How many lives at stake? Assessing 2030 Sustainable Development Goal trajectories for maternal and child health.” *The BMJ* 360: k373.

McArthur, John W. and Krista Rasmussen. 2018. “Change of pace: Advances and accelerations during the Millennium Development Goal era.” *World Development*. Vol 105 (May): 132-143.

## **Target classification and trajectory analysis methodology:**

McArthur, John W. and Krista Rasmussen. 2017. “Who and what gets left behind? Assessing Canada’s domestic status on the Sustainable Development Goals.” *Global Economy and Development Working Paper* 108. October. Washington, DC: Brookings Institution.