



# RESOLVE

**Climate Smart Mine Emissions Widget**  
Report

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## Climate Smart Mine Emissions Widget

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### Report

### Introduction

The Climate Smart Mine Emissions Widget (the Widget) is a tool to assess current emissions standards and support the organizations developing standards such as companies, associations, standards bodies, or investors. It targets standards because improved standards will result in better outcomes. The Widget is an adaptable tool that can be used upstream by mining companies, downstream by retailers and original equipment manufacturers (OEMs), and by investors to evaluate responsible mining and investing standards against a set of norms.

*The term Widget here refers to a mechanism that enables a user to perform a function or access a service. In this case the function is improving current responsible mining and investing standards.*

Focused on greenhouse gas (GHG) emissions reporting and target setting for the mining industry, the Widget outlines the norms that we expect will support progress towards a lower carbon mining sector.

This report provides details about 1) the context for, research behind, and design of the Widget; 2) the research and analysis conducted to support development of the Widget; 3) an assessment of trends in emissions reporting and target setting during the course of our work on the Widget; 4) the “Base Widget;” and 5) two case studies demonstrating the process for and benefits of using the Widget.

### Context: Why the Widget, Why Now?

The Climate Smart Mine Emissions Widget is an open-source tool developed by RESOLVE as a resource for companies, associations, investors and stakeholders. There are four primary drivers that make the Widget timely:

**Need for Rapid Global De-carbonization for Critical Energy Transition Minerals:** Climate scientists are clear that the world needs rapid greenhouse gas (GHG) emissions reductions to avoid the worst effects of climate change. Achieving these reductions will require rapid de-carbonization of the energy and mobility sectors in particular, and with it, significant production of minerals intensive technologies such as photovoltaic systems, wind turbines, and energy storage. While the scaling of these technologies can contribute to global emissions reductions, it is also necessary to consider the carbon footprint associated with their development and seek opportunities to minimize it.<sup>1</sup>

**Adoption of Responsible Sourcing and Investing—and Efforts to Support Alignment and Interoperability:** Companies like Apple, Tiffany & Co., BMW, and Tesla, among others, are calling for responsible minerals to use in their products. To meet this demand, voluntary responsible mining initiatives, standards, and investor screens have proliferated over the last decade and address a range of issues including the environment and human rights. This has led to efforts to align these standards to promote efficiency and interoperability. Two years ago, RESOLVE observed that on the critical issues of GHG emissions reporting and emissions reduction target setting, there was wide variability in these standards, both what was being requested and how companies were reporting. These differences impact the ability for downstream companies, investors, trade associations, and civil society stakeholders to meaningfully assess environmental performance.

**Sustainability Leadership on Greenhouse Gas (GHG) Emissions Management:** Companies and associations in the sector are seeking to establish a leadership position. Demonstrating gas emissions standards leadership confers reputational benefits to pioneering companies. The Widget can be used to benchmark performance against peers.

**Investor Interest in Defining Climate Reporting for Environmental, Social, and Governance (ESG) Investing in the Mining Sector:** In discussions with mining executives we found uncertainty in how environmental, social, and governance (ESG) investing standards would be applied to mining sites and companies, including for climate reporting and target setting. There is value in helping the market send clear signals to mining companies on climate issues. As an enhancing tool that identifies ambitious and achievable norms for the greenhouse gas emissions subsection of ESG standards, the Widget can be used to clarify relevant, leading ESG practices.

The Climate Smart Mine Emissions Widget is designed to respond to these drivers. The Widget supports miners, downstream companies, and investors by supporting alignment and consistency across mining related standards and initiatives on climate reporting and in doing so, moves the needle forward, to help the sector and its stakeholders achieve GHG reduction goals.

## Methodology

Development of the Widget involved four phases: 1) research to assess what voluntary initiatives and standards are requesting for GHG emissions reporting and target setting and what companies are reporting; 2) development of a base Widget that identifies the core climate reporting and target setting benchmarks we believe will be the norm in 3-5 years; 3) tailoring the base Widget to specific use cases, targeted to those users who have expressed interest; and 4) use or uptake of the tailored Widget by voluntary initiatives and standards or investor screens; and use by companies to benchmark or update reporting to align with

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<sup>1</sup> Kirsten Hund et al., “Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition” (Climate-Smart Mining Facility, World Bank Group, 2020), <https://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climates-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf>.

leading norms. Development of the Widget was supported by an Advisory Council comprised of experts from RESOLVE's Leadership Council and other climate and mining experts.

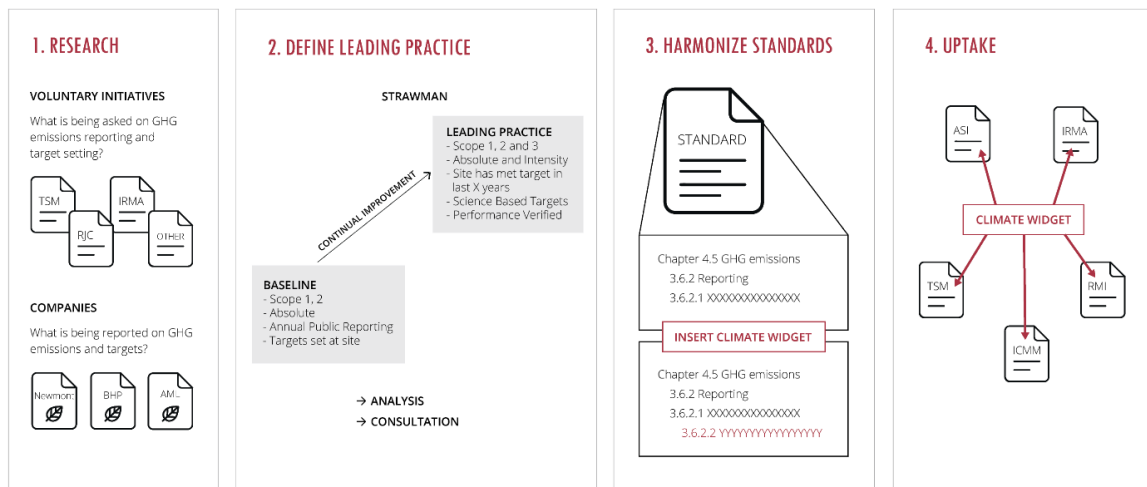


Figure 1: Process to Develop the Widget. Credit: Tunan Pan.

## Research

Desk research was conducted on the state of GHG emissions reporting and target setting requirements across voluntary standards, as well as how upstream companies were reporting their emissions and targets. Our analysis provided a picture of the GHG emissions reporting and target setting landscape across numerous standards and a 47-company peer group and informed our development of the Widget. Analysis was conducted along 21 key factors developed based on the guidance of our Advisory Council. This research began in 2018 and was updated in 2021.

### Standards Organizations and Voluntary Initiatives

With input from GIZ, RESOLVE identified and researched thirteen voluntary initiatives and standards bodies, listed below:

- Aluminum Stewardship Initiative (ASI)
- Carbon Disclosure Project (CDP)
- Down Jones Sustainability Index (DJSI)
- Drive Sustainability
- Global Reporting Initiative (GRI)
- International Council on Mining and Metals (ICMM)
- International Finance Corporation
- International Tin Association
- Responsible Business Alliance (RBA)
- Responsible Jewellery Council (RJC)
- Responsible Steel
- The Initiative for Responsible Mining Assurance (IRMA)
- Towards Sustainable Mining (TSM)

For each of the voluntary standards, factors related to emissions reporting were the focus of our analysis. This included: emission type; methodology specified (if any); timeframe for

reporting; assurance or verification requirements; absolute emissions and/or emissions intensity reporting; and scope 1, 2, or 3 reporting requirements. Additionally, we assessed whether the initiative or standard included requirements related to setting emissions targets.

## Company Peer Group Assessment

We also assessed how a peer group of 47 companies (listed below) were reporting on similar factors related to GHG emissions reporting and performance targets at the time of our initial research (2018). We updated our assessment three years later based on newer report releases (2021). In addition, we assessed whether companies were members of ICMM, followed TCFD, and the disclosure platform used. We compared practices across three main groups: ICMM-member companies (27 total, marked with a \* in the list below), top ten mining companies (10 total, marked with a ^ below), mid-tier mining companies (10 total), and oil & gas companies (6 total, marked with a ° below). The top 10 and mid-tier mining companies were selected based on their share of market capital. Seven of the top ten mining companies assessed are also included in the ICMM-member companies assessed. None of the mid-tier companies were ICMM members.

To conduct this assessment, individual company sustainability reports served as the primary source of information for this research. The most up-to-date reports from 2018 and later 2021 supplied the data referenced in the analysis. While most of the companies had updated reports released for FY2020 or FY2021, some of the companies had not released an update since the initial round of investigation. Those without updated sustainability reports were noted as unchanged with respect to key factor analysis between the years covered, defaulting to the most recent report. Companies included:

- African Rainbow Minerals\*
- Anglo American\*^
- Anglo Gold Ashanti\*
- Antofagasta Minerals\*
- Arcelor Mittal
- Barrick\*^
- BHP\*^
- Chevron°
- China Shenhua^
- China Molybdenum
- China Northern Rare Earth
- Coal India^
- Codelco\*
- ExxonMobil°
- First Quantum Minerals
- Freeport McMoRan\*
- Fresnillo^
- Glencore\*^
- Gold Fields\*
- Goldcorp\*
- Hydro\*
- Jiangxi Copper
- JX Nippon\*
- KGHM
- Lonmin\*
- Minera San Cristobal\*
- Minsur\*
- Mitsubishi Materials\*
- MMG\*
- Newcrest\*
- Newmont\*^
- Orano\*
- Polyus\*
- Randgold Resources
- Repsol°
- Rio Tinto\*^
- Shandong Gold
- Shell°
- Silver Wheaton
- South 32\*
- Sumitomo\*
- Teck\*
- Tianqi Lithium Industries
- Total°
- Tullow°
- Uralkali
- Vale\*^

Sustainability reports for each of the 47 companies in the peer group were analyzed along 21 key factors, or normative aspects of GHG emissions data reporting and target setting. These factors included benchmarks ultimately included in the Widget, such as whether companies were reporting on absolute emissions or emissions intensity; setting emissions targets and reporting on progress; reporting on and setting targets for scope 1, 2, and 3 emissions; and clearly defining the methodology used. Some of the factors included in the analytical research were ultimately not included as benchmarks in the Widget.

## Key Factor Selection

We selected the key factors for emissions reporting and target setting included in the analysis based on guidance from our Advisory Council, with some adaptation to include stratification of certain factors, or other areas of enhanced granularity. The 21 key factors (outlined below) were grouped into three main categories: Emissions Reporting, Target Setting, and Additional Information. For each of the 17 quantifiable factors this allowed us to assess whether a company in the peer group was Aligned (Y), Partially Aligned (P), or Not Aligned (N). 4 key factors were qualitative descriptors (marked with a <sup>Q</sup> below).

### ***Emissions Reporting***

- *Absolute Emissions* are the total cumulative greenhouse gas emissions not dependent on performance. They are included as a key factor in this analysis as a primary method for measuring GHG emissions.
- *Intensity (Reporting)* indicates whether or not the reporting includes GHG emissions intensity, which are the rate of greenhouse gas emissions calculated as a quantitative amount per ton of product. They are included as a key factor in this analysis as another primary method for measuring GHG emissions, as well as offering a more specific metric for individual sites, products, and/or materials.
- *Scope 1 & 2 emissions* are a company's direct emissions (Scope 1) and indirect emissions from generation of purchased energy (Scope 2). Both are the more commonly included categories of emissions when compared against Scope 3.
- *Scope 3 emissions* are the indirect emissions from all other steps in the value chain, upstream, and downstream. Included within Scope 3 emissions are emissions from net relevant land use activities. These emissions are typically more complex than Scope 1 & 2 to calculate given the complexity of value chains, and as such are typically a more ambitious goal with respect to GHG emissions reporting and/or target setting.

### ***Target Setting***

- *Targets (Y/N)* is an indicator of whether or not a company has set an emissions reduction target. While primarily a Y or N indicator response, it is possible to receive a (P) if the sustainability report notes pending status for target setting (or target setting updates). An example would be if a company's last released report was in FY2020, and within it they express plans to release a target in FY2021.
- *Target Defined* is defined by a qualitative descriptor. This key factor gives a text overview of the emissions reductions target, but because it is not a Y/P/N response, it cannot be included in the quantitative analysis in the following subsection.

- *Baseline Year* is defined by a qualitative descriptor, because the key factor is asking for a specific year to describe the time interval at which the target is to commence.
- *Goal Year* is defined by a qualitative descriptor, because the key factor is asking for a specific year to describe the time interval at which the target is to be achieved.
- *Units* is defined by a qualitative descriptor. It is simply identifying what types of units for measuring emissions are utilized in target setting.
- *Intensity (Targets)* is an indicator differentiating between whether or not a target has intensity emissions reported. P is a possible response if the sustainability report mentions plans for including intensity in an upcoming sustainability report.

### ***Additional Information***

- *Use of CO<sub>2</sub>-e Units* offers whether or not the reporting and targeting utilize CO<sub>2</sub> equivalents as units for emissions. This is a key factor that helps to determine the thoroughness of emissions data being made accessible by the company.
- *GRI Usage* is whether or not the company actively ascribes to the Global Reporting Initiative standards for its reporting.
- *ICMM Member* is whether or not the company is a member of the International Council on Mining and Metals.
- *CDP Usage* is whether or not the company ascribes to the CDP (formerly Climate Disclosure Protocol) for the construction of its sustainability report.
- *TCFD Usage* indicates whether or not the company is in line with the Task Force on Climate-related Finance.
- *Science-Based Targets* is if a company has incorporated the SBTi (Science-Based Targets initiative) into its reporting and target setting. While this is included within some of the standards organizations, receiving a Y in this category requires mention of SBTi or simply scientifically constructing targets with the report itself.
- *Emissions Reports* is a metric for whether the report has any substantive emissions data included at all. While this key factor is a fairly generic one, it helps to further stratify companies by providing numerous checkpoints for quality.
- *Baseline Reporting Year* is whether or not the baseline year for when data began being reported is present. This key factor helps to indicate the length of reporting.
- *Independent Assurance* is a factor for whether or not there are independent assurance statements within a company's report for external verification of the data present within the report. This key factor is a critical component of how reliable a company's reporting can be considered.
- *Annual Reporting* is whether or not a company offers emissions data on a year to year basis for consistent progress reporting in the area. This key factor helps mitigate organizations that would responsibly emit on reporting years, but become less stringent during non-reporting cycles. It is notable that this does not require an annual sustainability report, simply that the data for every year is included when a sustainability report is released.
- *Retroactive Reporting* indicates if a company has conducted disclosure of historically collected data alongside presently produced data as a means to compare with previous years data. This is based on whether past years are present or not in the data provided, and not on the length of reporting that has taken place.

## Analytical Results

The initial analysis, conducted in 2018, assessed each of the companies in the peer group against the different key factors outlined above to inform the development of the Widget. We revisited the data in 2021 to determine changes in the Aligned (Y), Partially Aligned (P), and Not Aligned (N) indicators from 2018 to 2021. This three-year trend analysis was designed to show the change across the entire peer group along the key factors over the three-year time period.

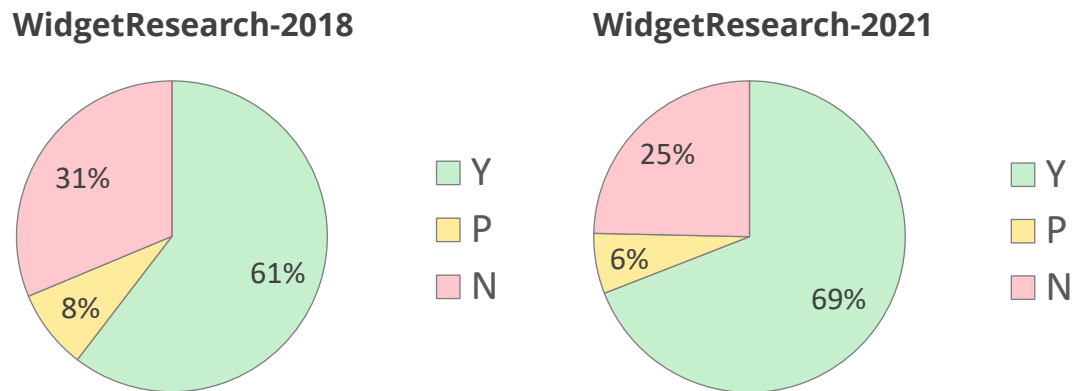


Figure 2: Peer Group Sustainability Reports Alignment with Key Factors, evolution from 2018 to 2021 by percentage.

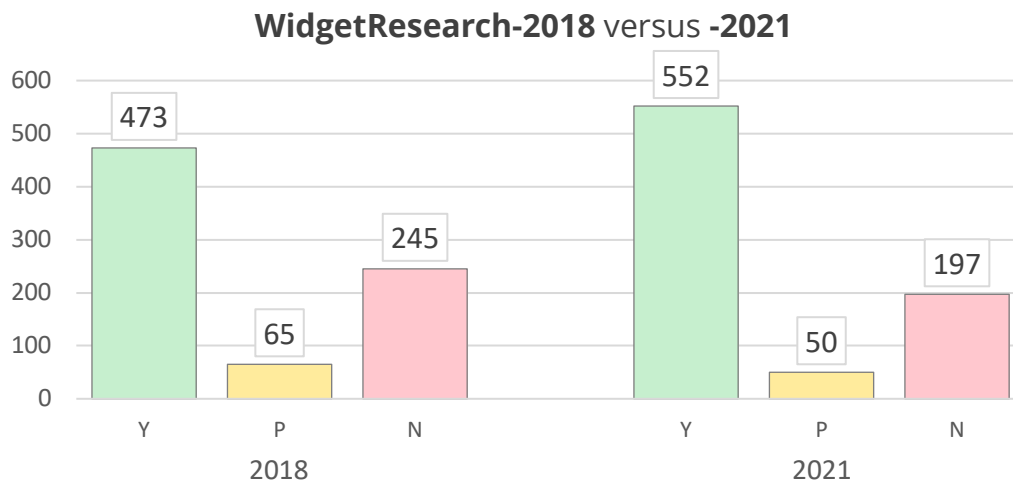


Figure 3: Peer Group Sustainability Reports Alignment with Key Factors, evolution from 2018 to 2021 by count.

The results show an overall improvement across the industry in emissions reporting and target setting from 2018 to 2021, with an increase from 473 to 552 (16.7% increase) for number of Y's, as well as a decrease from 65 to 50 P's (23.1% decrease) and 245 to 197 N's (19.6% decrease). This signifies greater alignment with the aspects of GHG emissions data and reporting and target setting investigated for this analysis, and highlights the existing areas where there can be improvement. The charts below show the percent change and



overall number of Y's in 2021 for each of the factors investigated for the cumulative peer group.

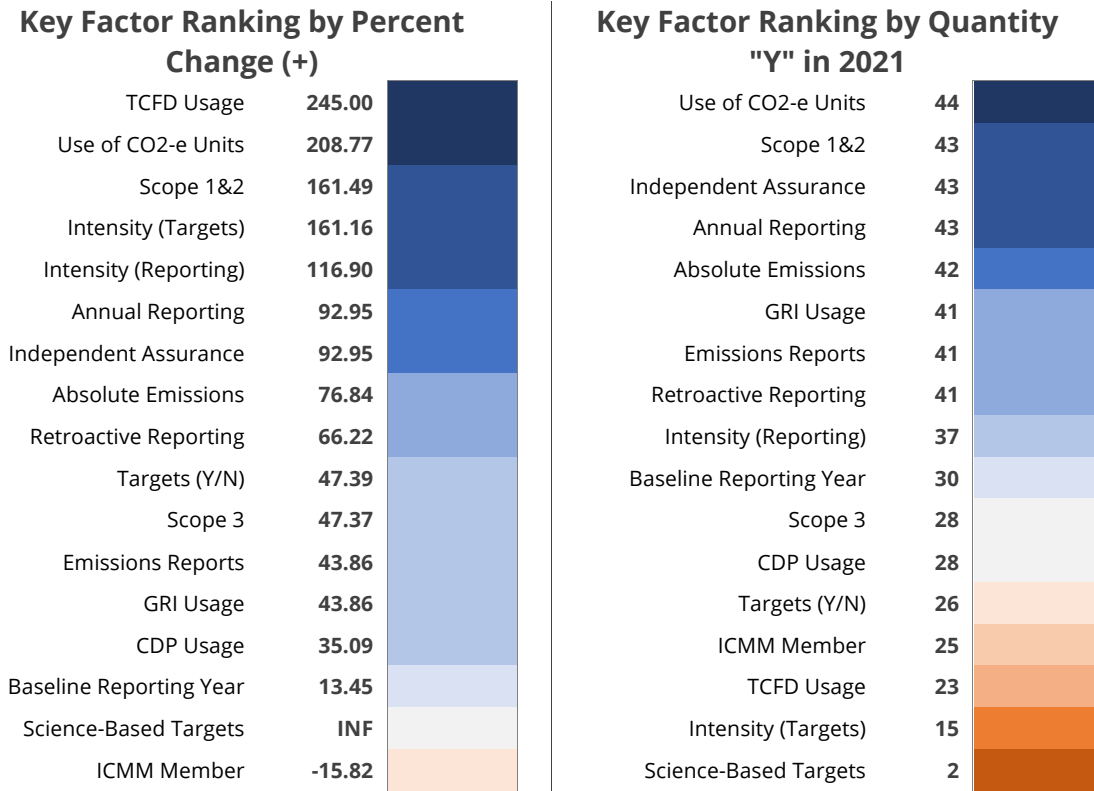


Figure 4: (Left) Key Factor Ranking by Percent Change (+) shows the percent increase or decrease for each of the 17 key factors in descending order; (Right) Key Factor Ranking by Quantity "Y" in 2021 shows the count of Y's amidst different factors.

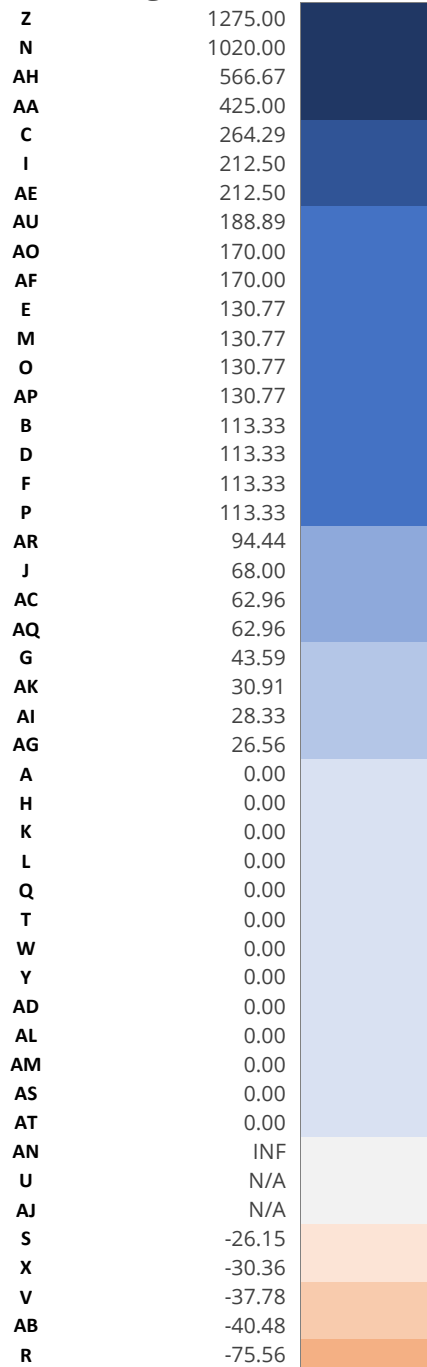
Of the 17 key factors, *TCFD Usage* saw the greatest percent change, where percent change equals:  $(\text{'Ratio of Y to P+N in 2021'} - \text{'Ratio of Y to P+N in 2018'}) / \text{'Ratio of Y to P+N in 2018'} * 100$

The function was structured using a ratio of Y to P+N counts in order to take into account partial alignment, although it could be an area of future development to analyze Y to P ratios and Y to N ratios separately. Both P's and N's are viewed as negative data points in the percent change calculation. The table on the left shows how 16 of the 17 key factors show a positive change (15 show a clear positive change, while *Science-Based Targets* shows an infinite percent change denoted INF due to increasing from 0 Y's to 2), meaning all of the key factors except ICMM membership have increased from 2018 to 2021. The table on the right shows nearly full adoption of *Use of CO<sub>2</sub> equivalents* (44 Y's) for measuring emissions, as well as consistent *Scope 1 & 2*, *Independent Assurance Standards*, and *Annual Reporting* (each with 43 Y's) with *Science-Based Targets* only having two Y's, 13 behind *Intensity (Targets)* at 15 Y's.

The following tables conduct a similar method for counting Y's, P's, and N's. However, instead of focusing on individual key factors, the data below shows the percent change and quantity of Y's in 2021 for each of the individual companies (codified) in the peer group. The companies with most advanced sustainability reports in terms of alignment with key factors

are on the right, while those whose reports saw the most improvement since 2018 are on the left:

### Company Ranking by Percent Change (+)



### Company Ranking by Quantity "Y" in 2021

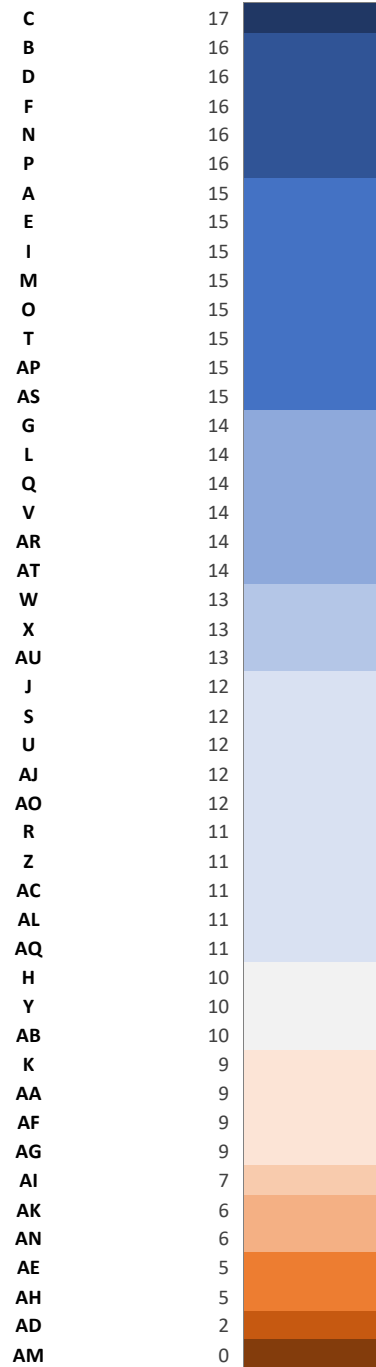


Figure 5: (Left) Company Ranking by Percent Change (+) shows the percent increase or decrease for each of the 47 companies in descending order; (Right) Company Ranking by Quantity "Y" in 2021 shows the count of Y's from the peer group. A company's ranking along either of the metrics is available on request from RESOLVE.

Overall, the results help to reveal what areas are changing with respect to specific aspects of standards defined by the key factors. Additionally, the current state-of-play as of 2021 is outlined by the quantity of Y's for each key factor.

Based on our analysis, some factors included in the analysis were not included in the Widget. For example, specifying individual reporting platforms (CDP, GRI, or TCFD) was distilled down to calculating emissions along leading international standards more generally. This was to recognize the rapidly evolving field of GHG emissions standards. Another example was the limited uptake of SBTi (Science-Based Target initiative) seen in the trend analysis. As opposed to strictly enforcing SBTi, the Widget has the broader requirement of having science-based targets, possibly through adherence to the Paris Agreement, leading climate science, or other methodologies - not exclusively SBTi. Other minor adaptations were made, observable in the section below.

## Define Leading Practice

Building on our research results, engagement with our Advisory Council, and feedback from experts as well as potential users, we defined a core set of emissions reporting and target setting benchmarks that we expect will be the norm in 3-5 years for inclusion in our "Base Widget". These represent benchmarks that are both achievable and can make a significant difference in the impact of GHG reporting and target setting.

### **Base Widget: Emissions Reporting**

*These are the key elements of the Widget related to GHG emissions reporting and/or disclosure along which standards are compared.*

Disclose GHG emissions:

- Company-wide and mine site level
- Scope: (should cover emissions associated with energy and net relevant land use activities)
  - Scope 1 (direct)
  - Scope 2 (indirect from generation of purchased energy)
  - Scope 3 (all other indirect in value chain, upstream, and downstream)
    - For some minerals, Scope 3 emissions will be more complex to calculate; mines producing these minerals should disclose a target date for reporting on Scope 3 emissions.
- Annually; retroactive reporting is recommended to support trend analysis
- Absolute and intensity
  - Report intensity as emissions per ton of product; companies may determine how to report on intensity at mine sites with multiple by-products, however, reporting should clearly disclose the amount of each material produced at a mine site and mine site emissions, including its impact on the carbon stock of impacted lands/forests
- Publicly disclosed
- Externally verified every 3 years

- Calculated in line with international reporting standards (e.g. GHG Protocol); where not apparent, organizations should describe the methodologies used (e.g., including equations to determine CO2 equivalents)

## Base Widget: Emissions Reduction Target Setting

*These are the key elements of the Widget related to GHG emissions reduction target setting along which standards are compared.*

Set GHG emissions reduction targets:

- Company-wide and for each mine site, covering emissions associated with energy and land use related activities
- Absolute and intensity
  - Intensity targets should be related to emissions per tonne of product or net emissions associated with deforestation for each site; companies may determine how to set targets on intensity at mine sites with multiple by-products
- Science based; where not apparent, organizations should describe the methodologies used (e.g., including equations to determine CO2 equivalents)
- That cover Scope 1 and 2 emissions at the company-wide and mine-site level
- That cover Scope 3 emissions at the company-wide level
  - Recognizing the complexity of and challenges in setting Scope 3 targets, companies may also commit to a target date for setting Scope 3 emissions targets
- That cover Scope 3 emissions at the mine site level (optional)
- Publicly disclose targets and performance against targets
- Time bound
- Strategy in place to achieve target [yes/no question]
- Public disclosure of progress [quantitative, annual]

## Designing for Use & Uptake

Early in the development of the Widget, we began conducting outreach to socialize the Widget with a broad group of relevant stakeholders from the mining industry, civil society, and voluntary initiatives and standards bodies. In addition to providing opportunities to discuss and get feedback on the Widget strategy and contents, this early outreach was essential to support later efforts to identify potential users and uptake of the Widget.

As this User Guide is released, we have already prepared a series of Widget alignment and standardization reports designed to offer guidance for specific interested companies and standards organizations. The reports offer recommendations for how to align with the norms outlined by the Widget, as well as the benefits alignment would confer in each specific use case. So far, we have reviewed the standards, protocols, or code of practices with eleven companies or organizations including Toward Sustainable Mining, Newmont, the World Gold Council, ICMM, IRMA, and Dundee Precious Metals.

Looking ahead, we plan to continue outreach to and engagement with potential users to increase uptake. This would likely include webinars or other sessions showcasing users and highlighting the value of and process for use of the Widget, building upon the case studies highlighted below.

## Newmont Case Study

An example case study developed with Newmont is detailed here to illustrate the process of Widget alignment and standardization based on Newmont's recent update of its reporting. This is an excerpt from a full review against all elements of the Widget.

BASE WIDGET NET EMISSIONS REDUCTION TARGET SETTING	Newmont	
Set GHG emissions reduction targets:	2018	2021
<ul style="list-style-type: none"> <li>Company-wide and for each mine site, covering emissions associated with energy and land use related activities</li> </ul>	Company-wide targets set, no mention of mine site reduction targets.	Included for both company-wide and mine-site levels.
<ul style="list-style-type: none"> <li>Absolute AND Intensity               <ul style="list-style-type: none"> <li>Intensity targets should be related to emissions per tonne of product or net emissions associated with deforestation for each site; companies may determine how to set targets on intensity at mine sites with multiple by-products</li> </ul> </li> </ul>	Intensity included. Target to reduce emissions by the intensity metric only, not absolute/total emissions.	Included. Both Absolute and Intensity emissions included.
<ul style="list-style-type: none"> <li>Science based; where not apparent, organizations should describe the methodologies used (e.g., including equations to determine CO2 equivalents)</li> </ul>	Preparation for applying an approach from the SBTi and alignment with Paris Agreement's scientifically based goals.	Aligned with the Science Based Target initiative (SBTi) for 2030.

= Aligned
  = On Track
  = Not Aligned; Target For Improvement

Figure 6: excerpt from the Newmont 2021 Sustainability Report alignment with the CSM Widget.

Figure 6 shows elements from the Widget used to compare against the Newmont's target setting for GHG emissions. In the left column: **Base Widget Net Emissions Reduction Target Setting**, *company-wide and mine-site level emissions*, *absolute AND intensity*, and *science-based targets* are the three elements highlighted from the Widget Alignment report. The right two columns showcase the change in Newmont's alignment with the norms of the Widget from 2018 to 2021. The colors correspond to the alignment with three possible outcomes denoted 'Aligned' (dark green), 'On Track' (light green), and 'Not Aligned; Target For Improvement' (light grey). Figure 7 shows that numerous areas of corporate target setting improved from an 'On Track' classification to an 'Aligned' classification over the three-

year timespan. In 2021, Newmont has attained full alignment with the norms outlined by the Widget in the three areas showcased in the expert and across all of the Widget norms.

Newmont's team is credited with this improvement in climate strategy and net emissions reduction target setting. Their work is indicative of the type of progress those using the Widget can achieve. Newmont's progress also affirms that the widget has calibrated the norm in a manner that is both ambitious and achievable. It affirms that downstream companies and ESG investors can align their standards with the norms set in the Widget.

## Towards Sustainable Mining (TSM) Case Study

To support assessment against and alignment with the Widget, we are working closely with a number of potential users to develop side-by-side comparisons of their standards with our norms in emissions reporting and target setting. This involves the development of a desk-study analysis on the user's environmental standards that compares their details to the norms outlined in the Widget. An example developed for Towards Sustainable Mining's (TSM's) GHG Emissions Management Protocol related to scope is included below to illustrate this step. This example is an excerpt from a three-page comparison that includes all of the elements listed above in the section on defining leading practice.

Base Widget Emissions Reporting	TSM (Comparison with Indicators)
<ul style="list-style-type: none"> <li>• Scope: (should cover emissions associated with energy and net relevant land use activities)               <ul style="list-style-type: none"> <li>○ Scope1 (direct)</li> <li>○ Scope2 (indirect from generation of purchased energy)</li> <li>○ Scope 3 (all other indirect in value chain, upstream, and downstream)</li> </ul> </li> </ul>	<p>Scope 1 &amp; 2 required for A-Level, Scope 3 required for AAA</p> <p>Scope 1 Included</p> <p>Scope 2 Included</p> <p>Scope 3 Included</p>
<ul style="list-style-type: none"> <li>• Annually; retroactive reporting is recommended to support trend analysis.</li> </ul>	<p>Criteria for reporting on an annual basis included, retroactive reporting not included</p>
<ul style="list-style-type: none"> <li>• Publicly disclosed</li> </ul>	<p>Required for at least A-Level; some public reporting takes place for B-level</p>

 = Aligned     
  = On Track     
  = Not Aligned; Target For Improvement

Figure 7: excerpt from the Towards Sustainable Mining Climate Change Protocol alignment report with the CSM Widget.

The table shows three of the seventeen elements from the Widget used to compare against the standards of TSM, with a possible three outcomes denoted 'Aligned' (dark green), 'On Track' (light green), and 'Not Aligned; Target For Improvement' (light grey). In the left column: "Base Widget Emissions Reporting," *Scope 1, 2, & 3, annual/retroactive reporting status, and public disclosure* are the three elements considered as an example subset of the alignment report. Even within the framework of three outcomes per element, more granular detail can be identified in the explanation for the outcome observable in the text in the right column: "TSM (Comparison with Indicators)."

Where the alignment finding is noted as "On Track" or "Not Aligned; Target For Improvement" we offer guidance re-drafting of the company's standards or other GHG emissions protocol. From there, guidance will be reviewed with the user, and additional support for implementation or alteration to the edits to meet the specific needs of the organization on a user-by-user basis is conducted for successful integration and lasting benefits.

One of the strengths of the Widget is its ability to be adapted for numerous different standards. Standards on the topic of emissions reporting and target setting range in form from multiple pages to a few sentences. The Widget meets standards where they are—for a downstream retailer alignment might occur through a number of small edits and an additional sentence, for a more complex upstream standards, edits and additions occur across multiple pages.

In the case of TSM the Widget was a particularly useful norming tool because a working draft of the Widget was ready to be tested as TSM was updating its standard on GHG Emissions Management. We prepared a before and after analysis that showed the improvement in the TSM standard. Users benefit as they don't have to ascertain a norm; the Widget provides this. We appreciate that TSM was willing to work with us to beta-test the usefulness of the Widget.

## Next Steps

The work to encourage and support alignment is ongoing as the field of GHG emissions reporting and target setting evolves. We will monitor results as we identify potential users across the mineral industry value chain and work to support use of the Base Widget to develop improved voluntary initiatives, standards, or investor screens; or use by companies to benchmark or update reporting. As work moves forward, we will continually showcase new examples to illustrate the process and value of the Widget and encourage additional uptake by other potential users. We are also developing other Widgets on priority sustainability issues in the mining sector.

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**RESOLVE** is a team of collaborative leaders, mediators, policy experts, strategists, scientists, and facilitators. We bring a unique combination of expertise to our work: mediation and process design; solutions-focused strategies and programs; and a capacity to create and launch self-sustaining social enterprise. As an independent, nonpartisan, nongovernmental organization (NGO), we work across sectors, borders, and political lines to engage with business, government, foundation, NGO, and community leaders.

Our work on the Climate Smart Mine Emissions Widget was supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). We also relied on the guidance of our Advisory Council, including John Drexhage, Tim Martin, and John Thompson, as well as our partners at GIZ over the course of the project, Johannes Lohmeyer, Lisa Stellner, and Tim Schloesser.

If you would like to learn more about the Widget and its application to your standards or if you are a mining company or association, please contact: *Nick Mitchell, RESOLVE Research and Policy Fellow: [nmitchell@resolve.ngo](mailto:nmitchell@resolve.ngo)*

If you would like to learn more about design of the collaborative process that led to the widget please contact: *Maya Breitburg-Smith, RESOLVE Senior Mediator: [mbreitburg-smith@resolve.ngo](mailto:mbreitburg-smith@resolve.ngo)*