

# Advancing Mining Company Contributions to the Sustainable Development Goals (SDGs)

## *A Comparative Analysis of the SDGs and the Initiative for Responsible Mining Assurance Standard for Responsible Mining*

June 2020

### SUSTAINABLE DEVELOPMENT GOALS

1	End poverty in all its forms everywhere
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3	Ensure healthy lives and promote well-being for all at all ages
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5	Achieve gender equality and empower all women and girls
6	Ensure availability and sustainable management of water and sanitation for all
7	Ensure access to affordable, reliable, sustainable and modern energy for all
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10	Reduce inequality within and among countries
11	Make cities and human settlements inclusive, safe, resilient and sustainable
12	Ensure sustainable consumption and production patterns
13	Take urgent action to combat climate change and its impacts
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development



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## I. Introduction

The Initiative for Responsible Mining Assurance (IRMA) seeks to better understand how mines in the IRMA system can contribute in a positive manner to the United Nations (UN) Sustainable Development Goals (SDGs, also known as the “Global Goals”).<sup>1</sup> The mining sector has been identified as having the potential to contribute in a positive manner to all 17 SDGs.<sup>2</sup>

The purpose of this work is foremost to highlight for mining companies, purchasers of mined materials, and stakeholders how conformance with the requirements in the IRMA Standard for Responsible Mining can contribute in a positive manner to the SDGs. Additionally, IRMA would like to identify any major gaps in the Standard’s alignment with the SDGs so that it may consider developing performance metrics that would enable mines to contribute in a greater way to certain SDGs.

This report will provide a brief introduction to IRMA and the IRMA Standard; a short overview of the relevant history and evolution of sustainable development objectives under the UN, from the Millennium Development Goals to the current SDGs; and a comparison of the IRMA Standard to the SDGs.

### A. The Initiative for Responsible Mining Assurance

The Initiative For Responsible Mining Assurance (IRMA) was founded in 2006 by a coalition of nongovernmental organizations, businesses purchasing minerals and metals for resale in other products, affected communities, mining companies, and labor unions.<sup>3</sup> IRMA’s mission is to “protect people and the environment directly affected by mining.”<sup>4</sup> The Initiative works with mining companies to independently verify and promote achievement of best practices for the sector.<sup>5</sup> IRMA also works with downstream purchasers of mined materials and consumer-facing brands who want to ensure that their supply chains and purchasing dollars reflect their commitment to social and environmental responsibility.<sup>6</sup> IRMA “offers the only third-party

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<sup>1</sup> United Nations, *Historic New Sustainable Development Agenda Unanimously Adopted by 193 UN Members*, Sept. 25, 2015, <https://www.un.org/sustainabledevelopment/blog/2015/09/historic-new-sustainable-development-agenda-unanimously-adopted-by-193-un-members/>; See generally United Nations, *Sustainable Development Goals*, 2015, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

<sup>2</sup> See generally United Nations Development Programme, World Economic Forum, Columbia Center on Sustainable Investments, and the Sustainable Development Solutions Network, *Mapping Mining to the Sustainable Development Goals*, Nov. 8, 2016, <http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/mapping-mining-to-the-sdgs--an-atlas.html>.

<sup>3</sup> Initiative for Responsible Mining Assurance, *History*, <https://responsiblemining.net/about/history/>.

<sup>4</sup> Initiative for Responsible Mining Assurance, *About Us*, <https://responsiblemining.net/about/about-us/>.

<sup>5</sup> *Id.*

<sup>6</sup> Initiative for Responsible Mining Assurance, *Businesses*, <https://responsiblemining.net/what-you-can-do/businesses/>.

certification of industrial-scale mine sites for all mined materials that is governed equitably by the private sector, local communities, civil society, and workers.”<sup>7</sup>

The IRMA Standard for Responsible Mining is IRMA’s chief tool in defining best practices for responsible mining at the industrial scale. The Standard covers “all mined minerals, except for energy fuels, for all sizes of industrial mines and in all parts of the world.”<sup>8</sup> It provides a comprehensive list of more than 400 expectations that are evaluated by independent auditors.<sup>9</sup>

IRMA began developing the IRMA Standard almost a decade before adoption of the SDGs. The IRMA Standard was developed over a ten-year period<sup>10</sup> and has gone through many iterations based on public comment, review by leading experts representing a wide range of stakeholder groups, and field testing. The first draft of the Standard was published in 2014, the second in 2016, and the most recent in 2018. The 2018 version of the IRMA Standard is the version reviewed for this report.

This report indicates that the 2018 IRMA Standard is highly compatible with all of the SDG Goals and targets and is already substantially aligned with 14 of the 17 SDGs. This report will enable IRMA to identify and enhance opportunities for mining companies to contribute to the SDGs. In the few areas where there is currently a low level of alignment between the IRMA Standard and the SDGs, IRMA can further consider where there is an appropriate role for mining companies and how such a role may be better integrated into the Standard, IRMA audits, and related IRMA guidance for mining companies.

## B. Emergence of the Sustainable Development Goals

World leaders adopted the UN Millennium Declaration in September 2000, building on a decade of UN conferences and summits and committing to a new global partnership to meet a set of eight Millennium Development Goals (MDGs).<sup>11</sup> The goals aimed to “eradicate extreme poverty and hunger” and “ensure environmental sustainability,” among other goals, by 2015.<sup>12</sup>

The Mining, Minerals and Sustainable Development (MMSD) Project, an extensive international consultation-based study conducted between 2000 to 2002, built on government, industry, and civil-society efforts to understand and promote the contributions of mining to sustainable

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<sup>7</sup> Initiative for Responsible Mining Assurance, *Certification*, <https://responsiblemining.net/what-we-do/certification/>.

<sup>8</sup> Initiative for Responsible Mining Assurance, *Approach*, <https://responsiblemining.net/what-we-do/approach/>.

<sup>9</sup> Initiative for Responsible Mining Assurance, *The Standard*, <https://responsiblemining.net/what-we-do/standard/>.

<sup>10</sup> Initiative for Responsible Mining Assurance, *Approach*, <https://responsiblemining.net/what-we-do/approach/>.

<sup>11</sup> United Nations, *Millennium Development Goals and Beyond 2015*, <https://www.un.org/millenniumgoals/bkgd.shtml>. The eight Millennium Development Goals include (1) Eradicate Extreme Poverty and Hunger, (2) Achieve Universal Primary Education, (3) Promote Gender Equality and Empower Women, (4) Reduce Child Mortality, (5) Improve Maternal Health, (6) Combat HIV/AIDS, Malaria and Other Diseases, (7) Ensure Environmental Sustainability, and (8) Global Partnership for Development.

<sup>12</sup> United Nations, *Millennium Development Goals and Beyond 2015*, <https://www.un.org/millenniumgoals/bkgd.shtml>.

development, including advancing the MDGs.<sup>13</sup> The MMSD Project informed the World Summit on Sustainable Development (Earth Summit), held in Johannesburg, South Africa in 2002. The Summit was a turning point for recognizing the importance of responsible management of the minerals sector to advancing sustainable development objectives.

The World Summit on Sustainable Development Plan of Implementation recognized the importance of both small-scale and large-scale mining to sustainable development. It led to development of the Intergovernmental Forum on Mining, Metals, Minerals and Sustainable Development<sup>14</sup> and promoted action on all levels, including corporate action.

While the international community made much progress toward the MDGs between 2000 and 2015, particularly toward eradicating extreme poverty and hunger,<sup>15</sup> more action was needed. Building on lessons learned and progress under the MDGs, in 2015 the UN Member States unanimously adopted the 2030 Agenda for Sustainable Development and its 17 SDGs.<sup>16</sup>

The SDGs are a set of 17 ambitious and interconnected goals that address global challenges related to poverty, inequality, climate change, environmental degradation, peace, and justice.<sup>17</sup>

The SDGs include:

- Goal 1: End poverty in all its forms everywhere
- Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

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<sup>13</sup> See International Institute for Environment and Development, *Mining, Minerals and Sustainable Development* (MMSD), 2002 at <https://www.iied.org/mining-minerals-sustainable-development-mmsd>; See also the final MMSD report, *Breaking New Ground: Mining, Minerals and Sustainable Development*, 2002, available in multiple languages at <https://www.iied.org/mmsd-final-report>.

<sup>14</sup> See Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, [www.IGFMining.org](http://www.IGFMining.org).

<sup>15</sup> United Nations, *The Millennium Development Goals Report*, [https://www.un.org/millenniumgoals/2015\\_MDG\\_Report/pdf/MDG%202015%20rev%20\(July%201\).pdf](https://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf).

<sup>16</sup> United Nations, *Historic New Sustainable Development Agenda Unanimously Adopted by 193 UN Members*, Sept. 25, 2015, <https://www.un.org/sustainabledevelopment/blog/2015/09/historic-new-sustainable-development-agenda-unanimously-adopted-by-193-un-members/>; See generally United Nations *Sustainable Development Goals*, 2015, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

<sup>17</sup> United Nations, *Sustainable Development Goals*, 2015, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

The United Nations Sustainable Development Goals<sup>18</sup>



<sup>18</sup> United Nations Sustainable Development Goals, *Sustainable Development Goals Kick Off with Start of New Year, 2015*, <https://www.un.org/sustainabledevelopment/blog/2015/12/sustainable-development-goals-kick-off-with-start-of-new-year/>.



The UN Member States aim to achieve the 17 SDGs and 169 underlying targets<sup>19</sup> by 2030. Each underlying target is measured through a set of universally harmonized indicators.<sup>20</sup> Member States, both developed and developing countries, are encouraged to “conduct regular and inclusive reviews of progress at the national and subnational levels, which are country-led and country-driven.”<sup>21</sup> These reviews, referred to as “Voluntary National Reviews” (VNRs), serve as the basis for regular reviews by the UN High-Level Political Forum on Sustainable Development.<sup>22</sup> VNRs form the basis for sharing of experience by governments, including successes, challenges, and lessons learned in implementing the SDGs.<sup>23</sup>

Data is also collected and distributed by the Sustainable Development Goals Partnership Platform through an online Goal Tracker. The Partnerships Platform works directly with each member state’s national statistical office and the national entity responsible for advancing the SDGs.<sup>24</sup> Monitoring efforts, however, remain constrained by lack of data.<sup>25</sup> The Goal Tracker thus complements official statistics with country data from non-traditional data sources.<sup>26</sup>

The Global Reporting Initiative (GRI) and UN Global Compact have developed a guide for businesses to track their performance on the SDGs by linking corporate disclosure frameworks with the SDG targets.<sup>27</sup> Businesses are able to use disclosure reporting to guide, prioritize, and develop strategic plans to monitor and improve performance on the SDGs. Limitations include the lack of relevant business indicators for certain targets and the ongoing push to develop SDG reporting frameworks that are harmonized across all business types and models.<sup>28</sup>

Based on the data available, it is evident that key stakeholders are making progress toward the SDGs in some areas, but overall action to meet the SDGs is not yet advancing at the necessary

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<sup>19</sup> United Nations, *Sustainable Development Goals*, 2015,

<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

<sup>20</sup> Local Governments for Sustainability, *Measuring, Monitoring, and Evaluating the SDGs*,

<https://www.local2030.org/library/236/ICLEI-SDGs-Briefing-Sheets-06-Measuring-Monitoring-and-Evaluating-the-SDGs.pdf>.

<sup>21</sup> United Nations General Assembly, *Transforming Our World: the 2030 Agenda for Sustainable Development* at para. 79, Sept. 25, 2015, [https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E).

<sup>22</sup> Sustainable Development Knowledge Platform, *Voluntary National Reviews Database*, <https://sustainabledevelopment.un.org/vnrs/>.

<sup>23</sup> Sustainable Development Goals, *Monitoring and Progress*, <https://www.un.org/sustainabledevelopment/monitoring-and-progress-hlpf/>.

<sup>24</sup> Sustainable Development Goals Partnership Platform, *Goal Tracker – A Visual Tool for the Global Goals*, <https://sustainabledevelopment.un.org/partnership/?p=29652>.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> Global Reporting Initiative (GRI) and United Nations Global Compact, *Business Reporting on the SDGs: An Analysis of the Goals and Targets*, [https://www.globalreporting.org/resource/library/GRI\\_UNGC\\_Business-Reporting-on-SDGs\\_Analysis-of-Goals-and-Targets.pdf](https://www.globalreporting.org/resource/library/GRI_UNGC_Business-Reporting-on-SDGs_Analysis-of-Goals-and-Targets.pdf).

<sup>28</sup> See *id.*

speed or scale.<sup>29</sup> The UN is calling the period of 2020 to 2030 “A Decade of Action”<sup>30</sup> to meet the SDGs. While governments are the primary drivers of advancing the SDGs, action is required at all levels: by youth, civil society, the media, the private sector, unions, academia, and other stakeholders.<sup>31</sup>

Mining is a major economic driver in many countries, yet governance of mining and other natural resources sectors is often weak, poor, or failing.<sup>32</sup> The International Council on Mining and Metals has established a Mining Contribution Index (MCI) that quantifies and ranks the significance of the mining sector’s contribution to national economies.<sup>33</sup> The MCI is a composite of four indicators: mineral and metal export contribution; increase or decrease in mineral export contribution; mineral production value as a percentage of Gross Domestic Product (GDP); and mineral rents as a percentage of GDP.<sup>34</sup> The MCI does not measure the success of governments in translating economic contributions of the mining sector into broader economic and social benefits. However, the index demonstrates that many low and middle-income economies remain dependent on the mineral sector.<sup>35</sup>

The top 25 countries from the most recent 2018 MCI<sup>36</sup> are listed below, based on 2016 data.

#### MCI Ranks and Scores for the Top 25 Countries in 2018<sup>37</sup>

2018 rank	Country	2018 score
1	Suriname	96.43
2	Congo, Dem. Rep.	96.40
3	Guinea	94.28
4	Burkina Faso	93.45
5	Kyrgyz Republic	93.31

<sup>29</sup> United Nations, *The Sustainable Development Agenda*, <https://www.un.org/sustainabledevelopment/development-agenda/>.

<sup>30</sup> United Nations Sustainable Development Goals, *Decade of Action*, <https://www.un.org/sustainabledevelopment/decade-of-action/#:~:text=2020%20needs%20to%20usher%20in,and%20closing%20the%20finance%20gap.>

<sup>31</sup> United Nations, *The Sustainable Development Agenda*, <https://www.un.org/sustainabledevelopment/development-agenda/>.

<sup>32</sup> International Council on Mining & Metals, *Role of Mining in National Economies: Mining Contribution Index 2018, 4<sup>th</sup> Edition* at 1, 2018, [https://www.icmm.com/website/publications/pdfs/social-and-economic-development/181002\\_mci\\_4th-edition.pdf](https://www.icmm.com/website/publications/pdfs/social-and-economic-development/181002_mci_4th-edition.pdf).

<sup>33</sup> International Council on Mining & Metals, *Mining Contribution Index*, 2018, <https://www.icmm.com/en-gb/society-and-the-economy/role-of-mining-in-national-economies/mining-contribution-index>.

<sup>34</sup> International Council on Mining & Metals, *Role of Mining in National Economies: Mining Contribution Index 2018, 4<sup>th</sup> Edition* at 1, 2018, [https://www.icmm.com/website/publications/pdfs/social-and-economic-development/181002\\_mci\\_4th-edition.pdf](https://www.icmm.com/website/publications/pdfs/social-and-economic-development/181002_mci_4th-edition.pdf).

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

6	Mali	93.22
7	Sierra Leone	92.59
8	Liberia	92.08
9	Ghana	90.94
10	Uzbekistan	89.13
11	Namibia	87.64
12	Madagascar	87.14
13	Botswana	86.13
14	Armenia	84.93
15	Tajikistan	84.90
16	Mongolia	84.89
17	Bolivia	84.46
18	Senegal	84.36
19	Zimbabwe	84.19
20	Guyana	80.42
21	Peru	80.06
22	Sudan	79.92
23	Mauritania	78.59
24	Zambia	78.38
25	Dominican Republic	78.27

Mining companies can ensure that mining activity proceeds in a responsible manner that promotes environmental protection and broader socio-economic development that is aligned with the SDGs. As detailed in the section below, by implementing the best practices in the IRMA Standard, mining companies can make positive contributions toward each of the SDGs.

## II. Comparison of SDG Targets and the IRMA Standard

### A. Overview and Methodology

This section compares the SDGs to the IRMA Standard, identifying areas of alignment and gaps.

The methodology for this comparative analysis involved use of Excel spreadsheets to document overlapping elements between the requirements in the IRMA Standard and the SDGs and targets. The assessment reviewed, on a requirement-by-requirement basis, whether or not there is alignment between the IRMA Standard and any SDG or target. Alignment exists where, if the IRMA Standard requirement were met, it would contribute in a positive manner toward meeting one or more SDGs. The Excel spreadsheets were then analyzed to review alignment and gaps.

We note that the SDGs and targets are very interconnected, thus a positive action toward one SDG is likely to have a positive impact on other SDGs. In order to optimize the value of this report, the narrative and tables below identify the key areas of alignment and key gaps. The tables in the Annex of this document provide greater detail.

Areas of high alignment between the SDGs and IRMA Standard are shaded in green, areas of medium alignment are shared in yellow, and areas of low alignment are shaded in gray.

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Our comparison showed that the IRMA Standard is highly aligned with 7 of the 17 SDGs:

- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Our comparison showed that the IRMA Standards has a medium level of alignment with 7 of the 17 SDGs:

- Goal 1: End poverty in all its forms everywhere
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 13: Take urgent action to combat climate change and its impacts

The comparison showed that the IRMA Standard has a low level of alignment with only 3 of the 17 SDGs:

- Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

There are many roles mining companies can play in advancing food security, nutrition, and sustainable agriculture; promoting access to sustainable energy; and conservation and sustainable use of the oceans, seas and marine resources.

While governments play the lead role in advancing all SDGs, it may be particularly important that governments lead and sustain actions to accomplish this Goal 2 and its underlying targets. However, mining companies can also advance progress toward Goal 2 by engaging with farmers and agricultural workers; considering agriculture and food security in impact assessment and monitoring; and as part of resettlement, local procurement, community benefit sharing, and mine closure and post-closure plans, developed with input from local stakeholders.

Regarding Goal 7, it is important to recognize that the IRMA Standard does not cover energy fuels. The IRMA Standard promotes progress toward Goal 7 by requiring mining companies to develop and maintain a policy to identify and measure greenhouse gas emissions from the project, identify energy efficiency and greenhouse gas reduction opportunities across the mining project, and set meaningful and achievable targets for reduction in greenhouse gas emissions at the mine site or on a corporate-wide basis. Mining companies can also advance progress toward Goal 7 by integrating renewable energy sources into plans for the mine and related infrastructure, community benefit sharing, and mine closure and post-mining transition.

Regarding Goal 14, we note that the IRMA Standard explicitly states that “mine sites using riverine, *submarine*, and lake disposal of mine waste materials will not be certified by IRMA.”<sup>38</sup> Mining companies may or may not operate in areas of direct impact to oceans, seas, and marine resources. However, as mining company interest and capacity builds to advance deep seabed mining projects, and as the changing climate and related glacier retreat makes mining in new areas more accessible, this may become an area in which IRMA can discourage operation and refuse certifications due to the high level of risk and need to make rapid progress toward the achievement of Goal 14.

Sections B, C, and D below provide a summary of how the IRMA Standard aligns with the SDGs, listing only the most applicable IRMA standards and corresponding SDG targets. A much more detailed table, with comparison across each of the 169 SDG targets, is provided in the Appendix at the end of this document.

## B. Areas of High Alignment

Our comparison showed high alignment between the IRMA Standard and 7 SDGs: Goal 3 (Ensure healthy lives and promote well-being for all at all ages); Goal 5 (Achieve gender equality and empower all women and girls); Goal 6 (Ensure availability and sustainable management of water and sanitation for all); Goal 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all); Goal 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss); Goal 16 (Promote peaceful and inclusive societies for sustainable development, provide access to

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<sup>38</sup> Initiative for Responsible Mining Assurance, *IRMA Standard for Responsible Mining IRMA-STD-001* at 4.1.8.1, 2018, [https://responsiblemining.net/wp-content/uploads/2018/07/IRMA\\_STANDARD\\_v.1.0\\_FINAL\\_2018-1.pdf](https://responsiblemining.net/wp-content/uploads/2018/07/IRMA_STANDARD_v.1.0_FINAL_2018-1.pdf) (emphasis added).

justice for all and build effective, accountable and inclusive institutions at all levels); and Goal 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development).

### Goal 3: Ensure healthy lives and promote well-being for all at all ages

Goal 3 aims for an end to the HIV/AIDs epidemic, tuberculosis, and malaria and a reduction in hepatitis, water-borne illnesses, and other infectious diseases. It calls for a reduction in child and maternal mortality rates, universal access to healthcare and essential medicines, and a substantial reduction in the number of deaths from health risks such as hazardous chemicals and contamination of the air, water, and soil.

Under the IRMA Standard, mining companies must advance the health and well-being of communities and take measures to prevent and eradicate the spread of disease. This is accomplished through a range of mechanisms required under the IRMA Standard, including but not limited to: Environmental and Social Impact Assessment and related impact management plans; health and safety management systems—both on company and community levels; responsible management of mine waste materials; and monitoring and managing impacts of a project on water quality and quantity.

Goal 3: Ensure healthy lives and promote well-being for all at all ages	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination. 3.9.</li> </ul>	<ul style="list-style-type: none"> <li>Complete an Environmental and Social Impact Assessment (ESIA), appropriate to the nature and scale of the proposed mining project and commensurate with the level of its environmental and social risks and impacts, prior to the commencement of any site-disturbing operations associated with the project. 2.1.1.1.</li> <li>Develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.7.</li> <li>Prepare, prior to commencement of mine construction activities, a reclamation and closure plan that is compatible with the protection of human health and the environment. 2.6.2.1.</li> <li>Implement a health and safety management system for measuring and improving the mining project's health and safety performance. 3.2.1.1.</li> <li>Implement measures to protect the safety and health of workers. 3.2.4.1.</li> <li>Identify significant potential risks and impacts to community health and safety from mining-related activities, and document and implement a community health and safety risk management plan. 3.3.1.1., 3.3.2.1, 3.3.3.1.</li> <li>Develop a policy for managing waste materials and mine waste facilities in a manner that eliminates, if practicable, and otherwise minimizes risks to human health, safety, the environment and communities. 4.1.1.1.</li> <li>Determine if there may be significant air quality impacts associated with the mining project and its operations. If significant impacts on air quality are identified, develop, maintain and implement an air quality management plan that documents measures to avoid, and where that is not possible, minimize adverse impacts on air quality. Monitor and</li> </ul>

	<p>document ambient air quality and dust associated with the mining project. 4.3.1., 4.3.2., 4.3.3.</p> <ul style="list-style-type: none"> <li>• Comply with the International Cyanide Management Code 4.7.1</li> <li>• A mining project with a mercury emission control system shall perform a mercury mass balance that assesses and document the amount of mercury in waste rock and ore, and the amount of mercury during or after processing that is released into air and water; produced as a by-product; and resident in tailings ponds, waste rock dumps and other mine waste facilities. For each mining project with a source of mercury air emissions a mercury monitoring plan shall be developed. 4.8.1., 4.8.3.1.</li> </ul>
<ul style="list-style-type: none"> <li>• End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases. 3.3.</li> </ul>	<ul style="list-style-type: none"> <li>• Where risk and impact assessment or other information indicates a significant risk of community exposure to HIV/AIDS, tuberculosis, malaria or other emerging infectious disease related to mining activities, the operating company shall develop, adopt and implement policies, business practices, and targeted initiatives to address identified risks. Educate affected and vulnerable communities about these infections and modes of prevention; share best practices for the prevention and treatment of these diseases; and make information publicly available regarding the company's infectious disease mitigation program. 3.3.4.1.</li> <li>• In relation to HIV/AIDS, provide free, voluntary and confidential HIV testing; Provide HIV/AIDS treatment for workers and employees; provide access to contractors to education and other preventative programs; work with public health authorities, communities, workers' organizations and other stakeholders towards ensuring universal access to treatment for dependents of mine workers/employees and affected community members 3.3.4.2.a.</li> <li>• In relation to tuberculosis, provide free and voluntary testing for mine workers/employees. 3.3.4.2.b.</li> <li>• In relation to malaria, develop a vector control plan; ensure that company facilities are not breeding environments for malaria-carrying mosquitoes; and provide protection from infection by malaria-carrying mosquitoes in company facilities and any company-provided housing. 3.3.4.2.c.</li> </ul>

## Goal 5: Achieve gender equality and empower all women and girls

Goal 5 calls for an end to all discrimination against women and girls, the elimination of gender-based violence, and full and effective participation and equal opportunities for leadership for women in all levels of political, economic, and public life.

The IRMA Standard fosters inclusivity and empowerment of women on many levels, and specifically notes that mining companies are to remove barriers to engagement for women. The Standard calls on companies to obtain and maintain broad community support for mining projects, based on meaningful input by all affected community members, including women. The Standard requires operating companies to take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to female workers. Operating companies are also required to provide maternity leave; where there is no national law nor collective bargaining agreement, the maternity leave must be no less than 14 weeks.



Goal 5: Achieve gender equality and empower all women and girls	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• End all forms of discrimination against all women and girls everywhere. 5.1.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall take measures to prevent and address harassment, intimidation, and/or exploitation, especially in regard to female workers. 3.1.3.3.</li> <li>• Where neither national law nor a collective bargaining agreement includes provisions for worker leave, the operating company shall, at minimum, provide a maternity leave period of no less than 14 weeks. 3.1.10.2.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life. 5.5.</li> </ul>	<ul style="list-style-type: none"> <li>• Consult with stakeholders to design engagement processes that are accessible, inclusive and culturally appropriate, and make continuous efforts to understand and remove barriers to engagement for affected stakeholders (especially women, marginalized and vulnerable groups). 1.2.1.3.</li> <li>• Obtain and maintain broad community support, which shall be determined based on the opportunity for meaningful input by all potentially affected community members, including women, vulnerable groups and marginalized members, prior to any decision or resolution. 2.3.2.1., 2.3.2.2.</li> <li>• When planning and delivering community benefits, design the planning process to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency. Make efforts to develop initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups). 2.3.3.2., 2.3.3.4.</li> </ul>

## Goal 6: Ensure availability and sustainable management of water and sanitation for all

Goal 6 aims to achieve universal and equitable access to safe drinking water for all. This includes reducing waste and pollution in waterways and reducing the dumping of hazardous chemicals and materials. This calls for developing strategies for the protection and restoration of water-related ecosystems and the expansion of water conservation infrastructure in developing countries.

The IRMA Standard includes extensive requirements regarding water quality and sanitation. Requirements include but are not limited to environmental and social impact assessment and related management plans; identification of water users, water rights holders, and other stakeholders potentially affected by mine water management practices; collaboration with relevant stakeholders to identify current and future uses of water at the local and regional level that may be affected by the mine’s water management practices; and mine closure plans that include comprehensive requirements to prevent the degradation of water resources and to maintain water management, water treatment, and mine site and waste site geotechnical stabilization, with adequate related financial assurance. The IRMA Standard calls on operating

companies to implement best practice water and waste management methods to avoid long-term treatment. Where a decision is made to proceed with long-term water treatment, the operating company must take all practicable efforts to minimize the volume of water to be treated.

Goal 6: Ensure availability and sustainable management of water and sanitation for all	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Achieve universal and equitable access to safe and affordable drinking water for all. 6.1.</li> <li>• Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials. 6.3.</li> <li>• Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity. 6.4.</li> <li>• Implement integrated water resources management at all levels, including through transboundary cooperation. 6.5.</li> <li>• Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes. 6.6.</li> <li>• Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies. 6.a.</li> </ul>	<ul style="list-style-type: none"> <li>• An Environmental and Social Impact Assessment (ESIA), appropriate to the nature and scale of the proposed mining project and commensurate with the level of its environmental and social risks and impacts, shall be completed prior to the commencement of any site-disturbing operations associated with the project. 2.1.1.1.</li> <li>• The operating company shall develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.7.1.</li> <li>• Prior to the commencement of mine construction activities the operating company shall prepare a reclamation and closure plan that is compatible with protection of human health and the environment, and demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining end use. Among minimum requirements, the reclamation and closure plan shall contain: <ul style="list-style-type: none"> <li>○ Source mitigation program to prevent the degradation of water resources;</li> <li>○ Interim operations and maintenance, including process water management, water treatment, and mine site and waste site geotechnical stabilization;</li> <li>○ Plans for stormwater runoff/run-on management. 2.6.2.1, 2.6.2.2.</li> </ul> </li> <li>• The reclamation and closure plan shall include a detailed determination of the estimated costs of reclamation and closure, and post-closure, based on the assumption that reclamation and closure will be completed by a third party, using costs associated with the reclamation and closure plan as implemented by a regulatory agency. Among minimum requirements for costs are: <ul style="list-style-type: none"> <li>○ Holding costs that would be incurred by a regulatory agency if the operating company were to declare bankruptcy, including costs related to interim process water and site management and short-term water treatment; and</li> <li>○ Post-closure costs for long-term water treatment; and long-term monitoring and maintenance. 2.6.2.3.</li> </ul> </li> <li>• Monitoring of closed mine facilities for geotechnical stability and routine maintenance are required in post-closure. The reclamation and closure plan shall include specifications for the post-closure monitoring and maintenance of all mine facilities. If a pit lake is present, pit lake water quality shall be monitored, and if potentially harmful to people, wildlife, livestock, birds or agricultural uses adequate measures shall be taken to protect these organisms. 2.6.5.1., 2.6.5.5.</li> <li>• Long-term water treatment shall not take place unless all practicable efforts to implement best practice water and waste management methods to avoid long- term treatment have been made; and the operating company funds an engineering and risk assessment that: <ul style="list-style-type: none"> <li>○ Is carried out by an independent third-party;</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Evaluates the environmental and financial advantages/disadvantages and risks of long-term water treatment versus other mitigation methods;</li> <li>○ Incorporates data on the failure rates of the proposed mitigation measures and water treatment mechanisms;</li> <li>○ Determines that the contaminated water to be treated perpetually poses no significant risk to human health or to the livelihoods of communities if the discharge were to go untreated; and</li> <li>○ Includes consultations with stakeholders and their technical representatives during the design of the study, and discussion of findings with affected communities prior to mine construction or expansion.</li> </ul> <p>If a decision is made to proceed with long-term water treatment, the operating company shall take all practicable efforts to minimize the volume of water to be treated. 2.6.6.1., 2.6.6.2.</p> <ul style="list-style-type: none"> <li>● The operating company shall provide sufficient financial surety for all long-term activities, including post-closure site monitoring, maintenance, and water treatment operations. Financial assurance shall guarantee that funds will be available, irrespective of the operating company's finances at the time of mine closure or bankruptcy. If long-term water treatment is required post-closure: <ul style="list-style-type: none"> <li>○ The water treatment cost component of the post-closure financial surety shall be calculated conservatively, and cost calculations based on treatment technology proven to be effective under similar climatic conditions and at a similar scale as the proposed operation; and</li> <li>○ When mine construction commences, or whenever the commitment for long-term water treatment is initiated, sufficient funding shall be established in full for long-term water treatment and for conducting post-closure monitoring and maintenance for as long as IRMA Water Quality Criteria are predicted to be exceeded. 2.6.7.1., 2.6.7.2.</li> </ul> </li> <li>● The operating company shall identify water users, water rights holders and other stakeholders that may potentially affect or be affected by its mine water management practices. The operating company shall conduct its own research and collaborate with relevant stakeholders to identify current and potential future uses of water at the local and regional level that may be affected by the mine's water management practices. The operating company shall conduct its own research and collaborate with relevant stakeholders to identify and address shared water challenges and opportunities at the local and regional levels, and shall take steps to contribute positively to local and regional water stewardship outcomes. 4.2.1.1., 4.2.1.2., 4.2.1.3.</li> <li>● The operating company shall gather baseline or background data to reliably determine: <ul style="list-style-type: none"> <li>○ The seasonal and temporal variability in: The physical, chemical and biological conditions of surface waters, natural seeps/springs and groundwaters that may be affected by the mining project; Water quantity (i.e., flows and levels of surface waters, natural seeps/springs and groundwaters) that may be affected by the mining project; and</li> <li>○ Sources of contamination and changes in water quantity or quality that are unrelated to the mining project. 4.2.2.1.</li> </ul> </li> <li>● The operating company, in collaboration with relevant stakeholders, shall evaluate options to mitigate predicted significant adverse impacts</li> </ul>
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	on water quantity, water quality and current and potential future water uses that may be affected by the mine's water management practices. 4.2.3.1.
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## Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 8 calls for policies that promote sustained economic growth, job creation, creativity and innovation, and entrepreneurship. It also calls for the eradication of forced labor, an end to human trafficking, and elimination of the worst forms of child labor. It aims to protect labor rights and promote safe working environments for all workers, including women and migrant workers, and those engaging in precarious employment. It endeavors to decouple economic growth from environmental degradation.

The IRMA Standard incorporates extensive requirements for labor rights, including the rights of workers to freedom of association and collective bargaining, and requires mining companies to pay a living wage or better. Furthermore, the Standard requires that children (persons under the age of 18) shall not be hired to do hazardous work and sets a minimum age requirement of 15 for non-hazardous work. The Standard expressly prohibits employment of forced labor or participation in human trafficking.

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>Sustain per capita economic growth in accordance with national circumstances, with particular attention paid to least developed countries. 8.1.</li> </ul>	<ul style="list-style-type: none"> <li>The operating company shall pay wages to workers that meet or exceed the higher of applicable legal minimum wages, wages agreed through collective wage agreements, or a living wage. 3.1.9.1.</li> </ul>
<ul style="list-style-type: none"> <li>Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation and encourage the formalization of employment. 8.3.</li> </ul>	<ul style="list-style-type: none"> <li>The operating company, in collaboration with affected communities and other relevant stakeholders (including workers and local government), shall develop a participatory planning process to guide a company's contributions to community development initiatives and benefits in affected communities. The planning process shall be designed to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency. 2.3.3.1., 2.3.3.2.</li> <li>Where national law substantially restricts workers' organizations, the operating company shall not restrict workers from developing alternative mechanisms to express their grievances and protect their rights regarding working conditions and terms of employment. The operating company shall not seek to influence or control these mechanisms. 3.1.2.2</li> <li>Upon employment, the operating company shall:</li> </ul>

	<ul style="list-style-type: none"> <li>○ Inform workers of their rights under national labor and employment law;</li> <li>○ Inform workers that they are free to join a workers' organization of their choosing without any negative consequences or retaliation from the operating company;</li> <li>○ If relevant, inform workers of their rights under any applicable collective agreement; and</li> <li>○ If relevant, provide workers with a copy of the collective agreement and the contact information for the appropriate trade union (or workers' organization) representative. 3.1.2.6.</li> </ul>
<ul style="list-style-type: none"> <li>● Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. 8.5.</li> </ul>	<ul style="list-style-type: none"> <li>● The operating company shall base employment relationships on the principles of equal opportunity and fair treatment, and shall not discriminate or make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. 3.1.3.1.</li> </ul>
<ul style="list-style-type: none"> <li>● Take immediate and effective measures to eradicate forced labor, human trafficking and the worst forms of child labor. 8.7.</li> </ul>	<ul style="list-style-type: none"> <li>● The operating company shall document the ages of all workers. Children (i.e., persons under the age of 18) shall not be hired to do hazardous work (e.g., working underground or where there may be exposure to hazardous substances). The minimum age for non-hazardous work shall be 15, or the minimum age outlined in national law, whichever is higher. 3.1.7.1., 3.1.7.2., 3.1.7.3.</li> <li>● The operating company shall not employ forced labor or participate in the trafficking of persons. Where there is a high risk of forced or trafficked labor in the mine's supply chain, the operating company shall develop and implement procedures to monitor its suppliers to determine if forced labor or trafficked workers are being employed. If any cases are identified, the operating company shall ensure that appropriate steps are taken to remedy them. Where remedy is not possible, the operating company shall shift the project's supply chain over time to suppliers that can demonstrate that they do not employ forced labor or participate in the trafficking of persons. 3.1.8.1., 3.1.8.2</li> </ul>
<ul style="list-style-type: none"> <li>● Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment. 8.8.</li> </ul>	<ul style="list-style-type: none"> <li>● The operating company shall respect the rights of workers to freedom of association and collective bargaining. 3.1.2.1.</li> <li>● The operating company shall implement an ongoing, systematic health and safety risk assessment process that follows a recognized risk assessment methodology for industrial operations. The operating company shall implement measures to protect the safety and health of workers. 3.2.2.1., 3.2.4.1.</li> </ul>

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 15 is focused on the conservation, restoration, and sustainable use of freshwater and mountain ecosystems and encourages urgent action to reduce the degradation of natural habitats. It promotes sustainable management plans to prevent forest degradation, combat desertification, and mobilize resources to finance forest conservation and reforestation. It also encourages the conservation of biodiversity.

The IRMA Standard's requirements for environmental and social impact assessments and related management plans promote achievement of this goal. In particular, the Standard requires operating companies to prepare a reclamation and closure plan that demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining end use. Among other minimum requirements, the reclamation and closure plan must include stabilization and final topography of the reclaimed mine lands; topsoil salvage to the maximum extent practicable; and topsoil storage in a manner that preserves its capability to support plant regeneration. When addressing revegetation and ecological restoration as required in the IRMA Standard, the company must prioritize native species as appropriate for the agreed post-mine land use and provide quantitative revegetation standards with clear measures to be implemented if the standards are not met within a specified time. The company must also set a defined period, no longer than 10 years, when planned revegetation tasks shall be completed; measures for control of noxious weeds; and planned activities to restore natural habitats, as well as biodiversity, ecosystem services, and other conservation values.

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development. 15.4.</li> <li>• Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species. 15.5.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete an Environmental and Social Impact Assessment (ESIA), appropriate to the nature and scale of the proposed mining project and commensurate with the level of its environmental and social risks and impacts, prior to the commencement of any site-disturbing operations associated with the project. 2.1.1.1.</li> <li>• Carry out a scoping process to identify all potentially significant social and environmental impacts of the mining project to be assessed in the ESIA. 2.1.2.1., 2.1.3.3., 2.1.4., 2.1.5., 2.1.6.</li> <li>• Develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.7.</li> <li>• Establish a program to monitor the significant environmental and social impacts identified during or after the ESIA process. 2.1.8.</li> <li>• Prior to the commencement of mine construction activities the operating company shall prepare a reclamation and closure plan that is compatible with protection of human health and the environment, and demonstrates how affected areas will be returned to a stable landscape</li> </ul>

	<p>with an agreed post-mining end use. At a minimum, the reclamation and closure plan shall contain:</p> <ul style="list-style-type: none"> <li>○ Earthwork: Stabilization and final topography of the reclaimed mine lands; Stormwater runoff/run-on management; Topsoil salvage to the maximum extent practicable; and Topsoil storage in a manner that preserves its capability to support plant regeneration;</li> <li>○ Revegetation/Ecological Restoration: Plant material selection, prioritizing native species as appropriate for the agreed post-mine land use; Quantitative revegetation standards with clear measures to be implemented if these standards are not met within a specified time; A defined period, no longer than 10 years, when planned revegetation tasks shall be completed; Measures for control of noxious weeds; and Planned activities to restore natural habitats (as well as biodiversity, ecosystem services and other conservation values).</li> </ul> <p>Financial surety instruments shall be in place for mine closure and post-closure. 2.6.2.1., 2.6.2.2., 2.6.4.1.</p> <ul style="list-style-type: none"> <li>● Biodiversity, ecosystem services and protected areas screening, assessment, management planning, implementation of mitigation measures, and monitoring shall be carried out and documented by competent professionals using appropriate methodologies. 4.6.1.1.</li> <li>● Mitigation measures for new mines shall follow the mitigation hierarchy of: <ul style="list-style-type: none"> <li>○ Prioritizing the avoidance of impacts on important biodiversity values and priority ecosystem services and the ecological processes and habitats necessary to support them;</li> <li>○ Where impacts are not avoidable, minimizing impacts to the extent possible;</li> <li>○ Restoring biodiversity, ecosystem services and the ecological processes and habitats that support them; and</li> <li>○ As a last resort, offsetting the residual impacts.</li> </ul> <p>Prioritize avoidance of impacts on important biodiversity values and priority ecosystem services early in the project development process; Be designed and implemented to deliver at least no net loss, and preferably a net gain in important biodiversity values, and the ecological processes that support those values, on an appropriate geographic scale and in a manner that will be self-sustaining after mine closure. 4.6.4.1.</p> </li> <li>● At existing mines: Where past adverse impacts on important biodiversity values and priority ecosystem services have been identified, the operating company shall design and implement onsite restoration strategies, and also, through consultation with stakeholders, design and implement additional conservation actions to support the enhancement of important biodiversity values and/or priority ecosystem services on an appropriate geographic scale; and If there is the potential for new impacts on important biodiversity values or priority ecosystem services (e.g., as a result of mine expansions, etc.), the operating company shall follow the mitigation hierarchy, prioritizing the avoidance of impacts on important biodiversity values or priority ecosystem services, but where residual impacts remain, shall apply offsets commensurate to the scale of the additional (new) impacts. 4.6.4.2.</li> </ul>
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Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 16 advocates for a reduction of violence in all forms, including human trafficking and violence against children. It calls for representative, responsive, and participatory governance that is inclusive at all levels. Institutions should be effective, accountable, and transparent. Fundamental freedoms should be protected, and non-discriminatory laws and policies for sustainable development should be promoted.

The IRMA Standard provides extensive requirements related to this Goal, only some of which are discussed here. The Standard prohibits hiring children to do hazardous work and hiring children under the age of 15 to do non-hazardous work. It also prohibits employment of forced labor and participation in human trafficking.

The Standard requires mining companies adopt a policy commitment that acknowledges its responsibility to respect all internationally recognized human rights. It also includes detailed requirements regarding respect for human rights in developing and implementing security measures. The Standard details requirements to follow international best practice when operating in conflict-affected or high-risk areas.

The Standard requires that mining companies utilize inclusive public engagement and participatory processes, all of which contribute toward peaceful and inclusive societies. At new and existing mines, the mining company must obtain Free, Prior and Informed Consent (FPIC) from indigenous peoples for proposed changes to mining-related activities that may result in new or increased impacts on indigenous peoples' rights or interests. The mining company must also obtain and maintain broad community support, which shall be determined based on the opportunity for meaningful input by all potentially affected community members, including women, vulnerable groups, and marginalized members, prior to any decision or resolution.

Furthermore, the operating company must develop culturally appropriate complaints and grievance procedures, aligned with the UN Guiding Principles on Business and Human Rights, including the need for the mechanism to be: (a) Legitimate, (b) Accessible, (c) Predictable, (d) Equitable, (e) Transparent, (f) Rights-compatible, (g) A source of continuous learning, and (h) Based on engagement and dialogue.

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• End abuse, exploitation, trafficking and all forms of violence against and torture of children. 16.2.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall document the ages of all workers. Children (i.e., persons under the age of 18) shall not be hired to do hazardous work (e.g., working underground or where there may be exposure to hazardous substances). The minimum age for non-hazardous work shall be 15, or the minimum age outlined in national law, whichever is higher. 3.1.7.1, 3.1.7.2, 3.1.7.3.</li> </ul>



	<ul style="list-style-type: none"> <li>• The operating company shall not employ forced labor or participate in the trafficking of persons. Where there is a high risk of forced or trafficked labor in the mine's supply chain, the operating company shall develop and implement procedures to monitor its suppliers to determine if forced labor or trafficked workers are being employed. If any cases are identified, the operating company shall ensure that appropriate steps are taken to remedy them. Where remedy is not possible, the operating company shall shift the project's supply chain over time to suppliers that can demonstrate that they do not employ forced labor or participate in the trafficking of persons. 3.1.8.1., 3.1.8.2</li> </ul>
<ul style="list-style-type: none"> <li>• Develop effective, accountable and transparent institutions at all levels. 16.6.</li> <li>• Ensure responsive, inclusive, participatory and representative decision-making at all levels. 16.7.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall undertake identification and analysis of the range of groups and individuals, including community members, rights holders and others ("stakeholders") who may be affected by or interested in the company's mining-related activities. 1.2.1.1.</li> <li>• The operating company shall consult with stakeholders to design engagement processes that are accessible, inclusive and culturally appropriate, and shall demonstrate that continuous efforts are taken to understand and remove barriers to engagement for affected stakeholders (especially women, marginalized and vulnerable groups). 1.2.1.3.</li> <li>• Stakeholder engagement shall begin prior to or during mine planning, and be ongoing, throughout the life of the mine. 1.2.2.1.</li> <li>• The operating company shall ensure that stakeholders, including affected community members and rights holders ("stakeholders") have access to an operational-level mechanism that allows them to raise and seek resolution or remedy for the range of complaints and grievances that may occur in relation to the company and its mining-related activities. 1.4.1.1.</li> <li>• The operating company shall consult with stakeholders on the design of culturally appropriate complaints and grievance procedures that address, at minimum: <ul style="list-style-type: none"> <li>○ The effectiveness criteria outlined in Principle 31 of the United Nations <i>Guiding Principles on Business and Human Rights</i>, which include the need for the mechanism to be: (a) Legitimate, (b) Accessible, (c) Predictable, (d) Equitable, (e) Transparent, (f) Rights-compatible, (g) A source of continuous learning, and (h) Based on engagement and dialogue;</li> <li>○ How complaints and grievances will be filed, acknowledged, investigated, and resolved, including general timeframes for each phase;</li> <li>○ How confidentiality of a complainant's identity will be respected, if requested;</li> <li>○ The ability to file anonymous complaints, if deemed necessary by stakeholders;</li> <li>○ The provision of assistance for those who may face barriers to using the operational-level grievance mechanism, including women, children, and marginalized or vulnerable groups;</li> <li>○ Options for recourse if an initial process does not result in satisfactory resolution or if the mechanism is inadequate or inappropriate for handling serious human rights grievances; and</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ How complaints and grievances and their resolutions will be tracked and recorded. 1.4.2.2.</li> <li>● The ESIA report and any supporting data and analyses shall be made publicly available. Detailed assessments of some issues and impacts may be reported as stand-alone documents, but the ESIA report shall review and present the results of the full analysis in an integrated manner. The operating company shall make publicly available an anonymized version of the ESIA record of stakeholder comments and its own responses, including how each comment was taken into account. The environmental and social management plan shall be made available to stakeholders upon request. Summary reports of the findings of the environmental and social monitoring program shall be made publicly available at least annually, and all data and methodologies related to the monitoring program shall be publicly available. The existence of publicly available ESIA and ESMS information, and the means of accessing it, shall be publicized by appropriate means. 2.1.10.1., 2.1.10.2, 2.1.10.3, 2.1.10.4, 2.1.10.5,</li> <li>● For new and existing mines, obtain Free, Prior and Informed Consent (FPIC) from indigenous peoples for proposed changes to mining-related activities that may result in new or increased impacts on indigenous peoples' rights or interests. 2.2.2.3.</li> <li>● Obtain and maintain broad community support, which shall be determined based on the opportunity for meaningful input by all potentially affected community members, including women, vulnerable groups and marginalized members, prior to any decision or resolution. 2.3.2.1., 2.3.2.2.</li> <li>● The operating company, in collaboration with affected communities and other relevant stakeholders (including workers and local government), shall develop a participatory planning process to guide a company's contributions to community development initiatives and benefits in affected communities. When planning and delivering community benefits, design the planning process to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency. Make efforts to develop initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups). 2.3.3.1., 2.3.3.2., 2.3.3.4.</li> </ul>
<ul style="list-style-type: none"> <li>● Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements. 16.10.</li> <li>● Promote and enforce non-discriminatory laws and policies for sustainable development. 16.b.</li> </ul>	<ul style="list-style-type: none"> <li>● The operating company shall comply with all applicable host country laws in relation to the mining project. 1.1.1.1.</li> <li>● The operating company shall adopt a policy commitment that includes an acknowledgement of its responsibility to respect all internationally recognized human rights. The policy shall: <ul style="list-style-type: none"> <li>○ Be approved at the most senior level of the company;</li> <li>○ Be informed by relevant internal and/or external expertise;</li> <li>○ Stipulate the operating company's human rights expectations of personnel, business partners and other parties directly linked to its mining project;</li> <li>○ Be publicly available and communicated internally and externally to all personnel, business partners, other relevant parties and stakeholders;</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Be reflected in the mining project's operational policies and procedures. 1.3.1.1., 1.3.1.2.</li> <li>● Mining project stakeholders shall have access to and be informed about a rights-compatible grievance mechanism and other mechanisms through which they can raise concerns and seek recourse for grievances related to human rights. 1.3.3.1.</li> <li>● The operating company shall, when responding to actual human rights impacts related to the mining project: <ul style="list-style-type: none"> <li>○ If the operating company determines that it has caused an actual human rights impact, the company shall: Cease or change the activity responsible for the impact; and In a timely manner, develop mitigation strategies and remediation in collaboration with affected rights holders. If mutually acceptable remedies cannot be found through dialogue, the operating company shall attempt to reach agreement through an independent, third-party mediator or another means mutually acceptable to affected rights holders;</li> <li>○ If the operating company determines that it has contributed to an actual human rights impact, the company shall cease or change any activities that are contributing to the impact, mitigate and remediate impacts to the extent of its contribution, use its leverage to influence other contributing parties to cease or change their activities, and mitigate and remediate the remaining impact;</li> <li>○ If the operating company determines that it is linked to an actual human rights impact through a business relationship the company shall use its leverage to prevent or mitigate the impact from continuing or recurring; and</li> <li>○ The operating company shall cooperate with other legitimate processes such as judicial or State-based investigations or proceedings related to human rights impacts that the operating company caused, contributed to, or was directly linked to through its business relationships. 1.3.3.3.</li> </ul> </li> <li>● The operating company shall respect the rights of workers to freedom of association and collective bargaining. 3.1.2.1.</li> <li>● When operating in or sourcing minerals from a conflict-affected or high-risk area, the operating company shall not knowingly or intentionally cause, contribute to or be linked to conflict or the infringement of human rights by any party, or knowingly provide direct or indirect support to non-state armed groups or their affiliates, public security forces, or private security forces who: <ul style="list-style-type: none"> <li>○ Illegally control mine sites, transportation routes and upstream actors in the supply chain;</li> <li>○ Illegally tax or extort money or minerals at point of access to mine sites, along transportation routes or at points where minerals are traded; or</li> <li>○ Illegally tax or extort intermediaries, export companies or international traders. 3.4.2.1.</li> </ul> </li> <li>● When operating in a conflict-affected or high-risk area, the operating company shall: <ul style="list-style-type: none"> <li>○ Adopt and communicate to the public and stakeholders a commitment that when operating in a conflict-affected or high-risk area the operating company will not knowingly or intentionally cause,</li> </ul> </li> </ul>
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	<p>contribute to or be linked to conflict or the infringement of human rights by any party;</p> <ul style="list-style-type: none"> <li>○ Maintain documentation on: the quantity and dates of mineral extraction; quantity and dates of minerals obtained from other sources (e.g., from ASM); locations where minerals are consolidated, traded or processed; all mining-related taxes, fees, royalties or other payments made to governmental officials for the purposes of extraction, trade, transport and export of minerals; all taxes and other payments made to public or private security forces or other armed groups; identification of all actors in the upstream supply chain; and transportation routes. This information shall be made available to downstream purchasers and auditors and to any institutionalized mechanism, regional or global, with the mandate to collect and process information on minerals from conflict-affected and high-risk areas 3.4.2.2.</li> <li>● The operating company shall adopt and make public a policy acknowledging a commitment to respect human rights in its efforts to maintain the safety and security of its mining project; and a commitment that it will not provide support to public or private security forces that have been credibly implicated in the infringement of human rights, breaches of international humanitarian law or the excessive use of force. 3.5.1.1.</li> <li>● The operating company shall have a policy and procedures in place regarding the use of force and firearms that align with the best practices expressed in United Nations Basic Principles on the Use of Force and Firearms. At minimum, the company's procedures shall require that: <ul style="list-style-type: none"> <li>○ Security personnel take all reasonable steps to exercise restraint and utilize non-violent means before resorting to the use of force;</li> <li>○ If force is used it shall not exceed what is strictly necessary, and shall be proportionate to the threat and appropriate to the situation; and</li> <li>○ Firearms shall only be used for the purpose of self-defense or the defense of others if there is an imminent threat of death or serious injury. 3.5.1.2.</li> </ul> </li> <li>● Prior to deployment of company or private security personnel, the operating company shall provide training that incorporates, at minimum, information related to ethical conduct and respect for the human rights of mine workers and affected communities, with particular reference to vulnerable groups, and the company's policy on the appropriate use of force and firearms. Initial training and refresher courses shall be mandatory for all operating company personnel involved in security, and for private security contractors that have not received equivalent training from their employers. 3.5.4.1.</li> </ul>
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## Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Goal 17 acknowledges that progress on sustainable development requires strategic partnerships between governments, the private sector, and civil society at all levels—local, national, and international—across multiple disciplines. Data-sharing, policy coherence, and

capacity-building are all areas in which increased collaboration can result in broader achievement toward all SDGs.

Mining companies are an important player in the global partnership for sustainable development. As outlined in this report and throughout the IRMA Standards, there are a wide range of opportunities for mining companies to contribute to the SDGs through promoting, implementing, and continuously improving responsible mining practices. The IRMA Standard is particularly focused on mining's impacts on affected communities and the environment where the mine operates. The IRMA Standard also includes extensive requirements for engagement and collaboration with affected communities, as well as development and implementation of plans for sharing benefits with communities. Furthermore, the Standard requires operating companies to collaborate with relevant stakeholders to identify current and potential future uses of water at the local and regional level that may be affected by the mine's water management practices, and to identify and address shared water challenges and opportunities at the local and regional levels.

Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<p><i>Systemic Issues: Policy and institutional coherence</i></p> <ul style="list-style-type: none"> <li>Enhance policy coherence for sustainable development. 17.14</li> </ul> <p><i>Systemic Issues: Data, monitoring and accountability</i></p> <ul style="list-style-type: none"> <li>Build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product and support statistical capacity-building in developing countries. 17.19</li> </ul>	<ul style="list-style-type: none"> <li>Develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.7.</li> <li>Establish a program to monitor the significant environmental and social impacts identified during or after the ESIA process. 2.1.8.</li> <li>Plan and deliver community benefits 2.3.3.</li> <li>Make efforts to develop local procurement opportunities; initiatives that benefit a broad spectrum of the community; mechanisms that can be self-sustaining after mine closure. 2.3.3.4.</li> <li>Prepare, prior to commencement of mine construction activities, a reclamation and closure plan that is compatible with the protection of human health and the environment. 2.6.2.1.</li> <li>Ensure that financial surety for mine closure is in place before ground disturbance begins. 2.6.4.1., 2.6.4.2.</li> <li>The operating company shall adopt and make public a policy acknowledging a commitment to respect human rights in its efforts to maintain the safety and security of its mining project; and a commitment that it will not provide support to public or private security forces that have been credibly implicated in the infringement of human rights, breaches of international humanitarian law or the excessive use of force. 3.5.1.1.</li> <li>Emergency preparedness and response plans or emergency action plans related to catastrophic failure of mine waste facilities shall be discussed and prepared in consultation with potentially affected communities and workers and/or workers' representatives, and in collaboration with first responders and relevant government agencies. Emergency and evacuation drills (desktop and live) related to catastrophic failure of mine waste facilities shall be held on a regular basis. 4.1.7.2., 4.1.7.3.</li> <li>The operating company or its corporate owner shall develop and maintain a greenhouse gas (GHG) or equivalent policy that commits the company to identify and measure GHG emissions from the mining</li> </ul>

	<p>project; identify energy efficiency and greenhouse gas reduction opportunities across the mining project; set meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and review the policy at least every five years and revise as needed. 4.5.1.1.</p> <ul style="list-style-type: none"> <li>• The operating company shall comply with emissions quantification methods described in a widely accepted reporting standard, such as the <i>Greenhouse Gas Protocol Corporate Standard</i> or the Global Reporting Initiative's <i>GRI 305</i> emissions reporting standard. 4.5.2.1.</li> </ul>
<p><i>Capacity-building</i></p> <ul style="list-style-type: none"> <li>• Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals. 17.9.</li> <li>• Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development. 17.15.</li> </ul> <p><i>Systemic Issues: Multi-stakeholder partnerships</i></p> <ul style="list-style-type: none"> <li>• Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, particularly in developing countries. 17.16.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall comply with all applicable host country laws in relation to the mining project. 1.1.1.1.</li> <li>• The operating company shall offer to collaborate with stakeholders from affected communities to assess their capacity to effectively engage in consultations, studies, assessments, and the development of mitigation, monitoring and community development strategies. Where capacity gaps are identified, the operating company shall offer appropriate assistance to facilitate effective stakeholder engagement. 1.2.3.1.</li> <li>• The operating company, in collaboration with affected communities and other relevant stakeholders (including workers and local government), shall develop a participatory planning process to guide a company's contributions to community development initiatives and benefits in affected communities. The planning process shall be designed to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency. 2.3.3.1., 2.3.3.2.</li> <li>• The operating company shall publicly commit to: Maintaining or improving the health, social and economic wellbeing of affected communities; and Developing a mining project only if it gains and maintains broad community support. 2.3.1.1.</li> <li>• The operating company shall identify water users, water rights holders and other stakeholders that may potentially affect or be affected by its mine water management practices. The operating company shall conduct its own research and collaborate with relevant stakeholders to identify current and potential future uses of water at the local and regional level that may be affected by the mine's water management practices. The operating company shall conduct its own research and collaborate with relevant stakeholders to identify and address shared water challenges and opportunities at the local and regional levels, and shall take steps to contribute positively to local and regional water stewardship outcomes. 4.2.1.1., 4.2.1.2., 4.2.1.3.</li> </ul>

### C. Areas of Medium Alignment

The comparison of the IRMA Standard and the SDGs showed a medium level of alignment with 7 SDGs: Goal 1 (End poverty in all its forms everywhere); Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all); Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; Goal

Goal 10 (Reduce inequality within and among countries); Goal 11 (Make cities and human settlements inclusive, safe, resilient and sustainable); Goal 12 (Ensure sustainable consumption and production patterns); and Goal 13 (Take urgent action to combat climate change and its impacts).

## Goal 1: End poverty in all its forms everywhere

Goal 1 and its targets call for universal eradication of extreme poverty, increasing the resilience of those living in poverty, and reducing their exposure to extreme climate-related events and economic, social, and environmental disasters. Poverty alleviation includes implementing nationally appropriate social protection systems and ensuring the most vulnerable have equal access to economic resources such as basic services, land ownership, natural resources, advanced technology, and financial services.

While governments must lead the overall fight against poverty, mining companies play a key role on many levels toward realizing this goal. The IRMA Standard requires mining companies to pay living wages or better. Under the IRMA Standard, mining companies must also commit to improve community health as well as social and economic well-being of affected communities.

Progress towards this goal and many other SDGs may be accomplished as part of the company's obligation under the IRMA Standard to plan and deliver community benefits.

Goal 1: End poverty in all its forms everywhere	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Eradicate extreme poverty for all people everywhere, defined as people living on less than \$1.25 a day. 1.1.</li> <li>• Reduce at least by half the proportion of men, women and children of all ages living in poverty according to national definitions. 1.2.</li> </ul>	<ul style="list-style-type: none"> <li>• Pay wages that meet or exceed living wages. 3.1.9.1.</li> </ul>
<ul style="list-style-type: none"> <li>• Implement nationally appropriate social protection systems and achieve substantial coverage of the poor and the vulnerable. 1.3.</li> <li>• Ensure that all men and women, particularly the poor and vulnerable, have equal rights to economic resources as well as access to basic services, land and property ownership, inheritance, natural resources, new</li> </ul>	<ul style="list-style-type: none"> <li>• Improve the health, social and economic wellbeing of affected communities. 2.3.1.1.a.</li> <li>• Plan and deliver community benefits. 2.3.3.</li> <li>• In the case of physical displacement the operating company shall develop a Resettlement Action Plan. If the project involved economic displacement only, a Livelihood Restoration Program shall be developed. In these plans, strategies to mitigate the negative impacts of displacement and improve or restore livelihoods and standards of living of displaced people must pay particular attention to the needs of women, the poor and vulnerable groups. 2.4.3.3.</li> </ul>

technology, and financial services. 1.4.	
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#### Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 4 calls for free and equitable primary education to all boys and girls by 2030, including early childhood development, and equal access for women and men to technical, vocational, and advanced education. The goal aims to substantially increase the number of young people and adults who have relevant skills for employment, decent jobs, and entrepreneurship. Goal 4 also calls for elimination of gender disparity in education, building and upgrading learning institutions, expanding scholarships to developing countries, and increasing the number of qualified teachers and instructors.

The mining sector provides a wide range of opportunities to advance education, capacity-building, and training. The IRMA Standard requires education and training programs related to work assignments and health and safety matters. The Standard also requires education and capacity building as part of engagement and consultation criteria, as well as in planning for community development and benefit sharing mechanisms that can survive mine closure.

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university. 4.3.</li> <li>• By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship. 4.4.</li> </ul>	<ul style="list-style-type: none"> <li>• Providing, at no cost to workers, education and training/retraining programs and comprehensible instructions on the work assigned and on safety and health matters. 3.2.4.1.d.</li> </ul>



<ul style="list-style-type: none"> <li>• By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development. 4.7.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall offer to collaborate with stakeholders from affected communities to assess their capacity to effectively engage in consultations, studies, assessments, and the development of mitigation, monitoring and community development strategies. Where capacity gaps are identified, the operating company shall offer appropriate assistance to facilitate effective stakeholder engagement. 1.2.3.1.</li> <li>• Identify if there are capacity issues that may prevent full and informed participation of indigenous peoples. If issues are identified, the operating company shall provide funding or facilitate other means to enable indigenous peoples to address capacity issues in their preferred manner. 2.2.3.2.d.</li> <li>• [Community development and benefit sharing] mechanisms that can be self-sustaining after mine closure (including the building of community capacity to oversee and sustain any projects or initiatives agreed upon through negotiations). 2.3.3.4.c.</li> </ul>
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## Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 9 promotes the development of sustainable and resilient infrastructure to support economic development and human well-being. It encourages inclusive and sustainable industrialization, including increasing manufacturing employment as a proportion of GDP. Infrastructure should be upgraded and retrofitted to become sustainable, including adopting clean and environmentally sound technologies.

The IRMA Standard requires Environmental and Social Impact Assessment, management of environmental and social risks and impacts throughout the life of the mine, reclamation, and mine closure—a framework that supports reliable, sustainable infrastructure. Requirements for financial surety support implementation of mine closure plans. The Standard promotes energy efficiency and reduction of greenhouse gas emissions. Furthermore, the Standard supports collaboration between large-scale mines and artisanal and small-scale mining (ASM) entities, where possible, which can support integration of ASM into value chains and markets.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Develop quality, reliable, sustainable and resilient infrastructure to support economic development and human well-being, with a focus on affordable and equitable access for all. 9.1.</li> <li>• Promote inclusive and sustainable industrialization and significantly raise industry's</li> </ul>	<ul style="list-style-type: none"> <li>• An Environmental and Social Impact Assessment (ESIA), appropriate to the nature and scale of the proposed mining project and commensurate with the level of its environmental and social risks and impacts, shall be completed prior to the commencement of any site-disturbing operations associated with the project. The operating company shall develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.1.1., 2.1.7.1</li> <li>• Prepare, prior to commencement of mine construction activities, a reclamation and closure plan that is compatible with the protection of human health and the environment. 2.6.2.1.</li> </ul>

<p>share of employment and GDP. 9.2.</p>	<ul style="list-style-type: none"> <li>• Ensure that financial surety for mine closure is in place before ground disturbance begins. 2.6.4.1., 2.6.4.2.</li> <li>• The operating company shall carry out a scoping exercise to identify significant potential risks and impacts to community health and safety from mining-related activities. At minimum, the following sources of potential risks and impacts to community health and/or safety shall be considered: <ul style="list-style-type: none"> <li>○ General mining operations;</li> <li>○ Operation of mine-related equipment or vehicles on public roads;</li> <li>○ Operational accidents;</li> <li>○ Failure of structural elements such as tailings dams, impoundments, waste rock dumps (see also IRMA Chapter 4.1);</li> <li>○ Mining-related impacts on priority ecosystem services;</li> <li>○ Mining-related effects on community demographics, including in-migration of mine workers and others;</li> <li>○ Mining-related impacts on availability of services;</li> <li>○ Hazardous materials and substances that may be released as a result of mining-related activities; and</li> <li>○ Increased prevalence of water-borne, water-based, water-related, and vector-borne diseases, and communicable and sexually transmitted diseases (e.g., HIV/AIDs, tuberculosis, malaria, Ebola virus disease or others) that could occur as a result of the mining project. 3.3.1.1.</li> </ul> </li> <li>• A mining project with a mercury emission control system shall perform a mercury mass balance that assesses and document the amount of mercury in waste rock and ore, and the amount of mercury during or after processing that is released into air and water; produced as a by-product; and resident in tailings ponds, waste rock dumps and other mine waste facilities. For each mining project with a source of mercury air emissions a mercury monitoring plan shall be developed. 4.8.1, 4.8.3.1.</li> </ul>
<ul style="list-style-type: none"> <li>• Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes. 9.4.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company or its corporate owner shall develop and maintain a greenhouse gas or equivalent policy that commits the company to: <ul style="list-style-type: none"> <li>○ Identifying and measuring greenhouse gas emissions from the mining project;</li> <li>○ Identifying energy efficiency and greenhouse gas reduction opportunities across the mining project;</li> <li>○ Setting meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and</li> <li>○ Reviewing the policy at least every five years and revising as needed, such as if there are significant changes to mining-related activities, new technologies become available, or there are newly identified opportunities for reductions. 4.5.1.1.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their</li> </ul>	<ul style="list-style-type: none"> <li>• When a large-scale mine sources minerals from or has other commercial relationships with ASM entities, the operating company shall: <ul style="list-style-type: none"> <li>○ Regularly assess the social and environmental risks and impacts related to the ASM entities with whom it has a commercial relationship;</li> </ul> </li> </ul>

integration into value chains and markets. 9.3.	<ul style="list-style-type: none"> <li>○ Collaborate with those ASM entities with whom it can legally and legitimately engage to develop and implement a plan to eliminate or mitigate the most significant risks, and over time, address other social and environmental risks related to those ASM operations; and</li> <li>○ Periodically monitor the effectiveness of mitigation strategies, and adapt plans as necessary to facilitate continued minimization of risks. 3.6.4.1.</li> </ul>
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## Goal 10: Reduce inequality within and among countries

Goal 10 promotes the sustained income growth of the bottom 40 percent of the population. It calls for the empowerment and social, economic, and political inclusion of all, regardless of age, sex, disability, race, ethnicity, origin, religion, economic, or other status.

The IRMA Standard promotes social inclusion in engagement and planning processes. This is particularly demonstrated in requirements for planning community development initiatives and benefits, which by design must include both men and women, as well as vulnerable groups and traditionally marginalized community members, such as children, youth, the elderly, or their representatives. The Standard requires mining companies to pay living wages or better, and uphold labor, indigenous, and human rights standards.

Goal 10: Reduce inequality within and among countries	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average. 10.1.</li> <li>• Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality. 10.4.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall pay wages to workers that meet or exceed the higher of applicable legal minimum wages, wages agreed through collective wage agreements, or a living wage. 3.1.9.1.</li> <li>• Efforts shall be made to develop: <ul style="list-style-type: none"> <li>○ Local procurement opportunities;</li> <li>○ Initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups); and</li> <li>○ Mechanisms that can be self-sustaining after mine closure (including the building of community capacity to oversee and sustain any projects or initiatives agreed upon through negotiations). 2.3.3.4.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. 10.2.</li> <li>• Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action. 10.3.</li> </ul>	<ul style="list-style-type: none"> <li>• Consult with stakeholders to design engagement processes that are accessible, inclusive and culturally appropriate, and make continuous efforts to understand and remove barriers to engagement for affected stakeholders (especially women, marginalized and vulnerable groups). 1.2.1.3.</li> <li>• The operating company shall adopt a policy commitment that includes an acknowledgement of its responsibility to respect all internationally recognized human rights. 1.3.1.1.</li> <li>• The operating company shall have a publicly available policy that includes a statement of the company's respect for indigenous peoples' rights, as set out in the United Nations Declaration on the Rights of Indigenous peoples. 2.2.1.1.</li> </ul>

	<ul style="list-style-type: none"> <li>• Obtain and maintain broad community support, which shall be determined based on the opportunity for meaningful input by all potentially affected community members, including women, vulnerable groups and marginalized members, prior to any decision or resolution. 2.3.2.1., 2.3.2.2.</li> <li>• When planning and delivering community benefits, design the planning process to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency. Make efforts to develop initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups). 2.3.3.2., 2.3.3.4.</li> <li>• The operating company shall base employment relationships on the principles of equal opportunity and fair treatment, and shall not discriminate or make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. 3.1.3.1.</li> </ul>
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### Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 11 calls for universal access to adequate and affordable housing, safe transportation, and inclusive and sustainable human settlement planning. It calls for protection of cultural heritage, reduction of impacts of environmental disasters on the populace, reduction of adverse impacts of poor air quality and other wastes, and greater access to green and public spaces. The goal also promotes increased support for development planning which incorporates resilience, mitigation, and adaptation to climate change and natural disasters.

The IRMA Standard requires protection of cultural values and cultural heritage. IRMA will not certify new mines that are developed in or adversely affect World Heritage Sites, areas on a State Party's official Tentative List for World Heritage Site Inscription; International Union for Conservation of Nature (IUCN) protected areas (categories I-III); and core areas of UN Educational, Scientific, and Cultural Organization (UNESCO) biosphere reserves, if these were designated to protect cultural values. The Standard also requires comprehensive community health and safety assessments. Furthermore, the Standard requires emergency preparedness on company and community levels, including drills and with special consideration for vulnerable groups or susceptible members of affected communities.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Strengthen efforts to protect and safeguard the world's cultural and natural heritage. 11.4.</li> </ul>	<ul style="list-style-type: none"> <li>• IRMA will not certify new mines that are developed in or that adversely affect the following protected areas if those areas were designated to protect cultural values: World Heritage Sites, and areas on a State Party's official Tentative List for World Heritage Site Inscription; International Union for Conservation of Nature (IUCN) protected area management categories I-III; and Core areas of UNESCO biosphere reserves. 3.7.5.4.</li> </ul>

	<ul style="list-style-type: none"> <li>• A cultural heritage management plan or its equivalent shall be developed that outlines the actions and mitigation measures to be implemented to protect cultural heritage. 3.7.7.1.</li> </ul>
<ul style="list-style-type: none"> <li>• Reduce the number of deaths and the number of people affected and reduce the direct economic losses caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations. 11.5.</li> <li>• Increase the number of cities and human settlements adopting and implementing integrated policies and plans toward inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and development and implement holistic disaster risk management at all levels. 11.b.</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency preparedness and response plans or emergency action plans related to catastrophic failure of mine waste facilities shall be discussed and prepared in consultation with potentially affected communities and workers and/or workers' representatives, and in collaboration with first responders and relevant government agencies. Emergency and evacuation drills (desktop and live) related to catastrophic failure of mine waste facilities shall be held on a regular basis. 4.1.7.2., 4.1.7.3.</li> <li>• The operating company shall carry out a scoping exercise to identify significant potential risks and impacts to community health and safety from mining-related activities. At minimum, the following sources of potential risks and impacts to community health and/or safety shall be considered: <ul style="list-style-type: none"> <li>○ General mining operations;</li> <li>○ Operation of mine-related equipment or vehicles on public roads;</li> <li>○ Operational accidents;</li> <li>○ Failure of structural elements such as tailings dams, impoundments, waste rock dumps (see also IRMA Chapter 4.1);</li> <li>○ Mining-related impacts on priority ecosystem services;</li> <li>○ Mining-related effects on community demographics, including in-migration of mine workers and others;</li> <li>○ Mining-related impacts on availability of services;</li> <li>○ Hazardous materials and substances that may be released as a result of mining-related activities; and</li> <li>○ Increased prevalence of water-borne, water-based, water-related, and vector-borne diseases, and communicable and sexually transmitted diseases (e.g., HIV/AIDs, tuberculosis, malaria, Ebola virus disease or others) that could occur as a result of the mining project.</li> </ul> <p>Scoping shall include an examination of risks and impacts that may occur throughout the mine life cycle (e.g., construction, operation, reclamation, mine closure and post-closure).</p> <p>Scoping shall include consideration of the differential impacts of mining activities on vulnerable groups or susceptible members of affected communities. 3.3.1.1, 3.3.1.2. 3.3.1.3.</p> </li> </ul>

## Goal 12: Ensure sustainable consumption and production patterns

Goal 12 aims to achieve the sustainable management and efficient use of natural resources. It calls for waste reduction, sound management of chemicals, the adoption of corporate sustainability practices and reporting. Developing countries should be supported in moving toward sustainable patterns of consumption and production.

The IRMA Standard promotes sustainable production and management of natural resources by requiring mining companies to assess and manage environmental and social impacts; prepare, fund and implement mine closure plans; reduce negative impacts on water quantity and quality and air quality; and eliminate waste where practicable, and otherwise minimize risks of mine

waste to human health, safety, the environment and communities. The Standard promotes local procurement and information sharing with a broad range of stakeholders.

Goal 12: Ensure sustainable consumption and production patterns	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Achieve the sustainable management and efficient use of natural resources. 12.2.</li> <li>• Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment. 12.4.</li> <li>• Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle. 12.6.</li> </ul>	<ul style="list-style-type: none"> <li>• An Environmental and Social Impact Assessment (ESIA), appropriate to the nature and scale of the proposed mining project and commensurate with the level of its environmental and social risks and impacts, shall be completed prior to the commencement of any site-disturbing operations associated with the project. The operating company shall develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.1.1., 2.1.7.1</li> <li>• The operating company shall guarantee that the cost of implementing reclamation for exploration activities related to the mining development will be met by the company. 2.6.1.1.</li> <li>• Prior to the commencement of mine construction activities the operating company shall prepare a reclamation and closure plan that is compatible with protection of human health and the environment, and demonstrates how affected areas will be returned to a stable landscape with an agreed post-mining end use. Financial surety instruments shall be in place for mine closure and post-closure. 2.6.2.1., 2.6.4.1.</li> <li>• Develop a policy for managing waste materials and mine waste facilities in a manner that eliminates, if practicable, and otherwise minimizes risks to human health, safety, the environment and communities. 4.1.1.1.</li> <li>• The operating company shall identify all existing and/or proposed mine waste facilities that have the potential to be associated with waste discharges or incidents, including catastrophic failures, that could lead to impacts on human health, safety, the environment or communities. The operating company shall perform a detailed characterization for each mine waste facility that has associated chemical risks. Characterization shall include: <ul style="list-style-type: none"> <li>○ A detailed description of the facility that includes geology, hydrogeology and hydrology, climate change projections, and all potential sources of mining impacted water (MIW); Source material characterization using industry best practice to determine potential for acid rock drainage (ARD) or metals leaching (ML). This shall include: Analysis of petrology, mineralogy, and mineralization; Identification of geochemical test units; Estimation of an appropriate number of samples for each geochemical test unit; and Performance of comprehensive geochemical testing on all samples from each geochemical test unit.</li> <li>○ A conceptual model that describes what is known about release, transport and fate of contaminants and includes all sources, pathways and receptors for each facility;</li> <li>○ Water balance and chemistry mass balance models for each facility;</li> <li>○ Identification of contaminants of concern for the facility/source materials, and the potential resources at risk from those contaminants. 4.1.3.1., 4.1.3.2.</li> </ul> </li> <li>• Identify potentially significant impacts the mining project may have on water quantity and quality, and current and future water uses; prevent</li> </ul>

	<p>and mitigate impacts to water; and develop and document a program to monitor changes in water quantity and quality. 4.2.2.2., 4.2.3., 4.2.4.</p> <ul style="list-style-type: none"> <li>• Determine if there may be significant air quality impacts associated with the mining project and its operations. If significant impacts on air quality are identified, develop, maintain and implement an air quality management plan that documents measures to avoid, and where that is not possible, minimize adverse impacts on air quality. Monitor and document ambient air quality and dust associated with the mining project. 4.3.1., 4.3.2., 4.3.3.</li> <li>• Develop and maintain a greenhouse gas (GHG) or equivalent policy that commits the company to identify and measure GHG emissions from the mining project; identify energy efficiency and greenhouse gas reduction opportunities across the mining project; set meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and review the policy at least every five years and revise as needed. 4.5.1.1.</li> </ul>
<ul style="list-style-type: none"> <li>• Promote public procurement practices that are sustainable, in accordance with national policies and priorities. 12.7.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall comply with all applicable host country laws in relation to the mining project. 1.1.1.1.</li> <li>• Efforts shall be made to develop: <ul style="list-style-type: none"> <li>○ Local procurement opportunities;</li> <li>○ Initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups); and</li> <li>○ Mechanisms that can be self-sustaining after mine closure (including the building of community capacity to oversee and sustain any projects or initiatives agreed upon through negotiations). 2.3.3.4.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature. 12.8.</li> </ul>	<ul style="list-style-type: none"> <li>• Consult with stakeholders to design engagement processes that are accessible, inclusive and culturally appropriate, and make continuous efforts to understand and remove barriers to engagement for affected stakeholders (especially women, marginalized and vulnerable groups). 1.2.1.3.</li> <li>• Stakeholder engagement shall begin prior to or during mine planning, and be ongoing, throughout the life of the mine. 1.2.2.1.</li> </ul>

### Goal 13: Take urgent action to combat climate change and its impacts

Goal 13 calls for taking coordinated, collaborative action to combat climate change and its global impacts. This includes implementing climate change strategies into all levels of policy and planning. Mining companies can help mitigate the effects of climate change by reducing their carbon footprint, engaging in dialogue with stakeholders, and ensuring the mining operations and surrounding communities are resilient to extreme weather events.

It is important to note again here that the IRMA Standard does not cover energy fuels. The IRMA Standard includes an entire chapter dedicated to mining company obligations related to Greenhouse Gas (GHG) Emissions. The Standard requires the operating company or its corporate owner to develop or maintain a greenhouse gas policy that commits the company to

identify and measure GHG emissions from the mining project; identify energy efficiency and GHG reduction opportunities across the mining project; set meaningful and achievable targets for reductions in absolute GHG emissions at the mine site level or on a corporate-wide basis; and review the policy at least every five years and revise as needed. The operating company must also set meaningful and achievable GHG reduction targets and detail actions that will be taken to achieve those targets.

Goal 13: Take urgent action to combat climate change and its impacts	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• Integrate climate change measures into national policies, strategies and planning. 13.2.</li> <li>• Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries, including focusing on women, youth and local and marginalized communities. 13.b.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company or its corporate owner shall develop and maintain a greenhouse gas (GHG) or equivalent policy that commits the company to identify and measure GHG emissions from the mining project; identify energy efficiency and greenhouse gas reduction opportunities across the mining project; set meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and review the policy at least every five years and revise as needed. 4.5.1.1.</li> <li>• The operating company shall comply with emissions quantification methods described in a widely accepted reporting standard, such as the <i>Greenhouse Gas Protocol Corporate Standard</i> or the Global Reporting Initiative's <i>GRI 305</i> emissions reporting standard. 4.5.2.1.</li> <li>• The greenhouse gas policy shall be underpinned by a plan that details the actions that will be taken to achieve the targets set out in the policy. 4.5.3.1.</li> <li>• The operating company shall demonstrate progress toward its greenhouse gas reduction targets. 4.5.3.2.</li> <li>• The operating company shall demonstrate that it has investigated greenhouse gas reduction strategies and shall document the results of its investigations. 4.5.3.3.</li> </ul>

#### D. Areas of Low Alignment

The comparison of the IRMA Standard and the SDGs showed a low level of alignment with three SDGs: Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture); Goal 7 (Ensure access to affordable, reliable, sustainable and modern energy for all); and Goal 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development).

#### Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 2 calls for an end to hunger in all forms by 2030, and an end malnutrition in all forms by 2025. This includes doubling the productivity and incomes of small-scale producers through a variety of means, as well as implementing resilient agricultural production and genetic diversity practices to combat environmental issues or disasters. Increased investment in rural



infrastructure, removing trade restrictions, and adopting measures to limit food price volatility are also key.

There are no directly related IRMA requirements on this goal. Mining companies could, however, advance progress toward Goal 2 by engaging with farmers and agricultural workers; considering agriculture and food security in impact assessment and monitoring; and as part of resettlement, local procurement, community benefit sharing, and mine closure and post-closure plans, developed with input from local stakeholders.

### Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

No directly related IRMA requirements, however the following could be avenues to advance actions toward this goal:

- The operating company, in collaboration with affected communities and other relevant stakeholders (including workers and local government), shall develop a participatory planning process to guide a company's contributions to community development initiatives and benefits in affected communities. When planning and delivering community benefits, design the planning process to ensure local participation, social inclusion (including both women and men, vulnerable groups and traditionally marginalized community members, e.g., children, youth, the elderly, or their representatives), good governance and transparency. Make efforts to develop initiatives that benefit a broad spectrum of the community (e.g., women, men, children, youth, vulnerable and traditionally marginalized groups). Make efforts to develop local procurement opportunities; initiatives that benefit a broad spectrum of the community; mechanisms that can be self-sustaining after mine closure. 2.3.3.1., 2.3.3.2., 2.3.3.4.
- Prepare, prior to commencement of mine construction activities, a reclamation and closure plan that is compatible with the protection of human health and the environment. 2.6.2.1.
- Ensure that financial surety for mine closure is in place before ground disturbance begins. 2.6.4.1., 2.6.4.2.

### Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 7 calls for universal access to affordable, reliable energy services, a substantial increase in renewable energy sources, and an increase in energy efficiency. This includes intergovernmental cooperation in research and development, cleaner fossil fuels, and expansion and upgrades to existing infrastructure, particularly in developing countries.

It is important to recognize here that the IRMA Standard does not cover energy fuels. The IRMA Standard promotes progress toward Goal 7 by requiring mining companies to develop and maintain a policy to identify and measure greenhouse gas emissions from the project, identify energy efficiency and greenhouse gas reduction opportunities across the mining project, and set meaningful and achievable targets for reduction in greenhouse gas emissions at the mine site or on a corporate-wide basis.

Mining companies can also advance progress toward Goal 7 by integrating renewable energy sources into plans for the mine and related infrastructure, community benefit sharing, and mine closure and post-mining transition.

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• By 2030, double the global rate of improvement in energy efficiency. 7.3.</li> <li>• By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology. 7.a.</li> <li>• By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries. 7.b.</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company or its corporate owner shall develop and maintain a greenhouse gas or equivalent policy that commits the company to:               <ul style="list-style-type: none"> <li>○ Identifying and measuring greenhouse gas emissions from the mining project;</li> <li>○ Identifying energy efficiency and greenhouse gas reduction opportunities across the mining project;</li> <li>○ Setting meaningful and achievable targets for reductions in absolute greenhouse gas emissions at the mine site level or on a corporate-wide basis; and</li> <li>○ Reviewing the policy at least every five years and revising as needed, such as if there are significant changes to mining-related activities, new technologies become available, or there are newly identified opportunities for reductions. 4.5.1.</li> </ul> </li> </ul>

## Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 14 aims to prevent and significantly reduce marine pollution from land-based activities; sustainably manage and protect marine and coastal ecosystems; and minimize and address the impacts of ocean acidification. The goal also calls for action to effectively regulate harvesting and prevent overfishing, eliminate illegal fishing practices, and prohibit subsidies which contribute to those issues. Increased scientific knowledge and research capacity, enhanced conservation and sustainable use of the ocean and its resources, and conservation of coastal and marine areas are also targets under Goal 14.

Mining companies may or may not operate in areas of direct impact to oceans, seas and marine resources. However, as mining increasingly moves into deep seabed areas; as climate change and related glacier retreat makes mining in new ocean areas more accessible, and as new technologies emerge that change the nature of how mining in ocean, sea, and marine areas is conducted, the potential impacts and benefits of mining toward realization of Goal 14 are likely to increase. This may become an area in which IRMA can discourage operation and refuse certifications due to the high level of risk and need to make rapid progress toward the achievement of Goal 14.

The IRMA Standard does include requirements that are relevant to Goal 14, such as requirements for operating companies to comply with all applicable host country laws, requirements for environmental and social impact assessment and related management plans, and requirements related to protection of water resources. Importantly, the IRMA Standard

also specifies that IRMA will not certify mine sites using riverine, submarine and lake disposal of mine waste materials.

Where relevant, mining companies can also incorporate impacts on fishing and marine and coastal ecosystems into impact assessment and management plans, community benefit sharing plans, and plans for mine closure and post-mining transition.

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
Most Applicable SDG Targets	Most Applicable IRMA Standards
<ul style="list-style-type: none"> <li>• By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.1</li> <li>• By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans 14.2</li> <li>• Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels 14.3</li> </ul>	<ul style="list-style-type: none"> <li>• The operating company shall comply with all applicable host country laws in relation to the mining project, 1.1.1.1.</li> <li>• Develop and maintain a system to manage environmental and social risks and impacts throughout the life of the mine. 2.1.7.</li> <li>• Establish a program to monitor the significant environmental and social impacts identified during or after the ESIA process. 2.1.8.</li> <li>• At the present time, mine sites using riverine, submarine and lake disposal of mine waste materials will not be certified by IRMA. 4.1.8.1.</li> <li>• The operating company shall identify water users, water rights holders and other stakeholders that may potentially affect or be affected by its mine water management practices. The operating company shall conduct its own research and collaborate with relevant stakeholders to identify current and potential future uses of water at the local and regional level that may be affected by the mine's water management practices. The operating company shall conduct its own research and collaborate with relevant stakeholders to identify and address shared water challenges and opportunities at the local and regional levels, and shall take steps to contribute positively to local and regional water stewardship outcomes. 4.2.1.1., 4.2.1.2., 4.2.1.3.</li> </ul>

## E. Conclusions

This report concludes that the IRMA Standard is very closely aligned with the SDGs. The IRMA Standard details numerous opportunities for mining companies to contribute to the SDGs across all of the 17 Goals.

IRMA should highlight alignment with the SDGs in its work with mining companies, businesses, and other stakeholders, to reinforce the importance of responsible mining and responsible purchasing in advancing sustainable development and achieving the 17 SDGs by 2030. Mining companies and purchasers of mined minerals are key stakeholders in the current “Decade of Action.”<sup>39</sup> The mining sector plays a pivotal role, in collaboration with governments, businesses,

<sup>39</sup> See United Nations Sustainable Development Goals, *Decade of Action*, <https://www.un.org/sustainabledevelopment/decade-of-action/#:~:text=2020%20needs%20to%20usher%20in,and%20closing%20the%20finance%20gap>. and United

civil society, and other stakeholders, in advancing and making progressive and continuous action toward the SDGs. IRMA can use this report to stimulate discussions with mining companies, business, and other stakeholders regarding the IRMA Standard and the SDGs. IRMA can also use the report to inform communications, case studies, data collection, reporting, and guidance to advance the SDGs.

While the IRMA Standard is already an incredible tool for advancing responsible mining and the SDGs, there is room for improvement. This is particularly relevant regarding Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture). Although it may not be always appropriate for mining companies to lead action on Goal 2, IRMA could provide guidance for mining companies and other stakeholders regarding engaging with farmers and agricultural workers; considering agriculture and food security in impact assessment and monitoring; and incorporating agriculture and food security as part of resettlement, local procurement, community benefit sharing, and mine closure and post-closure plans.

Likewise, alignment between the IRMA Standard and Goal 7 (Ensure access to affordable, reliable, sustainable and modern energy for all) was low. IRMA does not cover energy fuels, however, mines use substantial energy resources and also have substantial opportunities to share energy with communities. The IRMA Standard already promotes progress toward Goal 7 by requiring mining companies to develop and maintain a policy to identify and measure greenhouse gas emissions from the project, identify energy efficiency and greenhouse gas reduction opportunities across the mining project, and set meaningful and achievable targets for reduction in greenhouse gas emissions at the mine site or on a corporate-wide basis. IRMA could amplify impact by providing guidance and capacity building on the topics of energy for mines and for communities; promoting affordable, reliable, sustainable, and modern energy for both mines and communities can be a win-win. This guidance could cover strategies for integrating renewable energy sources into plans for the mine and related infrastructure, community benefit sharing, and mine closure and post-mining transition.

Alignment between the IRMA Standard and Goal 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development) was also low. The IRMA Standard, requirement 4.1.8.1. states that “At the present time, mine sites using riverine, *submarine*, and lake disposal of mine waste materials will not be certified by IRMA.” The words “At the present time,” could be removed to strengthen this requirement and to signal enduring commitment to the requirement. IRMA could also provide guidance related to Goal 14 to support rapid action. The guidance could discuss strategies such as incorporating impacts on fishing and marine and coastal ecosystems into impact assessments and management plans and mine closure and post-mining transition plans; supporting community and employee education regarding conservation of oceans, seas and marine resources; and supporting development of conservation areas and marine reserves. IRMA can also discourage operation and refuse

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Nations, *The Sustainable Development Agenda*, <https://www.un.org/sustainabledevelopment/development-agenda/>.

certifications due to the high level of risk and need to expedite progress toward the achievement of Goal 14.

Finally, IRMA should carefully consider the gaps in alignment with the 169 SDG targets, based on the tables in the Appendix to this document. These are areas where small changes to the IRMA Standard and/or methodology for IRMA audits could fill gaps, or where guidance could be produced to aid mining companies in advancing the targets and related SDGs. IRMA may also use the SDG/IRMA Alignment table on page 12 of this report to focus attention on areas where alignment with specific SDG targets may be increased from low to medium, and from medium to high.

IRMA will continue to progress responsible mining and its appropriate contributions towards achieving the SDGs. As part of this effort, IRMA has commissioned this report to inform its ongoing work and additional actions, including possibly developing a tool to provide a value-add report for companies on the SDGs. IRMA will look at gap areas and determine if future versions of the Standard should include metrics that address gaps and will also consider possible guidance documents to aid mining companies in advancing the SDGs.

## Appendix: SDG/IRMA Comparison Tables

Areas of high alignment are shaded in green, areas of medium alignment are shared in yellow, and areas of low alignment are shaded in gray.

### Goal 1: End poverty in all its forms everywhere

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
1	End poverty in all its forms everywhere	Obtaining Community Support and Delivering Benefits, Resettlement, Fair Labor and Terms of Work, Waste and Materials Management	2.3, 2.4, 3.1, 4.1	2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 3.1.9, 4.1.3, 4.1.7
1.1	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	Fair Labor and Terms of Work	3.1	3.1.9
1.2	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Fair Labor and Terms of Work	3.1	3.1.9
1.3	Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	Obtaining Community Support and Delivering Benefits, Resettlement	2.3, 2.4	2.3.1, 2.3.3, 2.4.3
1.4	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	Obtaining Community Support and Delivering Benefits, Resettlement, Fair Labor and Terms of Work	2.3, 2.4, 3.1	2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 3.1.3
1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	Environmental and Social Impact Assessment and Management, Obtaining Community Support and Delivering Benefits, Mining and Conflict Affected or High Risk Areas, Waste and Materials Management	2.1, 2.3, 3.4, 4.1	2.1, 2.3.3, 3.4.3, 4.1.3, 4.1.7
1.a	Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions			

1.b	Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions	Obtaining Community Support and Delivering Benefits	2.3	2.3.2, 2.3.3
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## Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture			
2.1	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round			
2.2	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons			
2.3	By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment			
2.4	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality			
2.5	By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed			

2.a	Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries			
2.b	Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round			
2.c	Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility			

### Goal 3: Ensure healthy lives and promote well-being for all at all ages

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
3	Ensure healthy lives and promote well-being for all at all ages	Environmental and Social Impact Assessment and Management, Obtaining Community Support and Delivering Benefits, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Occupational Health and Safety, Community Health and Safety, Waste and Waste Materials Management, Air Quality, Cyanide Management, Mercury Management	2.1, 2.3, 2.5, 2.6, 3.1, 3.2, 3.3, 4.1, 4.3, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.3.1, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 4.1.1, 4.3.1, 4.3.2, 4.3.3, 4.7.1, 4.8.1, 4.8.3
3.1	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births			
3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births			
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	Community Health and Safety	3.3	3.3.1, 3.3.4



3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being			
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol			
3.6	By 2020, halve the number of global deaths and injuries from road traffic accidents			
3.7	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes			
3.8	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all			
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Environmental and Social Impact Assessment and Management, Planning and Financial Reclamation and Closure, Occupational Health and Safety, Community Health and Safety, Waste and Materials Management, Water Management, Air Quality, Cyanide Management, Mercury Management	2.1, 2.6, 3.2, 3.3, 4.1, 4.2, 4.3, 4.7, 4.8	2.1.1, 2.1.7, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.2.1, 3.2.4, 3.3.1, 3.3.2, 3.3.3, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate			
3.b	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all			

3.c	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	Obtaining Community Support and Delivering Benefits	2.3	2.3.1
3.d	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	Environmental and Social Impact Assessment and Management, Obtaining Community Support and Delivering Benefits, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Community Health and Safety, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.1, 2.3, 2.5, 2.6, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.3.1, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Community and Stakeholder Engagement, Free, Prior and Informed Consent, Obtaining Community Support and Delivering Benefits, Occupational Health and Safety	1.2, 2.2, 2.3, 3.2	1.2.3, 2.2.3, 2.3.3, 3.2.4

4.1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes			
4.2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education			
4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	Occupational Health and Safety Requirements	3.2	3.2.4
4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Occupational Health and Safety Requirements	3.2	3.2.4
4.5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations			
4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy			
4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	Community and Stakeholder Engagement; Free, Prior and Informed Consent (FPIC); Obtaining Community Support and Delivering Benefits	1.2, 2.2, 2.3	1.2.3, 2.2.3, 2.3.3
4.a	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all			
4.b	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries			
4.c	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States			

## Goal 5: Achieve gender equality and empower all women and girls

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
5	Achieve gender equality and empower all women and girls	Legal Compliance, Community and Stakeholder Engagement, Obtaining Community Support and Delivering Benefits, Fair Labor and Terms of Work Requirements	1.1, 1.2, 2.3, 3.1	1.1.1., 1.1.2, 1.2.1, 1.2.2, 2.3.2, 2.3.3, 3.1.1, 3.1.3
5.1	End all forms of discrimination against all women and girls everywhere	Fair Labor and Terms of Work Requirements	3.1	3.1.3, 3.1.10
5.2	Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	Fair Labor and Terms of Work	3.1	3.1.3, 3.1.8
5.3	Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation			
5.4	Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate			
5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	Community and Stakeholder Engagement, Obtaining Support and Delivering Benefits	1.2, 2.3	1.2.1, 1.2.2, 1.2.3, 2.3.2, 2.3.3
5.6	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conference			
5.a	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	Legal Compliance, Obtaining Community Support and Delivering Benefits, Fair Labor and Terms of Work	1.1, 2.3, 3.1	1.1.1., 1.1.2, 2.2.1, 2.2.7, 2.3.2, 2.3.3, 3.1.3, 3.1.8
5.b	Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women			
5.c	Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	Community and Stakeholder Engagement, Fair Labor and Terms of Work Requirements	1.2, 3.1	1.2.1, 1.2.2, 3.1.3, 3.1.8

## Goal 6: Ensure availability and sustainable management of water and sanitation for all

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
6	Ensure availability and sustainable management of water and sanitation for all	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Community Health and Safety, Waste and Materials Management, Water Management, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.1, 2.6, 3.3, 4.1, 4.2, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Water Management	2.1, 2.6, 4.2	2.1.1, 2.1.7, 2.6.2, 2.6.5, 2.6.6, 2.6.7, 4.2.1, 4.2.2, 4.2.3
6.2	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations			
6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Water Management	2.6, 2.6, 4.2	2.1.1, 2.1.7, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 4.2.1, 4.2.2, 4.2.3
6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	Water Management	4.2	4.2.1, 4.2.3

6.5	By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Community Health and Safety, Waste and Materials Management, Water Management, Cyanide Management, Mercury Management	2.1, 2.6, 3.3, 4.1, 4.2, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.6.2, 3.6.3, 3.6.4, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Water Management	4.2	4.2.3
6.a	By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	Planning and Financing Reclamation and Closure	2.6	2.6.6, 2.6.7
6.b	Support and strengthen the participation of local communities in improving water and sanitation management	Planning and Financing Reclamation and Closure	2.6	2.6.2

## Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
7	Ensure access to affordable, reliable, sustainable and modern energy for all	Greenhouse Gas Emissions	4.5	4.5.1
7.1	By 2030, ensure universal access to affordable, reliable and modern energy services			
7.2	By 2030, increase substantially the share of renewable energy in the global energy mix			
7.3	By 2030, double the global rate of improvement in energy efficiency		4.5	4.5.1
7.a	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	Greenhouse Gas Emissions Requirements	4.5	4.5.1

7.b	By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	Greenhouse Gas Emissions Requirements	4.5	4.5.1
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Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Human Rights Due Diligence, Complaints and Grievance Mechanism and Access to Remedy, Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Planning and Financing Reclamation and Closure, Fair Labor and Terms of Work Requirements, Occupational Health and Safety, Community Health and Safety, Artisanal and Small Scale Mining, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	1.3, 1.4, 2.1, 2.2, 2.3, 2.6, 3.1, 3.2, 3.3, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8	1.2.1, 1.2.2, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.6.2, 3.6.3, 3.6.4, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3,

				4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	Fair Labor and Terms of Work	3.1	3.1.9
8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors			
8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	Obtaining Community Support and Delivering Benefits	2.3, 3.1	2.3.3, 2.3.3, 3.1.2
8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead	Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Planning and Financing Reclamation and Closure, Community Health and Safety, Artisanal and Small Scale Mining, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.1, 2.2, 2.3, 2.6, 3.3, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.6.2, 3.6.3, 3.6.4, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5,



				4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Fair Labor and Terms of Work	3.1	3.1.3
8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training			
8.7	Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	Human Rights Due Diligence and Compliance Requirements, Complaints and Grievance Mechanism and Access to Remedy, Fair Labor and Terms of Work Requirements, Occupational Health and Safety	1.3, 1.4, 3.1, 3.2	1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6
8.8	Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Human Rights Due Diligence and Compliance Requirements, Complaints and Grievance Mechanism and Access to Remedy, Fair Labor and Terms of Work Requirements, Occupational Health and Safety	1.3, 1.4, 3.1, 3.2	1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6
8.9	By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products			
8.10	Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all			
8.a	Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries			
8.b	By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization			

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Planning and Designing Stakeholder Engagement Processes, Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Community Health and Safety, Mining and Conflict Affected or High Risk Areas, Security Arrangements, Artisanal and Small Scale Mining, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Mercury Management	2.1, 2.6, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.6, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.6.2, 3.6.3, 3.6.4, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.8.1, 4.8.3
9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Community Health and Safety, Mercury Management	2.1, 2.6, 3.3, 4.8	2.1.1, 2.1.7, 2.6.2, 2.6.4, 3.3.1, 4.8.1, 4.8.3
9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Community Health and Safety, Mercury Management	2.1, 2.6, 3.3, 4.8	2.1.1, 2.1.7, 2.6.2, 2.6.4, 3.3.1, 4.8.1, 4.8.3

9.3	Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets	Artisanal and Small-Scale Mining	3.6	3.6.4
9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Environmental and Social Impact Assessment and Management, Planning and Financing Reclamation and Closure, Mining and Conflict Affected or High Risk Areas, Security Arrangements, Artisanal and Small Scale Mining, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Mercury Management	2.1, 2.6, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.6, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.6.2, 3.6.3, 3.6.4, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6
9.5	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending			
9.a	Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States			
9.b	Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities			

9.c	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020			
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## Goal 10: Reduce inequality within and among countries

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
10	Reduce inequality within and among countries	Legal Compliance, Community and Stakeholder Engagement, Complaints and Grievance Mechanism and Access to Remedy, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Fair Labor and Terms of Work	1.1, 1.2, 1.4, 2.2, 2.3, 3.1	1.1.2, 1.2.1, 1.2.2, 1.2.3, 1.4.2, 2.3.2, 2.3.3, 3.1.3
10.1	By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	Obtaining Community Support and Delivering Benefits, Fair Labor and Terms of Work	2.3, 3.1	2.3.3, 3.1.9
10.2	By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	Community and Stakeholder Engagement, Human Rights Due Diligence, Complaints and Grievance Mechanism and Access to Remedy, Free, Prior and Informed Consent (FPIC), Obtaining Support and Delivering Benefits	1.2, 1.3, 1.4, 2.2, 2.3	1.2.1, 1.2.2, 1.2.3, 1.3.1, 1.4.2, 2.3.2, 2.3.3
10.3	Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	Legal Compliance, Community and Stakeholder Engagement, Human Rights Due Diligence, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Fair Labor and Terms of Work	1.1, 1.2, 1.3, 2.2, 2.3, 3.1	1.1.2, 1.2.1, 1.3.1, 2.2.1, 2.3.2, 2.3.3, 3.1.3
10.4	Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	Obtaining Community Support and Delivering Benefits, Fair Labor and Terms of Work	2.3, 3.1	2.3.3, 3.1.9
10.5	Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations			

10.6	Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions			
10.7	Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies			
10.a	Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements			
10.b	Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes			
10.c	By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent			

## Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
11	Make cities and human settlements inclusive, safe, resilient and sustainable	Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Resettlement, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Community Health and Safety, Cultural Heritage, Waste and Materials Management, Water Management, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.1, 2.2, 2.3, 2.5, 2.6, 3.3, 3.7, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1,

				4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums			
11.2	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons			
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries			
11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Cultural Heritage	3.7	3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7
11.5	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	Planning and Financing Reclamation and Closure, Community Health and Safety, Waste and Materials Management	2.6, 3.3, 4.1	2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 4.1.7
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management			
11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities			
11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning			

11.b	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Community Health and Safety, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.1, 2.2, 2.3, 2.5, 2.6, 3.3, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
11.c	Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials			

## Goal 12: Ensure sustainable consumption and production patterns

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
12	Ensure sustainable consumption and production patterns	Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Resettlement, Emergency Preparedness and Response, Planning and Financing Reclamation	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2,

		and Closure, Fair Labor and Terms of Work Requirements, Occupational Health and Safety, Community Health and Safety, Mining and Conflict-Affected or High-Risk Areas, Security Arrangements, Artisanal and Small-Scale Mining, Cultural Heritage, Waste and Materials Management, Water Management, Air Quality, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management		2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
12.1	Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries			



12.2	By 2030, achieve the sustainable management and efficient use of natural resources	Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Resettlement, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Fair Labor and Terms of Work Requirements, Occupational Health and Safety, Community Health and Safety, Mining and Conflict Affected or High Risk Areas, Security Arrangements, Cultural Heritage, Waste and Materials Management, Water Management, Air Quality, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.6, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
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12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses			
12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	Obtaining Community Support and Delivering Benefits, Planning and Financing Reclamation and Closure, Waste and Materials Management, Water Management, Air Quality, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	2.3, 2.6, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	2.3.1, 2.6.1, 2.6.2, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	Waste and Materials Management, Water Management, Air Quality, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	Human Rights and Due Diligence Compliance Requirements, Revenue and Payments Transparency, Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Resettlement, Emergency	1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.3, 3.6, 3.7, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 4.8	1.3.5, 1.4.2, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.3.2,

		Preparedness and Response, Planning and Financing Reclamation and Closure, Community Health and Safety, Artisanal and Small Scale Mining, Cultural Heritage, Waste and Materials Management, Water Management, Air Quality, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management		2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.6.2, 3.6.3, 3.6.4, 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
12.7	Promote public procurement practices that are sustainable, in accordance with national policies and priorities	Legal Compliance, Obtaining Community Support and Delivering Benefits	1.1, 2.3	1.1.1, 1.1.2, 1.1.4, 2.3.3
12.8	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	Community and Stakeholder Engagement	1.2	1.2.1, 1.2.2
12.a	Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production			
12.b	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products			

12.c	Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities			
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### Goal 13: Take urgent action to combat climate change and its impacts

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
13	Take urgent action to combat climate change and its impacts	Greenhouse Gas Emissions	4.5	4.5.1, 4.5.2, 4.5.3, 4.5.4
13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Greenhouse Gas Emissions	4.5	4.5.1, 4.5.2, 4.5.3, 4.5.4
13.2	Integrate climate change measures into national policies, strategies and planning	Greenhouse Gas Emissions	4.5	4.5.1, 4.5.2, 4.5.3, 4.5.4
13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Greenhouse Gas Emissions	4.5	4.5.1, 4.5.2, 4.5.3, 4.5.4
13.a	Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	Greenhouse Gas Emissions	4.5	4.5.1, 4.5.2, 4.5.3, 4.5.4
13.b	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	Greenhouse Gas Emissions	4.5	4.5.1, 4.5.2, 4.5.3, 4.5.4

### Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Legal Compliance, Environmental and Social Impact Assessment and	1.1, 2.1, 4.1, 4.2	1.1.1, 1.1.2, 2.1.7, 2.1.8, 4.1.8, 4.2.1

		Management, Waste and Materials Management, Water Management		
14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	Legal Compliance, Environmental and Social Impact Assessment and Management, Waste and Materials Management, Water Management	1.1, 2.1, 4.1, 4.2	1.1.1, 2.1.7, 2.1.8, 4.1.8, 4.2.1
14.2	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	Legal Compliance, Environmental and Social Impact Assessment and Management, Waste and Materials Management, Water Management	1.1, 2.1, 4.1, 4.2	1.1.1, 2.1.7, 2.1.8, 4.1.8, 4.2.1
14.3	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	Legal Compliance, Environmental and Social Impact Assessment and Management, Waste and Materials Management, Water Management	1.1, 2.1, 4.1, 4.2	1.1.1, 2.1.7, 2.1.8, 4.1.8, 4.2.1
14.4	By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics			
14.5	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	Legal Compliance	1.1	1.1.1., 1.1.2
14.6	By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation			
14.7	By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism			

14.a	Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries			
14.b	Provide access for small-scale artisanal fishers to marine resources and markets			
14.c	Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want			

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Community and Stakeholder Engagement, Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Planning and Financing Reclamation and Closure	1.2, 2.1, 2.6, 4.6	1.2.3, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 4.6.1
15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements			
15.2	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally			
15.3	By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	Planning and Financing Reclamation and Closure	2.6	2.6.2
15.4	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	Environmental and Social Impact Assessment, Planning and Financing Reclamation and Closure	2.1, 2.6, 4.6	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8,

				2.6.2, 2.6.4, 4.6.1, 2.6.4
15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Environmental and Social Impact Assessment, Planning and Financing Reclamation and Closure	2.1, 2.6, 4.6	2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.6.2, 2.6.4, 4.6.1, 2.6.4
15.6	Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed			
15.7	Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products			
15.8	By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	Planning and Financing Reclamation and Closure	2.6	2.6.2
15.9	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts			
15.a	Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems			
15.b	Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation			
15.c	Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	Community and Stakeholder Engagement	1.2	1.2.3

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Legal Compliance, Community and Stakeholder Engagement, Human Rights and Due Diligence, Complaints and Grievance Mechanisms and Access to Remedy, Revenue and Payments Transparency, Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Resettlement, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Fair Labor and Terms of Work Requirements, Occupational Health and Safety, Community Health and Safety, Mining and Conflict-Affected or High-Risk Areas, Security Arrangements, Artisanal and Small Scale Mining, Cultural Heritage, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8	1.2.1, 1.2.2, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.6.2, 3.6.3, 3.6.4, 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1,



				4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
16.1	Significantly reduce all forms of violence and related death rates everywhere	Mining and Conflict-Affected or High-Risk Areas, Security Arrangements	3.4, 3.5	3.4.2, 3.5.1, 3.5.4
16.2	End abuse, exploitation, trafficking and all forms of violence against and torture of children	Fair Labor and Terms of Work	3.1	3.1.7, 3.1.8
16.3	Promote the rule of law at the national and international levels and ensure equal access to justice for all	Legal Compliance	1.1	1.1.1., 1.1.2. 1.1.3, 1.1.5
16.4	By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime			
16.5	Substantially reduce corruption and bribery in all their forms	Revenue and Payments Transparency	1.5	1.5.2, 1.5.4, 1.5.5
16.6	Develop effective, accountable and transparent institutions at all levels	Legal Compliance, Community and Stakeholder Engagement, Human Rights and Due Diligence Compliance Requirements, Complaints and Grievance Mechanism and Access to Remedy, Revenue and Payments Transparency, Environmental and Social Impact Assessment and Management, Free, Prior and Informed Consent (FPIC), Obtaining Community Support and Delivering Benefits, Resettlement, Emergency Preparedness and Response, Planning and Financing Reclamation and Closure, Fair Labor and Terms of Work Requirements, Occupational Health and Safety, Community Health and Safety, Artisanal and Small Scale Mining, Cultural Heritage, Waste and Materials Management, Water Management, Air Quality, Noise and Vibration, Greenhouse Gas	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8	1.1.5, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.3.1, 2.3.2, 2.3.3, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.5.1, 2.5.2, 2.5.3, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 3.1.9, 3.1.10, 3.2.1,

		Emissions, Biodiversity, Ecosystem Services and Protected Areas, Cyanide Management, Mercury Management		3.2.2, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.6.2, 3.6.3, 3.6.4, 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 3.7.6, 3.7.7, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.4.1, 4.4.2, 4.4.3, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.6.1, 4.6.2, 4.6.3, 4.6.4, 4.6.5, 4.6.6, 4.7.1, 4.7.2, 4.7.3, 4.7.4, 4.7.5, 4.8.1, 4.8.2, 4.8.3, 4.8.4
16.7	Ensure responsive, inclusive, participatory and representative decision-making at all levels	Legal Compliance, Community and Stakeholder Engagement, Human Rights and Due Diligence Compliance Requirements, Complaints and Grievance Mechanism and Access to Remedy	1.1, 1.2, 1.3, 1.4, 1.5	1.1.5, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 1.5.3
16.8	Broaden and strengthen the participation of developing countries in the institutions of global governance			
16.9	By 2030, provide legal identity for all, including birth registration			
16.10	Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	Legal Compliance, Human Rights Due Diligence, Fair Labor and Terms of Work, Mining and Conflict-Affected or High-Risk Areas	1.1, 1.3, 3.1, 3.4, 3.5	1.1.1, 1.3.1, 1.3.2, 1.3.3, 3.1.2, 3.4.2, 3.5.1, 3.5.4
16.a	Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	Mining and Conflict Affected or High Risk Areas, Security Arrangements	3.4, 3.5	3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.6, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6

16.b	Promote and enforce non-discriminatory laws and policies for sustainable development	Legal Compliance	1.1, 1.3, 3.1	1.1.1., 1.1.2, 1.1.3, 1.3.1, 1.3.2, 1.3.3, 3.1.2, 3.5.1
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## Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

No.	SDG	IRMA Chapter Name	IRMA Chapter Number	IRMA Criteria Number
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	Legal Compliance, Community and Stakeholder Engagement, Human Rights Due Diligence, Complaints and Grievance Mechanisms and Access to Remedy, Revenue and Payments Transparency, Environmental and Social Impact Assessment and Management, Obtaining Community Support and Delivering Benefits, Planning and Financing Reclamation and Closure, Security Arrangements, Waste and Materials Management, Water Management, Greenhouse Gas Emissions	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.6, 3.5, 4.1, 4.2, 4.5	1.1.1, 1.2.3, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.1.10, 2.3.1, 2.3.2, 2.3.3, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.5.1, 4.5.2, 4.5.3, 4.5.4
17.1	Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection			
17.2	Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries			
17.3	Mobilize additional financial resources for developing countries from multiple sources			
17.4	Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress			

17.5	Adopt and implement investment promotion regimes for least developed countries			
17.6	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism			
17.7	Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed			
17.8	Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology			
17.9	Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation	Legal Compliance, Community and Stakeholder Engagement, Obtaining Community Support and Delivering Benefits, Water Management	1.1, 1.2, 2.3, 4.2	1.1.1, 1.2.3, 2.3.1, 2.3.3, 4.2.1
17.10	Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda			
17.11	Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020			
17.12	Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access			
17.13	Enhance global macroeconomic stability, including through policy coordination and policy coherence			
17.14	Enhance policy coherence for sustainable development	Environmental and Social Impact Assessment and Management, Obtaining Community Support and Delivering Benefits, Planning and Financing Reclamation and Mine Closure, Security Arrangements, Waste and	2.1, 2.3, 2.6, 3.5, 4.1, 4.5	2.1.7, 2.1.8, 2.3.3, 2.6.2, 2.6.4, 3.5.1, 4.1.7, 4.5.1, 4.5.2

		Materials Management, Greenhouse Gas Emissions		
17.15	Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	Legal Compliance, Community and Stakeholder Engagement, Obtaining Community Support and Delivering Benefits, Water Management	1.1, 1.2, 2.3, 4.2	1.1.1, 1.2.3, 2.3.1, 2.3.3, 4.2.1
17.16	Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	Community and Stakeholder Engagement, Human Rights and Due Diligence Compliance Requirements, Complaints and Grievance Mechanism and Access to Remedy, Obtaining Community Support and Delivering Benefits	1.2, 1.3, 1.4, 1.5, 2.3	1.2.1, 1.2.2, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 1.5.3, 2.3.3
17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Community and Stakeholder Engagement, Human Rights and Due Diligence Compliance Requirements, Complaints and Grievance Mechanism and Access to Remedy	1.2, 1.3, 1.4, 1.5	1.2.1, 1.2.2, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 1.5.3
17.18	By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts			
17.19	By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries	Environmental and Social Impact Assessment and Management, Obtaining Community Support and Delivering Benefits, Planning and Financing Reclamation and Mine Closure, Security Arrangements, Waste and Materials Management, Greenhouse Gas Emissions	2.1, 2.3, 2.6, 3.5, 4.1, 4.5	2.1.7, 2.1.8, 2.3.3, 2.6.2, 2.6.4, 3.5.1, 4.1.7, 4.5.1, 4.5.2