

JPMORGAN CHASE & CO.

Environmental and Social Policy Framework

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I. INTRODUCTION

As a global provider of financial advisory and lending services for clients in various sectors and geographies around the world, we recognize that our business decisions have the potential to impact surrounding communities and the environment. JPMorgan Chase believes that balancing environmental and human rights issues with financial priorities is fundamental to sound risk management and a core part of corporate responsibility.

Protecting the natural systems which all life depends on while lifting people out of poverty and advancing economic development are among the greatest challenges confronting humanity. We recognize that the policies and practices we adopt today will shape not only our lives but also those of future generations. Therefore, we have designed policies that ensure environmental and human rights impacts are identified early, carefully evaluated and managed responsibly. Such policies not only promote positive environmental stewardship, but also highlight business opportunities to support investments in renewable energy, energy efficiency, sustainable water management, sustainable forestry and sustainable supply chains. Attention to environmental and social (E&S) issues helps us to better manage risk, attract and retain critical talent, develop expertise and provide clients with suggested solutions to pressing sustainability issues in their businesses.

JPMorgan Chase adopted its first comprehensive Environmental and Social Risk Policy (E&S Risk Policy) in 2005. The Sustainable Finance and Global Environmental and Social Risk Management (GESRM) teams partner closely in the implementation of the E&S Risk Policy and serve as the lead resources to the Firm on E&S issues. This Environmental and Social Policy Framework outlines the key elements of JPMorgan Chase's E&S Risk Policy, articulates the Firm's approach to key issues such as human rights, climate change, forests and biodiversity, and describes the Firm's initiatives to manage its operational footprint in a sustainable manner.

In July 2017, JPMorgan Chase announced an expansion of its comprehensive strategy to advance environmentally sustainable solutions for clients and its own operations. The Firm's updated strategic goals regarding environmental financing and energy procurement are outlined below in [Section III. B. Climate-Related Business Opportunities](#) and [Section VI. A. Global Energy and Greenhouse Gas Reductions](#). These new commitments build on JPMorgan Chase's long-term commitment to sustainability and are outlined in broader context and more detail on our [website](#).

As we refine our understanding of how sustainability issues impact our business, we will continue to integrate consideration of environmental and human rights issues into our financing decision-making processes. Maintaining the dialogue we have with stakeholders is a key part of improving our understanding and management of E&S risks in our business, and we welcome further engagement. We will also continue to train employees in each relevant Line of Business (LOB) to understand and effectively implement the E&S Risk Policy in partnership with GESRM and Sustainable Finance. Our E&S Risk Policy is subject to annual review and will be adjusted to reflect changes in our business and the context in which we operate. This Framework is an evolving document, and we will update it periodically to reflect changes in our thinking and our E&S Risk Policy.

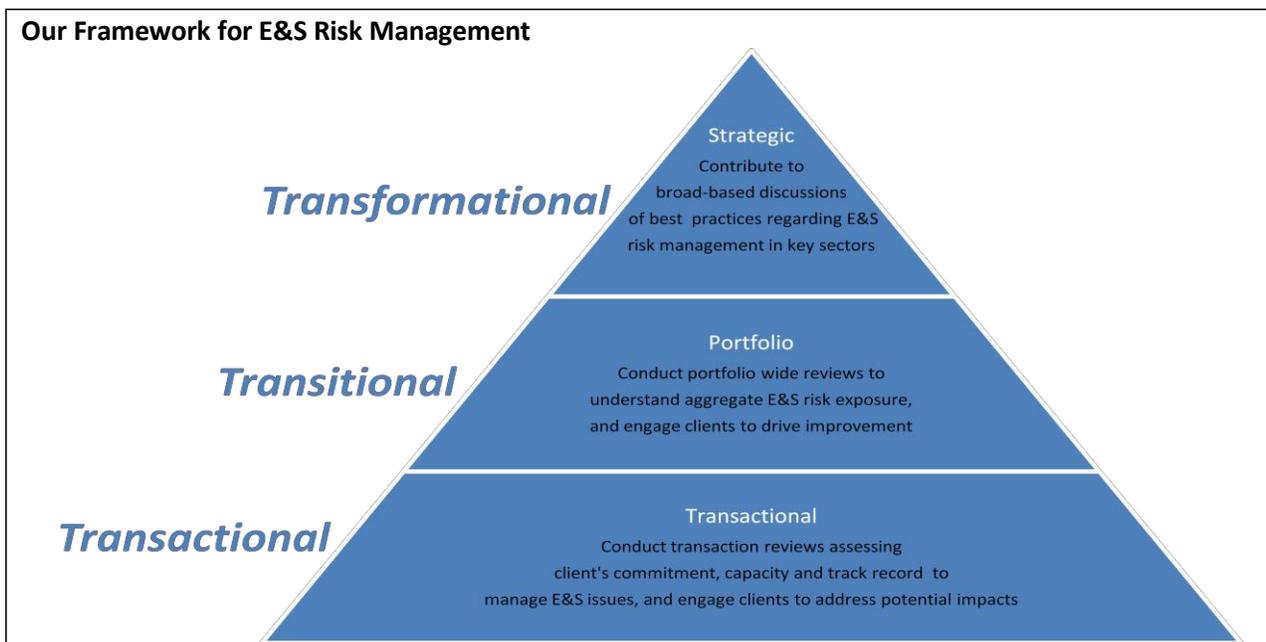
II. ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT

A. Our Approach to Risk Management

Understanding our clients' E&S performance is an important element of how we assess and manage risk. The consequences of failing to appropriately manage E&S issues can directly impact our reputation, our clients' operations and long-term economic viability, and the communities and environment in which we and our clients operate.

In 2013, JPMorgan Chase adopted a new Firm-wide policy management framework, which guides development, application and consistency of policies across the Firm. Situated within this framework is an updated E&S Risk Policy, which identifies the sectors, activities and issues that present an increased E&S risk and outlines our approach to managing those risks. The crosscutting issues of climate change, sensitive locations (areas of high biodiversity and operational complexity) and human rights are highlighted to provide the context for the E&S Risk Policy. Global Environmental and Social Risk Management (GESRM) is a dedicated team of experts principally responsible for applying the E&S Risk Policy and coordinates across the relevant LOBs to ensure successful implementation.

JPMorgan Chase has a multifaceted approach to managing the E&S risks associated with its financial products and services (as represented in the graphic below). At the transactional level, GESRM assesses a client's commitment and capacity to manage E&S issues, reviews its associated track record, and engages directly with clients to discuss performance improvements, where appropriate (See [Section II. E. Transaction Reviews](#)). The Firm also conducts sector-based portfolio reviews, which provide greater insight into our aggregate exposure to E&S risks and assist in the development of sector-based risk mitigation strategies (See [Section II. F. Portfolio Reviews](#)). A sophisticated understanding of industry practices allows us to contribute to key strategic initiatives that are aimed at promoting best practices in relevant industry sectors, which further drives more effective management of the Firm's E&S risk exposure.



B. Memberships and Commitments

JPMorgan Chase is a member of several leading organizations that address environmental and social issues in business. These include:

- [Center for Climate and Energy Solutions \(C2ES\) Business Environmental Leadership Council](#)
- [Ceres](#)
- [World Business Council for Sustainable Development](#)
- [Business and Sustainability Development Commission](#)
- [Global Impact Investing Network](#)

We adhere to a range of internationally-recognized principles of best practice to assess E&S impacts and promote responsible performance. These include:

- [The United Nations Universal Declaration of Human Rights](#)
- [The Wolfsberg Principles](#) (anti-money laundering)
- [The Equator Principles](#)
- [The Green Bond Principles](#)
- [The Extractive Industries Transparency Initiative](#)
- [Soft Commodities Compact](#)
- [United Nations Principles for Responsible Investment](#)

C. Environmental & Social Risk Policy Scope

The E&S Risk Policy applies to certain transactions in the Corporate and Investment Bank and Commercial Bank in sectors with the greatest potential for significant E&S impacts.¹ The [Equator Principles \(EP\)](#) and the [International Finance Corporation \(IFC\) Performance Standards](#) frameworks have informed the development of our E&S Risk Policy. However, our E&S Risk Policy is broader in scope. The following types of transactions are referred to GESRM irrespective of dollar amount:

- Project finance transactions (including advisory and principal investments)
- Bilateral and syndicated loans (including project-related corporate loans and bridge loans as defined under the Equator Principles)
- Equity security offerings
- Debt security offerings
- Private placements
- Advisory assignments

D. Prohibited Transactions

The following section outlines transactions that we will not finance:

- **Modern Slavery and Child Labor:** Transactions where there is evidence of modern slavery, such as forced labor and human trafficking, or child labor;

¹ These include: Mining and Metals, Oil and Gas, Power Generation, Heavy Manufacturing, Forestry & Pulp & Paper, Agriculture, Chemicals, Infrastructure, Shipping, Fishing, and Real Estate Construction and Development.

- **World Heritage Sites:** Transactions for natural resource development within UNESCO World Heritage sites, unless there is prior consensus with both the government authorities and UNESCO that such operations will not adversely affect the Outstanding Universal Value of the site;
- **Coal:** Transactions that involve asset-specific financing where the proceeds will be used to develop a new greenfield coal mine or a new coal-fired power plant in a high income OECD country.² (See Section E2b below for additional details on the firm’s approach for transactions involving coal.)
- **Illegal Logging:** Transactions with entities or projects that collude with or are knowingly engaged in illegal logging. Clients that process, purchase, or trade wood products from high risk countries (i.e., where more than 50% of the harvest is illegal) will have certifiable systems in place to ensure that the wood they process or trade comes from legal sources. Due diligence includes company representations as to its practices, monitoring and chain of custody certification (e.g., Forest Stewardship Council controlled wood standard) for illegal logging;
- **Uncontrolled Fire:** Transactions with entities or projects that lack an explicit policy against the uncontrolled and/or illegal use of fire in their forestry, plantation or extractive operations.

See also [Section IV. B. Prohibited Transactions Pertaining to Forests](#).

E. Transaction Reviews

1. Environmental and Social Review (E&S Review)

Where a transaction is within scope of our E&S Risk Policy, an E&S Review is conducted. GESRM will determine the requisite level of diligence according to a client’s sector and domicile of operations, the financial services being provided, whether the client’s operations are exposed to sensitive issues and / or sensitive locations and the nature of the underlying E&S risks. The E&S Review will assess the client’s approach to E&S risk management at the corporate level, the specific E&S impacts at the asset level (e.g., for asset specific financing), or both. The E&S Review focuses on a client’s commitment and capacity to manage the risks relevant to its activities including the company’s policy, governance, risk management and stakeholder engagement approaches. In addition, a client’s track record of E&S impact management is reviewed. An E&S Review evaluates clients against a set of sector-appropriate E&S indicators and utilizes in-house expertise and publicly available documentation (e.g., public and regulatory filings, media, and academic resources), and direct client engagement, where appropriate.

² <http://data.worldbank.org/income-level/OEC>

Equator Principles: For project finance and project-related corporate loans in any sector, we apply the [Equator Principles](#) as the framework for assessing E&S risk. The Equator Principles are based on the [Performance Standards](#) (PS) on Environmental and Social Sustainability of the IFC, and include the following key areas of review:

- PS 1: Assessment and Management of Environmental and Social Risks and Impacts
- PS 2: Labor and Working Conditions
- PS 3: Resource Efficiency and Pollution Prevention
- PS 4: Community Health, Safety, and Security
- PS 5: Land Acquisition and Involuntary Resettlement
- PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- PS 7: Indigenous Peoples
- PS 8: Cultural Heritage

JPMorgan Chase adopted the Equator Principles in 2006. In 2013, the Equator Principles' scope was expanded to include project-related corporate loans and bridge loans. The specific framework, including categorization of projects and application of standards, can be viewed on the [Equator Principles website](#).

2. Sensitive Sectors and Activities Requiring Enhanced Review

Certain sectors and activities require a tailored approach to ensure a comprehensive understanding of the transaction and associated risks. Where a client is involved in a sensitive sector, activity, location, or where we identify additional issues during a standard E&S Review, an Enhanced Review will be required. This process may entail sector/issue specific due diligence questions including a determination of whether a client holds specific sector certifications, direct client engagement, site visits and risk mitigation plans. An Enhanced Review may result in placing some conditions on certain future activities or transactions.

a. Oil and Gas

- (i) **Hydraulic fracturing:** Any transaction with a client engaged in the exploration and/or extraction of shale oil or natural gas using hydraulic fracturing is subject to Enhanced Review. This focuses on the client's management of water (including access, recycling and disposal), air emissions (including fugitive methane), well integrity and community impacts.
- (ii) **Oil sands development:** Any transaction with a client involved in oil sands development will be subject to Enhanced Review. This will focus on the client's management of water discharge, use of fresh water, impacts to biodiversity, interactions with First Nations communities, the type of technology deployed (and its environmental footprint) and the client's compliance with Canadian permitting requirements.
- (iii) **The Arctic:** The Arctic environment is unique for its remoteness from population

centers and major infrastructure, and the presence of ice conditions, permafrost and Indigenous Peoples. This uniqueness can present distinct challenges for corporate operations, particularly complexities regarding resource extraction. In recognition of the unique nature of the Arctic ecosystem and these operational complexities, transactions in the region are subject to an Enhanced Review. We define the Arctic as the Arctic lands and the Arctic Ocean with its marginal seas and adjoining water bodies prone to extensive permanent or seasonal ice cover. Each Enhanced Review will be tailored to the context and nature of the transaction and the location of a client's operations.

b. Coal

We believe the financial services sector has an important role to play as governments implement policies to combat climate change, and that the trends toward more sustainable, low-carbon economies represent growing business opportunities. While we expect our business to reflect the decline of coal as an energy source over time as a result of government policies, technology choices and innovation, we recognize that conventional energy sources will continue to form an important part of the energy mix. We will therefore continue to provide financial support to those clients whose activities remain consistent with our own internal policies and government-led efforts to achieve an orderly transition toward less carbon-intensive economies.

(i) Coal Mining:

- a. Prohibition on development of greenfield coal mines: JPMC will not provide project financing or other forms of asset-specific financing where the proceeds will be used to develop a new greenfield coal mine.
- b. Credit to coal mining companies: Over the medium term, our credit exposure to companies deriving the majority of their revenues from the extraction and sale of coal will be reduced.
- c. Credit to diversified mining and industrial companies: JPMC will apply enhanced due diligence to transactions with diversified mining and industrial companies where proceeds will be used to finance new coal production capacity.
- d. Mountaintop mining: Mountaintop mining (which includes mountaintop removal mining) is a method of removing all or a portion of a mountain or ridge to access coal seams near the surface. Coal production from mountaintop mining has declined by close to 50 percent since 2008 due to market conditions, regulations, and concerns over environmental and human health impacts. In 2013, we reduced our exposure to companies engaged in mountaintop mining. Going forward, we expect this decline to continue and exceed any decline in the overall market.

(ii) Coal-fired power generation:

- a. Prohibition on financing of new coal-fired power plants in high income OECD countries: JPMC will not provide project financing or other forms of asset-specific financing where the proceeds will be used to develop a new coal-fired power plant located in a high income OECD country.

Coal-fired power plants employing carbon capture and sequestration technology will be considered on a case-by-case basis.

- b. Technology requirement for new coal-fired power plants located outside of high income OECD countries: JPMC will not provide project financing or other forms of asset-specific financing where the proceeds will be used to develop a new coal-fired power plant located outside of high income OECD countries, unless it employs ultra-supercritical steam generation technology.
- c. Reduction in proportion of coal-fired power: JPMC expects that the proportion of coal-fired technology contained in power generation portfolios financed by the firm will continue to decline.

We will continue to apply enhanced due diligence to transactions involving coal-fired power generation and consider the type of technology, regulatory drivers, and the company's commitment, capacity and track record in managing environmental and social risks.

c. Large Hydroelectric Plants:

Transactions involving the construction of dams for hydroelectric power projects with more than 20MW of installed capacity or dams for other purposes where the dam wall is greater than 10 meters high are assessed using the International Hydropower Association Sustainability Assessment Protocol.

d. Soft Commodities

- (i) **Palm oil:** We require an Enhanced Review for transactions that involve palm oil production. The [Roundtable on Sustainable Palm Oil \(RSPO\) Principles and Criteria for Sustainable Palm Oil Production](#) is the framework for our assessments, although we are cognizant that other standards are under development. As outlined in the RSPO Principles and Criteria #5, environmental impact assessments include consideration of impacts on soil and water resources, air quality, GHGs, biodiversity and ecosystems, and local communities. Stakeholder consultation has a key role in identifying environmental impacts, and our Enhanced Review will assess the client's level of attention to these issues.

JPMorgan Chase acknowledges that the RSPO framework has been criticized on the basis that the rigor applied to the certification process is insufficient in some territories and that, according to certain constituents, the RSPO Principles and Criteria do not adequately address all the relevant E&S issues. Notwithstanding,

JPMorgan Chase will continue to use RSPO as a reference point for good E&S practice in conducting due diligence on clients and transactions, while recognizing that operator certification does not necessarily equate to positive E&S outcomes.

JPMorgan Chase also recognizes the scale of the challenges faced by the governments of countries where the palm oil industry is active in enforcing legal requirements and resolving competing land use claims. We believe institutional capacity in certain jurisdictions needs to be significantly enhanced before concepts such as plantation legality can become meaningful.

It remains our view that certain operators in the palm industry have accepted the societal concerns regarding the ongoing expansion of the industry. JPMC will continue to engage, support and work with operators who can evidence that management commitment is translating into improved E&S practices on the ground, particularly with respect to 'upstream' segments of the supply chain. We will continue to monitor the sector closely and review our analytical framework to accommodate developments that can help our clients strengthen their performance.

- (ii) **Soy:** We require clients involved in soy production to conform to the Roundtable on Responsible Soy (RTRS).
- (iii) **Timber:** We prefer Forest Stewardship Council (FSC) certification when we finance forestry projects that impact high conservation value forests, unless a comparable assessment process underpins a conservation plan. For operations that are not already certified, we require certification within five years and will introduce operators to credible experts who can help establish a rigorous, time-bound, step-wise approach to achieve this goal. We periodically review the merits of the different internationally accepted forestry certification standards to better understand evolving best practices.

See also [Section IV. A. Transactions Pertaining to Forests and Enhanced Review](#).

3. Escalation Process

GESRM may escalate any transaction to the relevant LOB Reputation Risk Committee to address residual reputation risk. The Firm has LOB-specific Reputation Risk Guidelines & Procedures describing the process for escalating reputation risk issues within each LOB. Where appropriate, matters may be escalated from the relevant Reputation Risk Committee up to and including the Firm-wide Risk Committee.

F. Portfolio Reviews

The set of relationships the Firm has with clients in a given sector constitutes a sector portfolio. In addition to reviewing specific transactions within a given sector, we have expanded our risk management approach to include portfolio-wide reviews of companies engaged in certain industries. We undertake these reviews where the Firm has significant financial exposure, and there are particular activities which may present an increased level of E&S risk. In addition to industry-specific considerations, we examine client management of

impacts on air quality, water, biodiversity, GHG emissions, worker safety, labor, and community relations.

Portfolio reviews provide greater insight into how our clients comparatively manage E&S challenges and enhance our decision-making during transaction reviews. In addition, the portfolio reviews provide a mechanism for proactive engagement with our clients, independent of the timeline and context of a transaction review process. This allows for a deeper and broader dialogue around their E&S risks and a collaborative approach to identify solutions. We have conducted portfolio reviews of our mining, power, and oil and gas clients, including a separate review of those oil and gas clients engaged in horizontal drilling and hydraulic fracturing. We will consider future portfolio reviews as circumstances warrant.

Portfolio Review of Clients Employing Hydraulic Fracturing of North American Shale: As one of the largest financiers of the oil and gas sector, we see both a need to thoroughly understand the environmental and community risks associated with unconventional oil and gas development, and an opportunity to identify best practices and raise the performance bar across the sector more broadly. As a result, in 2012, we launched a major effort to consult with our clients, academic and technical experts, nongovernmental organizations, local and national government agencies, investors and a range of other stakeholders to conduct an in-depth assessment of E&S risks associated with unconventional oil and gas development. We have shared our risk assessment framework with other financial institutions to help facilitate a robust, consistent approach to identifying and managing risk across the sector and are continuing to engage in dialogue with organizations working to promote best practices in oil and gas development.

III. CLIMATE CHANGE

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) concludes that it is extremely likely that human activity, principally the burning of fossil fuels and deforestation, has been the dominant cause of observed warming since the mid-20th century. Analysis from the International Energy Agency (IEA) estimates that, without widespread carbon sequestration, no more than one-third of the world's proven fossil fuel reserves can be consumed prior to 2050 in order to avoid a rise in global average temperatures of more than 2°Celsius—the level the IPCC states will trigger extreme and irreversible impacts on human and natural systems.³ This conclusion was supported by the 2015 UN Climate Change Conference (COP 21) Paris Agreement, which commits 188 signatory nations to lowering greenhouse gas (GHG) emissions and to pursuing efforts to limit the global average temperature from rising more than 1.5°C.

This global consensus provides a critical challenge to governments, companies, and consumers globally with respect to how the world produces and consumes energy as well as underscoring the need to manage the physical risks associated with the impacts of more severe and unpredictable weather – outcomes that are predicted if global GHG emissions continue to rise. Absent significant breakthroughs in commercializing large-scale, cost-effective carbon sequestration, the IEA estimates that the world will need to reduce its reliance on the most carbon-intensive fossil fuels, while significantly increasing levels of energy efficiency, renewable energy and other forms of low-carbon energy such as natural gas to achieve needed reductions in GHG emissions.

A. Perspective on Climate Policy

JPMorgan Chase recognizes that climate change poses global challenges and risks. An effective approach to climate change requires broad leadership and cooperation from governments to implement sensible policies that balance the need to reduce GHG emissions with the importance of promoting economic growth and social development.

Government needs to take the lead in sending clear and timely signals to business that incentivize innovation and investment in low-carbon and energy efficient technologies, while ensuring GHG reductions are achieved as cost-effectively as possible. Private sector efforts, including our own, have been successful in implementing GHG reduction and energy efficiency measures, and pursuing other business initiatives that help to address climate change. However, without economy-wide signals from the public sector, it will be challenging to make meaningful progress on global GHG emission reductions.

As a global financial firm, we work with clients in many different countries and sectors around the world. Our clients are continually innovating and developing new products and solutions in response to changing consumer preferences and needs, market trends, and regulatory frameworks. Our business reflects, and evolves with, the capital raising and financing needs of our clients. We expect it will continue to do so as global economies adapt to and address the climate challenge.

³ International Energy Agency, World Energy Outlook 2013, p.435

B. Climate-Related Business Opportunities

JPMorgan Chase is well-positioned to leverage its financial capabilities to assist companies seeking to deploy technologies that help to reduce GHG emissions and strengthen resilience and adaptation to climate change. The Firm is committed to facilitating \$200 billion in clean financing through 2025, the majority of which will support climate-related business opportunities. To support this commitment we have a range of efforts in place or under development across our lines of business:

- **Corporate & Investment Bank (CIB):** J.P. Morgan provides mergers & acquisitions advisory, equity private placement, capital markets execution and commercial banking services for global clients involved in renewable energy, waste-to-energy, smart grid, electric vehicles, building and home area networking, and energy storage technologies. As a leading financier of wind and solar, J.P. Morgan has best-in-class expertise in structuring and closing innovative transactions to monetize tax credit provisions, which play a significant role in driving renewable energy development in the United States.

J.P. Morgan's Global Commodities Group also offers a range of commodity services including price risk management, strategic hedging, project and structured finance for natural gas, biofuels, renewable energy, and related commodities.

JPMorgan Chase was a lead author of the Green Bond Principles (GBP), voluntary process guidelines for issuers of Green Bonds. The GBP were issued in early 2014 and promote transparency, disclosure and integrity in the development of the Green Bond market. The GBP are intended for broad use by the market. They provide guidance for issuers on the key components involved in launching a credible Green Bond, aid investors by ensuring availability of information necessary to evaluate the environmental impact of their Green Bond investments, and assist underwriters by moving the market towards standard disclosures which will facilitate transactions. JPMorgan Chase serves on the Executive Committee for the ongoing review and management of the [Green Bond Principles](#), now housed at the International Capital Markets Association (ICMA).

- **Commercial Banking (CB):** Commercial Banking provides financing to public sector clients such as local governments, universities and hospitals, to make their buildings more energy efficient. In addition to continuing these efforts, we will pursue opportunities to develop new, or extend existing products, to financing for energy efficiency retrofits and distributed energy (e.g., solar PV and combined heat and power) in the commercial and industrial sectors. We will also continue financing and investing in real estate projects that integrate green building strategies in their design process, construction and operations. By doing so, these projects conserve energy and natural resources, promote better health outcomes, and provide easy access to transit, jobs, schools, and services.
- **Consumer and Community Banking (CCB):** We work to identify opportunities to embed consumer education on energy efficiency into our product marketing materials. For example, in 2012 we launched an initiative, in partnership with the New York State Energy Research and Development Authority, to educate our home equity line of credit customers on ways to improve home energy efficiency.

C. Climate Change in Transaction and Portfolio Reviews

The Firm's E&S Risk Policy governs efforts across the CIB and the CB to assess climate-related policy, economic and social risks in the context of transaction reviews. Both our transaction and our portfolio reviews seek to better understand (i) how our clients manage their contributions to climate change (e.g., the control of fugitive methane by oil and gas producers), and (ii) consider how clients manage climate change related risk factors (e.g., access to fresh water).

Under the scope of the Equator Principles, all projects expected to emit over 100,000 metric tons of CO₂ equivalent annually must undergo an analysis of alternatives, including less carbon-intensive fuel sources and technologies. Borrowers must also report publicly on emissions during the operational phase of a project. In addition, projects that are subject to the International Finance Corporation's Performance Standards and Environmental, Health and Safety Guidelines are also required to address climate considerations incorporated within these standards.

D. Thought Leadership on Climate-Related Risks

We engage with our peers and civil society in the ongoing dialogue about climate-related risks. In 2016, JPMC served on the Financial Stability Board's [Task Force on Climate-related Financial Disclosures](#) (TCFD), which has developed recommendations for the voluntary disclosure of information pertaining to the financial impacts of climate change. The TCFD recommendations are an important step in promoting transparency around climate-related risks and opportunities. We commend the TCFD on its process and look forward to engaging as companies explore best practices for implementation.

E. Reporting and Engagement

JPMorgan Chase will publish information on our climate-related commitments, activities and operational footprint data in the annual Corporate Responsibility Report and respond to CDP's Climate Change questionnaire. In addition, as outlined in Section VII, we will convene and engage external stakeholders including clients, NGOs and other thought leaders to periodically discuss our climate related initiatives, best practices and relevant policy and scientific developments.

IV. FORESTS AND BIODIVERSITY

Forests are home to more than half of all terrestrial species and support the livelihoods of millions of people. They are sources of food, medicine, lumber, tourism, recreation and aesthetic benefits. They sequester carbon, cleanse water and cycle nutrients. In spite of their critical importance, many forests around the world are under threat; half of the world's original forests⁴ are gone and well over 30 million acres more are lost each year.⁵ In addition, the decline in high ecological-value forests and protected areas results in the loss of critical biodiversity as natural habitats are destroyed.

A. Transactions Pertaining to Forests and Enhanced Review

Transactions where we are able to identify that the client has operations in one of the following locations, or transactions where the use of proceeds is designated for assets to be developed in one of the following locations, will be subject to Enhanced Review (See [Section II. E. Transaction Reviews](#)):

- **Internationally recognized areas:** Internationally recognized areas are defined as UNESCO Natural World Heritage Sites, UNESCO Man and the Biosphere Reserves, Key Biodiversity Areas, and wetlands designated under the Convention on Wetlands of International Importance (the Ramsar Convention).
- **Legally protected areas:** Legally protected areas are clearly defined geographical space that is recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. This covers the IUCN categories I-VI.
- **Critical habitats:** Critical habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes.
- **High conservation value forests:** High conservation value forests are defined as areas of forest or other vegetation types that have particular importance for social or environmental reasons, including: species diversity, contribution to landscape-level mosaics of ecosystems and habitats, critical ecosystem services, community needs and cultural values. When we finance forestry projects that impact high conservation value forests, we prefer FSC⁶ certification, unless a comparable assessment process underpins a conservation plan. For operations that are not already certified, we will introduce operators to credible experts who can help establish a rigorous, time-bound, step-wise approach to achieve certification within five years. We periodically review the merits of the different internationally-accepted forestry certification standards to stay abreast of evolving best practices.

⁴ <http://www.un.org/earthwatch/forests/forestloss.html>

⁵ <http://www.un.org/en/development/desa/news/forest/reforestation-the-easiest.html>

⁶ The Forest Stewardship Council (FSC) is an international organization that sets standards to ensure forestry is practiced in an environmentally responsible, socially beneficial, and economically viable way. It is one of the most stringent forest certification programs and its standards protect streams, conserve endangered forests and species habitat, and require the consent of indigenous communities. There are other forest stewardship certification schemes which provide assurance that timber is produced legally and comes from broadly sustainable sources.

B. Prohibited Transactions Pertaining to Forests

In addition to the prohibited transactions outlined above in [Section II. D](#), as part of our implementation of the Equator Principles:

- JPMorgan Chase will not finance commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests. Any other type of transaction in a primary tropical moist forest will be subject to Enhanced Review.
- JPMorgan Chase will finance plantations only on non-forested areas (including previously planted areas) or on heavily degraded forestland.

C. Opportunities to Invest in Nature

There is an urgent need to step up the scale and creativity of financial resources dedicated to the protection of natural ecosystems and the cities and communities that rely on them for clean water, clean air and quality of life. In 2014, JPMorgan Chase provided founding sponsorship for [NatureVest](#), an initiative of The Nature Conservancy designed to attract investment capital to conservation. NatureVest serves as a platform for research, convening, and transaction development in the growing impact investment sector as investors increasingly seek positive environmental and social outcomes alongside financial returns.

The Sustainable Finance group also supports the market for investments intended to create positive social or environmental impact. The group partners with the business and clients on ESG and impact investing trends, structures, and products.

V. HUMAN RIGHTS

Across all our lines of business and in each region of the world in which we operate, JPMorgan Chase supports fundamental principles of human rights. Our respect for the protection and preservation of human rights is guided by the principles set forth in the United Nations Universal Declaration of Human Rights, as outlined in our [Human Rights Statement](#). Further, we acknowledge the Guiding Principles on Business and Human Rights (also known as the Guiding Principles) as the recognized framework for corporations to respect human rights in their own operations and through their business relationships. We are actively engaging with stakeholders, peer financial institutions and others in developing guidance on how to most appropriately apply the Guiding Principles to the financial sector.

JPMorgan Chase believes it is the role of government in each country to protect human rights. We also believe that our company has a role to play in promoting respect for human rights. We have a range of policies, procedures and training that pertain to human rights issues, including modern slavery, across our business and supply chain.

A. Indigenous Peoples

JPMorgan Chase recognizes that the identities and cultures of Indigenous Peoples are inextricably linked to the ancestral lands on which they live and the natural resources (such as fresh water or forest products) on which they depend. These lands and natural resources are often traditionally-owned or under customary use. We recognize that Indigenous Peoples, as social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population.

For transactions where we can identify that the use of proceeds may have the potential to impact Indigenous Peoples, we expect our clients to demonstrate alignment with the objectives and requirements of IFC Performance Standard 7 on Indigenous Peoples, including with respect to circumstances requiring Free, Prior and Informed Consent. These objectives include:

- Ensuring that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples;
- Anticipating and avoiding adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts;
- Promoting sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner;
- Establishing and maintaining an ongoing relationship based on informed consultation and participation with the Indigenous Peoples affected by a project throughout the project's life-cycle;
- Ensuring the Free, Prior and Informed Consent of the Affected Communities of Indigenous Peoples when the circumstances described in Performance Standard 7 are present; and
- Respecting and preserving the culture, knowledge, and practices of Indigenous Peoples.

Transactions that fall under the scope of the Equator Principles must demonstrate compliance with these requirements (See [Section II. Equator Principles](#)).

B. Modern Slavery and Child Labor

JPMorgan Chase is committed to strong business growth that is not achieved at the expense of the fundamental rights of workers to provide their service willingly. We recognize that modern slavery issues, such as forced labor and human trafficking, are a significant global challenge. The global economy has seen marked shifts in the labor migration, and we are mindful of the need to understand where the patterns and practices of labor recruitment present risk to our business.

We have a robust Environmental and Social Risk Management process that analyzes the potential social impacts of our corporate lending, advisory and capital markets transactions. The process prohibits any transactions where there is evidence of the use of modern slavery or child labor.

Once a transaction has triggered an E&S Review (See [Section II. E. Transaction Reviews](#)) by GESRM, we assess management commitment to respect human rights through a policy or recognition of international standards and a client's capacity to effectively implement such a policy with appropriate management systems or governance approaches. In particular, we look for evidence that the company is assessing compliance with its policies and procedures within its own supply chain, typically by operating an internal audit process.

In addition to our transactional review by GESRM, the Firm has a Global Anti-Money Laundering (AML) Compliance Program that includes policies, procedures and internal controls designed to comply with all applicable U.S. and international AML and counter-terrorist financing laws and regulations. As part of this program, the AML team works to help identify customers whose financial activity may show involvement in human trafficking and communicates actionable information directly to law enforcement. As a result of this work, we participated in a White House Forum to Combat Human Trafficking, alongside law enforcement.

VI. OPERATIONAL RESOURCE MANAGEMENT

As a financial institution, our direct environmental impacts stem primarily from the operation of our corporate real estate, including office buildings, bank branches, data centers and other specialty use buildings. The majority of these facilities are located in the U.S., but we also maintain offices and infrastructure to serve our clients throughout Europe, Latin America, Asia Pacific, the Middle East and Africa. We strive to manage our operations in an efficient and sustainable manner, continually look for opportunities to improve our performance, find innovative solutions to environmental challenges and engage our employees in these efforts. Our key areas of focus are:

A. Global Energy and Greenhouse Gas Reductions

JPMorgan Chase's Global Real Estate group applies best practices in energy efficiency, energy procurement, and resource management throughout our global operations to reduce energy use and GHG emissions. In 2017, the Firm committed to sourcing renewable power for 100% of its global energy needs by 2020. This commitment builds on JPMorgan Chase's long history of advancing sustainability in our business and operations, including the partnership with Current, powered by GE, to cut energy use at Chase branches. The Firm will install on-site solar power generation for bank-owned retail and commercial buildings globally as well as support the development of new renewable energy projects on the grids from which JPMorgan Chase purchases power. All GHG emissions associated with employee air travel will be offset by Verified Emission Reduction credits.

B. Paper Procurement

JPMorgan Chase believes strongly in the importance of ensuring that the paper we use is sourced from sustainably-managed forests, which provide many significant long-term benefits for the environment and local communities, including timber for paper and other wood products, ecosystem services such as clean air and water, habitat for wildlife and biodiversity, and recreation opportunities. As a result, we seek to maximize the use of paper that has been independently-certified by the Forest Stewardship Council or Sustainable Forestry Initiative. Our primary focus is on office copy-paper and customer-facing paper used in the daily operations of corporate and retail branch facilities, as well as customer-facing paper including statements and forms.

We work to use paper efficiently to meet our customers' needs. For example, our efforts to expand paperless billing options for customers and implement smart-printing methods for employees reduces costs and improves information security. This is consistent with our Firm-wide focus on efficiency, and secure and cost-effective customer service.

C. Water and Waste Management

JPMorgan Chase aims to reduce water usage throughout our corporate and retail facilities. Global Real Estate applies best practices to all sites, including new build and major building renovations, by utilizing reduced-flow fixtures and engineering whole building systems to optimize water conservation. In areas where our retail banking footprint extends into drought prone regions, we pilot and assess systems to minimize demand for landscape irrigation. In flood and storm prone areas, we will continue efforts to ensure the communities we serve are able to conduct business with us when most impacted by

changing climate conditions.

Throughout our offices and branches around the world, we integrate recycling into our programs for secure handling and destruction of sensitive paper documents. In addition, we are working to reduce non-paper waste (e.g., bottles, plastics and cans) throughout our corporate and retail sites by identifying opportunities to optimize existing recycling services, expanding such services to new locations, and exploring opportunities to expand composting services at our corporate locations with cafeterias.

D. Employee Engagement

Sustainable Finance and the Firm's Employee Engagement and Volunteerism teams support a distributed, volunteer network of employees who work to raise awareness of environmental issues and encourage participation in environmental initiatives. The Firm's Volunteer Leadership Groups help connect employees with environmental volunteer opportunities within their communities. The Firm's Service Corps program also deploys teams of top-performing employees to work on-site with non-profit partners (including those working on sustainability issues), lending their skills and expertise to help those organizations fulfill their missions.

VII. IMPLEMENTATION, ENGAGEMENT AND REPORTING

A. Resources, Training and Implementation

JPMorgan Chase will continue to train staff and provide necessary resources to ensure that environmental objectives are met and procedures, policies and standards are implemented. Training on E&S issues is provided globally to bankers whose clients operate in covered sectors and other internal constituents, such as corporate employees. A mandatory online training module covers the key elements of JPMorgan Chase's E&S Risk Policy, including the criteria that require GESRM review. Additional specialized training is provided to employees through interactive workshops that are tailored by region, product or industry (e.g., training on the updated requirements of Equator Principles III). Refresher training is provided periodically to increase awareness on E&S issues.

In addition to training, JPMorgan Chase has internal processes to ensure that relevant transactions are referred to GESRM for E&S Review. These processes also help improve familiarity with, and awareness of, policy commitments. To further engage employees on environmental and social risks and opportunities, Sustainable Finance and GESRM convene workshops and panels to enhance understanding of key issues.

Global Real Estate conducts energy management reviews to align energy and resource savings expectations with targeted savings allocated by region and facility. Monthly and quarterly energy usage and carbon emissions are reported internally via asset-level and portfolio-level dashboard tools. These tools are shared among facility and asset managers responsible for achieving energy savings at our corporate, data center and retail facilities.

Energy and resource-efficiency projects are implemented strategically so as to prioritize opportunities by cost, quantity and intensity of use, and associated GHG emissions. Projects with acceptable economics of initial investment and payback will be tracked for performance verification and replication in similar facilities throughout the global real estate portfolio.

B. Engagement

JPMorgan Chase values the perspectives of external stakeholders. Their experience and perspective often help inform our approach and improve our strategy and communications. The Sustainable Finance and GESRM teams make it a priority to regularly engage with clients, peer financial institutions, investors, policy makers, NGOs, and other sustainability thought leaders. We conduct briefings to periodically highlight specific sector related initiatives and engage in dialogue around best practice and relevant policy and scientific developments. To that end, we are a member of Ceres and work within their network of stakeholders to periodically discuss key issues and emerging trends in E&S risk management.

C. Reporting and Review

JPMorgan Chase publishes an annual Corporate Responsibility Report, which includes a discussion of the Firm's E&S risk management and operational sustainability efforts. The annual environmental and sustainability reports establish objectives and report on progress made on achieving the previous year's goals. We also respond annually to the CDP's Climate Change questionnaire. JPMorgan Chase performs periodic audits of its policies, including the E&S Risk Policy, to ensure compliance. GESRM also conducts an annual review of the E&S Policy to assess the need for any additions or changes.

VIII. GOVERNANCE STRUCTURE

The Sustainable Finance team reports to the Head of Corporate Responsibility, who is a member of the Executive Committee, and is overseen by the Public Responsibility Committee of the Board of Directors.

GESRM reports to the Chief Risk Officer for the Corporate and Investment Bank and coordinates its efforts with Sustainable Finance. See [Section II. E.3](#) for information regarding how GESRM reviews are escalated within the Firm's risk management structure.

Global Real Estate reports to the Chief Administrative Officer and collaborates with Sustainable Finance.