

CCICED Report on Gender Mainstreaming in SPS Research for the Period 2024–2025

Executive Summary

Progress has been made in mainstreaming gender equality across CCICED's 2024–2025 Special Policy Studies (SPSs), with all teams incorporating gender considerations to varying degrees through standalone sections, crosscutting analysis, or gender-responsive recommendations. SPS reports included recommendations, such as expanding women's access to green employment and social protection (SPS Climate), strengthening women's participation and benefit sharing in biodiversity governance (SPS Nature), supporting gender-responsive innovation and finance for women entrepreneurs (SPS Tech Innovation and SPS Green Finance), promoting gender equality in ocean and circular economy sectors (SPS Oceans and SPS Circular Economy), and ensuring equitable re-skilling and employment in low-carbon transitions and green development cooperation (SPS Energy Transition and SPS Green Development). The next CCICED phase in 2025–26 would benefit from further integrating gender objectives in research design, improving the collection and use of sex- and diversity-disaggregated data, and maintaining gender equality as a core priority across SPSs and High-Level Task Force work. A new monitoring, evaluation, and learning (MEL) plan introduced in 2025 will help to track progress and strengthen institutional learning on gender integration across CCICED's research cycle.

Introduction

Gender mainstreaming has been a central commitment of CCICED since 2018. To integrate gender considerations across the Special Policy Studies (SPSs), each research team receives tailored gender mainstreaming guidance at the outset of its work and at key milestones throughout the drafting process. The guidance provides an in-depth assessment of potential avenues for examining gender equality and identifies entry points for integrating equity and diversity perspectives within each research theme. CCICED also shares its *Toolkit on Gender Equality and Environmental Sustainability*, which provides practical tools for SPS teams to systematically incorporate gender equality and social equity concepts and considerations. In 2025, the CCICED Secretariat International Support Office (SISO) introduced a new monitoring, evaluation, and learning (MEL) plan to further reinforce and track progress on gender mainstreaming across all research and policy processes and ensure the teams receive adequate support.

This report presents an overview of the integration of gender perspectives in the 2024–2025 SPS research process and as part of the SPS final research papers. The report builds on previous annual reports to highlight best practices within this process and recommendations to further strengthen gender mainstreaming efforts as part of CCICED's science-policy research cycle.

Recent Developments in Gender Equality and Environmental Sustainability

Global developments in 2024 and 2025 have reinforced international commitments to gender-responsive just transitions—strengthening women's leadership and meaningful participation in climate action and highlighting the transformational potential of adaptation, mitigation, and finance efforts. Progress has been made in recognizing women both as key beneficiaries of climate finance and as vital contributors—particularly in the informal economy—to a just transition toward low-emission economies. Yet significant gaps remain. Gender perspectives and women's rights are still not consistently recognized as a foundation for addressing the climate crisis. Women's voices and leadership in designing climate solutions continue to be constrained by underrepresentation and limited decision-making power, and many countries have yet to fully integrate gender considerations into their climate action plans. Climate finance still lacks clear goals and robust accountability mechanisms to ensure gender-responsive outcomes.

A key outcome of COP 29 was the 10-year extension of the enhanced Lima Work Programme on Gender, along with the mandate to develop a new Gender Action Plan for adoption at COP 30 in Belém, Brazil. This forthcoming plan will keep gender equality high on the COP 30 agenda, with an expected focus on gender-responsive climate finance mechanisms, gender parity in climate-governance structures, and systematic collection and use of sex-disaggregated data. Recognition of the diversity of women's experiences will also be a priority as well as strengthened progress in centring Indigenous Peoples' voices in global climate action, ensuring their knowledge, rights, and leadership are integral to a just transition.²

In parallel, efforts under the Kunming-Montreal Global Biodiversity Framework (GBF) have advanced gender integration within biodiversity policy and planning. Target 23 of the GBF calls for including gender equality in the implementation of the framework through gender-responsive approaches and the full, equitable participation of women and girls at all levels of decision making. Countries are now updating their national biodiversity strategies and action plans (NBSAPs) to align with the GBF, with several countries taking steps to embed gender considerations through participatory consultations, gender assessments, and the identification of gender-responsive indicators.

Finally, China hosted the Global Summit of Women in Beijing in October 2025 to mark the 30th anniversary of the 1995 World Conference on Women. The event aims to advance the Beijing Declaration and Platform for Action and accelerate progress toward the 2030 Sustainable Development Goals on gender equality. It also released a white paper highlighting China's achievements in promoting women's development and its commitment to contributing to the global advancement of women.

CCICED's 2024–25 Special Policy Studies Gender Equality-Related Policy Recommendations

¹ UN Women, *COP29 decisions deliver gains for gender equality in climate action, but more remains to be done*, 26 November 2024, accessed 21 September 2025. https://www.unwomen.org/en/news-stories/news/2024/11/cop29-decisions-deliver-gains-for-gender-equality-in-climate-action-but-more-remains-to-be-done

² COP29: Amplifying Indigenous Voices in Climate Action – A Just Transition Must Include Indigenous Perspectives, *China Development Brief*, 30 November 2024, accessed 21 September 2025. https://chinadevelopmentbrief.org/reports/cop29-amplifying-indigenous-voices-in-climate-action-a-just-transition-must-include-indigenous-perspectives/

In 2024–2025, CCICED conducted eight SPSs focusing on four key topics: Innovation in Global Environmental Governance; National Green Governance System; Sustainable Production and Consumption; and Low-Carbon Inclusive Transition. Below are specific recommendations from each SPS report related to gender equality and social inclusion.

Task Force 1: Innovation in Global Environmental Governance

- SPS 1: Global Climate Governance and Green and Inclusive Transition: Strengthen the integration of gender within multilateral climate frameworks. Expand women's access to green employment through retraining, upskilling, and social protection measures. Support women's leadership in renewable energy and low-carbon industries. Integrate gender-responsive planning into South-South climate cooperation, including targeted support for women-led enterprises and training in clean energy technologies. Advance gender equality through China–EU collaboration in third-party countries by integrating gender equality as a criterion in climate finance, introducing gender-sensitive training, and issuing joint guidance on the social impacts of overseas investments. Ensure climate finance and cross-border investments apply gender-sensitive safeguards and equitable access to benefits.
- SPS 2: Governance System for a Harmonious Coexistence Between Humans and Nature: Strengthen inclusive participation in biodiversity governance by conducting targeted capacity building for local communities and stakeholders on sustainable land use, biodiversity conservation techniques, and ecosystem management strategies, with particular emphasis on gender equality, strengthening women's participation, and recognizing their critical roles in project implementation. Implement participatory planning, benefit-sharing mechanisms, and innovative ecological conservation models to promote community involvement in Ecological Conservation Redline (ECR) delineation and advance equitable benefit sharing.

Task Force 2: National Green Governance System

- SPS 3 Major Scientific and Technological Innovation in Green Transition: Mainstream gender equality across research and innovation systems for the green transition. Address women's underrepresentation in science, technology, engineering, and mathematics (STEM), research and development (R&D), and leadership roles by expanding access to mentorship, training, and innovation networks. Ensure women's equitable participation in technical and leadership roles in renewable energy value chains. Support gender-responsive finance and women's access to finance to strengthen their role as innovators and entrepreneurs in clean energy technologies.
- SPS 4 Green Finance for a Comprehensive Green Transformation of the Society and Economy: Consider providing additional subsidies specifically targeted at women—for example, financial institutions and governments can jointly establish dedicated green funds for women entrepreneurs or offer corresponding financing incentives to enhance the economic resilience and transition adaptability of women. Encourage financial institutions to incorporate an equitable transition into their financial products.

- SPS 5 Sustainable Blue Economy Under the Vision of Carbon Neutrality: Mainstream gender equality across sustainable ocean governance frameworks. Recognize and support women's roles across marine supply chains, from small-scale fisheries and coastal resource management to processing, aquaculture, and conservation. Ensure women's equitable access to training, finance, and leadership in blue economy sectors. Integrate sex-disaggregated data into marine economic statistics. Integrate gender metrics into national top-level policy framing and explicitly into China's next Five-Year Plan. Promote equal rights and opportunities for all—regardless of gender, functional ability, sexual orientation, age, ethnicity, or religion.
- SPS 6 Promote High-Quality Development with Circular Economy: Ensure professional and technical
 training programs for the circular economy are gender responsive. Recognize international
 frameworks and national gender strategies as central entry points for mainstreaming gender
 perspectives more explicitly across all stages of circular economy development.

Task Force 4: Low-Carbon and Inclusive Transition

- SPS 7 Low-Carbon Transition Pathways in Traditional Energy Regions: Integrate gender
 considerations into just transition planning. Support employment shifts by enabling women's access
 to reskilling, vocational training, and re-employment opportunities in new energy sectors. Ensure
 social protection measures are accessible to women and groups in vulnerable situations. Promote
 women's equitable participation in decision-making bodies overseeing industrial restructuring.
- SPS 8 Green Development Cooperation: Develop innovative models for resilient, inclusive, and sustainable global green development through transformative partnerships with emerging economies. These models should include cross-border training, joint research, and talent exchange, with particular attention to advancing gender equality, and recognize the knowledge and capacities of local communities to inform green development efforts worldwide. Include gender-related indicators or data to ensure greater accountability on gender equality outcomes. Provide dedicated support for gender-responsive climate finance, including women-led initiatives like the AIIB Gender-Responsive Climate Fund, as well as the Global Women Exchange and Training Centers to support women's participation in the green transition.

CCICED's 2024-25 Gender-Related Work Through Special Policy Studies: Key observations

This section highlights the research conducted by each SPS in the areas of gender equality and social inclusion as well as best practices in the integration of gender-related concepts. The section also identifies opportunities to further advance gender equality within environmental and climate change policy development and governance.

As an addition to the research year 2024–2025, the CCICED Secretariat developed a MEL plan focused on gender integration. The plan was informed by a preliminary survey to identify challenges related to gender equality integration in the 2023–2024 research year. It is now being monitored through metrics and a follow-up survey to assess progress. The MEL plan aims to deepen understanding of both areas of success and specific challenges, and to identify opportunities for improvement. To this end, a set of outcomes has been established: the ultimate outcome is to strengthen institutional commitment to gender mainstreaming in policy research, while the intermediate outcomes focus on increasing the

capacity of SPS research teams to integrate gender considerations into their research products (see Appendix A).

Findings from the mid-point survey suggest an overall positive learning progress within SPS teams regarding knowledge of gender issues and an overall strengthened capacity to integrate gender considerations. All SPS teams confirmed that their research includes gender considerations using different approaches (for example, a dedicated gender or equity chapter, or integrating gender dimensions across sectors). The feedback received demonstrates that the support provided by the team ensured that SPS reports proposed concrete measures, such as training, subsidies, and inclusive mechanisms, to enhance women's participation, showing that gender is both a crosscutting theme and a standalone focus area. SPS teams highlighted several challenges related to the use of gender-disaggregated data, including its limited availability, especially across sectors such as marine industries. Where data is available, it is often collected at a macro-level, making it difficult to clearly identify gendered impacts or to apply the data consistently across analyses. Several teams also noted accessibility challenges, including difficulty locating relevant datasets and the significant time required to do so.

SPS 1: Global Climate Governance and Green and Inclusive Transition (SPS Climate)

As underscored within the Paris Agreement, the Sustainable Development Goals (SDGs), and the UN Framework Convention on Climate Change (UNFCCC) Gender Action Plan, climate governance and gender equality are interconnected. Climate change has differentiated impacts on women and men due to gender-based norms and social and economic roles that typically disadvantage women, hinder access to their rights, and exacerbate inequalities. Women, especially those who may be further marginalized due to poverty, Indigeneity, or other identity factors, often face increased vulnerability to climate shocks because of reliance on natural resources and unequal access to resources and decision making. Concurrently, women's knowledge and leadership are not effectively utilized within climate governance structures and approaches. Climate governance that neglects to incorporate gender-responsive and inclusive approaches risk reinforcing existing inequalities and hindering adaptation and mitigation efforts. For China and the international community, promoting gender equality within global and national climate governance is imperative for advancing rights and driving inclusive and sustainable green transitions.

The SPS Climate addresses gender equality in climate governance through the inclusion of a standalone chapter on the importance of gender mainstreaming within climate change governance. This chapter situates gender within the evolving climate governance landscape and emphasizes the risk of women's perspectives being marginalized as climate, trade, and investment priorities shift. The SPS acknowledges that gender norms that discriminate against women and disparities in socio-economic outcomes inhibit women's access to the resources required to participate in climate change adaptation and mitigation, their access to their rights, and their participation in decision making around climate change governance and transition processes. The study also recognizes the importance of women's unique knowledge and the need for their skills and leadership in progressing effective climate change adaptation, mitigation, and just transition processes.

The SPS emphasizes the importance of integrating gender equality within national and global climate frameworks, noting delays in implementation amidst some incremental improvements. It notes that in their NDCs as of 2024, over 80% of countries provided gender-related information, while just over

a third integrated gender perspectives in their energy-related emission reduction measures. The SPS pays specific attention to the role of China in promoting a gender-responsive green transition, including through the development and implementation of policies that increase opportunities for women within low-carbon industries, the renewable energy sector, and emerging green employment opportunities. The SPS also identifies the need for China's South-South cooperation on climate finance, the transfer of technologies, and capacity building to adopt gender-responsive approaches that enable women's participation. This includes a recommendation for targeted support for women-led enterprises in partner countries, as well as targeted training and knowledge transfer mechanisms for women within clean energy and low-carbon industries. It also recommends specific China—EU collaboration in third-party countries to promote gender integration, positioning China's engagement as a vehicle for inclusive transitions.

Future research in this SPS could examine how gender mainstreaming in climate governance can move from commitments to measurable outcomes, including analysis of how international frameworks, such as the UNFCCC Gender Action Plan, are operationalized within national policies.

SPS 2: Governance System for a Harmonious Coexistence Between Humans and Nature (SPS Nature)

Experience shows that when environmental agencies work in silos and overlook linkages and trade-offs, they fall short of realizing their full potential. Though multilateral agreements exist, including the 2030 Agenda for Sustainable Development, the UNFCCC, and the Convention on Biological Diversity (CBD), challenges remain between biodiversity conservation and socio-economic development. It is against this backdrop that the SPS Nature seeks to examine ways to advance the implementation of the GBF.

The SPS Nature effectively mainstreams equity and inclusion across its sections, offering equityfocused recommendations and highlighting the critical roles of local communities, Indigenous Peoples, NGOs, and SMEs in biodiversity conservation. It underscores the value of participatory approaches, multistakeholder engagement, and collaborative governance as key to building an inclusive model for the sustainable use of biodiversity and benefit sharing. By linking conservation and climate action to livelihoods, education, training, and community benefits, it integrates social equity alongside ecological and economic goals, while case studies and examples showcase best practices in inclusive conservation. The report presents ECRs as an important model and pathway for achieving the global 30x30 GBF target, offering unique advantages for biodiversity conservation, in addition to creating opportunities to support local communities, safeguard livelihoods, and ensure fair participation, including of women, in conservation planning. The SPS calls for strengthened governance models that protect social capital and promote women's equitable participation in decision-making processes, recognizing their critical role in shaping and influencing sustainable livelihoods. This also means focusing on promoting equal employment, safeguarding the rights and interests of women workers, and ensuring engagement of women and youth in local decision making. As these efforts demonstrate a shift toward collaborative biodiversity governance, the SPS advises on the need for a clear participation framework with defined roles and responsibilities as well as incentive and accountability mechanisms to allow for the full participation of all societal groups, including women and youth. In addition, the SPS recommends creating a transparent guarantee mechanism with multistakeholder oversight, including women and youth, to protect eco-tourism projects, reduce risks, and encourage sustained social capital engagement.

Future considerations for an innovative biodiversity governance system could examine ways in which governance models can further empower local communities and their residents as active stakeholders and rights-holders to increase legitimacy and long-term sustainability of conservation efforts.

SPS 3: Major Scientific and Technological Innovation in Green Transition (SPS Tech Innovation)

Gender equality is a significant dimension of scientific and technological innovation for the green transition. Women have important roles as household energy managers, renewable energy entrepreneurs, and contributors to innovation. However, their contributions remain undervalued, while structural barriers such as unequal access to finance, training, and leadership opportunities limit their participation in STEM fields, research, and policy processes. Without gender-responsive measures to close these gaps and expand leadership, women's perspectives will not be adequately considered within scientific and technological innovation for green transition processes. This risks limiting women's ability to access the benefits of such innovations and increases the disproportionate negative impacts from transition processes in comparison to men. Addressing these and other gender-based inequalities are fundamental to designing and implementing scientific and technological innovation for the green transition in a just and equitable way.

The SPS Tech Innovation includes a gender-focused section that examines the intersections between gender equality and technological innovation. The SPS recognizes that progressing gender equality within the renewable energy sector is an issue of rights and a driver of growth and resilience. Integrating gender equality improves talent pools, increases the effectiveness of teams, and improves financial performance while ensuring equitable sharing of the benefits of energy transitions.

The SPS emphasizes the gender imbalance within innovation pathways for solar and wind technologies. Beyond underrepresentation in STEM education, women face workplace bias, lack of mentorship, and inadequate access to professional networks. Within innovation ecosystems, men remain dominant amid women's underrepresentation, which limits women's ability to influence the prioritization and funding of technologies and to benefit from clean energy advances. Educational institutions and industries are working to expand pathways into technical and managerial roles, and STEM programs are attracting more women. Continued efforts are needed to move women into core technical and leadership positions. The SPS also highlights the increasing recognition of gender-responsive financing as a competitive advantage. It cites mechanisms such as the EU Just Transition Fund and multilateral financing standards, which increasingly incorporate gender criteria into project assessments, while Singapore issues gender bonds for women-led renewable energy businesses. These approaches expand women's access to capital and highlight gender equality as a competitive edge. This, in turn, supports women's entrepreneurship in clean energy and a more inclusive, sustainable energy transition.

Future research could explore how gender equality can be systematically integrated in renewable energy innovation ecosystems with a focus on barriers and enablers for women's advancement.

<u>SPS 4: Green Finance for a Comprehensive Green Transformation of the Society and Economy (SPS Green Finance)</u>

Globally, gender equality considerations are being increasingly integrated within green finance,

with a longer history of gender integration found within climate finance specifically. Lessons and approaches of how gender equality considerations can be further integrated within green finance can be drawn from innovative finance instruments, such as gender-lens investing and blended finance instruments that integrate the gender-climate nexus.

The SPS Green Finance seeks to further examine how green finance can advance the green transformation of high-carbon industries by asking two specific questions: How can finance support technological innovation in high-carbon enterprises? And how can finance mitigate the risks associated with stranded assets and support an equitable transition? In doing so, the paper recognizes that transition strategies that neglect gender equality not only fail to achieve a fair transition but may also exacerbate social inequalities. As such, the objective is to minimize the social equity impacts as high-carbon enterprises undergo transformation. The SPS makes two specific recommendations when it comes to the role of finance in mitigating social risks. The first calls on governments to consider providing additional subsidies specifically targeted at women. For example, financial institutions and governments can jointly establish dedicated green funds for women entrepreneurs or offer corresponding financing incentives to enhance the economic resilience and transition adaptability of women. The SPS also encourages financial institutions to incorporate an equitable transition into their financial products.

Areas for future research could include looking at structural and policy-based barriers to inclusive finance and sharing best practices when it comes to innovative gender-responsive financial models. This could include setting targets for women's participation; creating funding channels that are accessible to women-led SMEs, cooperatives and entrepreneurs; and including gender-disaggregated indicators in reporting mechanisms to track beneficiaries in employment, entrepreneurship, and finance flows.

SPS 5 Sustainable Blue Economy Under the Vision of Carbon Neutrality (SPS Oceans)

As is increasingly recognized internationally, gender equality is deeply intertwined with sustainable ocean governance. Gender norms mean women and men often use and manage marine ecosystems differently, and they experience different impacts. Although women contribute significantly to marine resource management and household food security, they often face barriers—for example, restrictive norms, exclusion from male-dominated sectors, such as offshore energy and shipping, and limited access to training, finance, and decision making. Ocean governance that fails to adopt gender-responsive approaches risks reinforcing inequalities, while inclusive approaches draw on women's knowledge and leadership to improve sustainability, resilience, and equity.

The SPS Oceans effectively integrates gender equality through the inclusion of two equity- and gender-focused sections. It emphasizes that equity and gender equality are essential to sustainable ocean governance. While women and men have equal stake in ocean resources, women are disproportionately represented within informal, lower-wage activities in small-scale fisheries, seafood processing, and coastal tourism. Men are concentrated in higher-wage roles, with greater security in subsectors, such as industrial fishing, maritime transport, and marine engineering, and they have greater access to leadership, including those that shape policy governing the blue economy. These disparities, the SPS notes, weaken women's economic empowerment, abilities to represent the needs of coastal communities, and influence in ocean governance.

The SPS stresses the collection of sex-disaggregated data to understand gender-based disparities

and women's roles in ocean industries, enabling policies that address differentiated impacts. It also underscores equitable access to education, training, finance, and leadership spaces as prerequisites for women's full participation in the blue economy—measures that must be institutionalized in gender-responsive ocean governance. The paper also asserts that the development of a sustainable blue economy must incorporate gender equality and inclusion to avoid exacerbating existing inequalities and forcing the displacement of coastal communities. It emphasizes the importance of equal rights—regardless of gender—functional ability, sexual orientation, age, ethnicity, and religion, noting that women and marginalized groups, who are often reliant on traditional livelihoods such as fishing and tourism, are especially vulnerable to industrial expansion. It calls for integrating gender metrics into national policy framing, China's next Five-Year Plan, and marine economic statistics since disaggregated data is necessary to track participation and leadership gaps across ocean sectors. Importantly, it calls for including gender equality within the definition and principles of a sustainable blue economy in China.

Future research in this SPS focus area could build on these foundations by examining how gender-responsive approaches can be operationalized within blue economy sectors.

SPS 6: Promote High-Quality Development With Circular Economy (SPS Circular Economy)

A circular economy can be a powerful way to create jobs, reduce waste, and build fairer societies—but only if it is designed with people in mind. Without the right protections, circular systems could unintentionally deepen existing inequalities and leave some groups behind. That's why social safeguards, such as clear policies, fair workplace practices, and protections for vulnerable people, are so important. These measures help to prevent exploitation or exclusion of groups such as women, Indigenous Peoples, low-income communities, and workers in the informal economy. For women in particular, it is vital to weave gender equality into every stage of circular economy planning. This means tackling barriers that limit women's participation, ensuring equal access to training and resources, and checking that policies do not inadvertently disadvantage women. Looking at how different sectors take gender perspectives into account will help to ensure the circular economy grows in a way that is inclusive, fair, and beneficial to everyone.

The SPS Circular Economy addresses gender equality within the circular economy through the inclusion of a standalone chapter. The chapter, titled, "Gender Considerations Issue in Building and Implementing a Circular Economy," underscores that while circular economy policies often emphasize environmental and economic benefits, their social and gender dimensions remain underexplored. For example, in the textiles sector, women dominate manufacturing but are underrepresented in design, innovation, and leadership; targeted training and reskilling could close these gaps. In the chemicals sector, women face disproportionate health risks but gender-disaggregated data and gender-responsive risk assessments are still limited.

The paper recommends accelerating and broadening professional and technical training programs for the circular economy and ensuring these initiatives are gender responsive. This could include, for example, proactively recruiting women and creating pathways that support diverse participation in leadership, research, and skilled technical roles. The paper also highlights the important role that international frameworks and national gender strategies can play as entry points to embed gender perspectives more explicitly. It will be important to look at ways China can continue to ensure that gender

equality and social equity considerations remain central in international cooperation frameworks and dialogues on the circular economy. This could include further promoting the meaningful participation of women in bilateral and multilateral negotiations; integrating gender-responsive objectives into agreements, action plans, and funding mechanisms; and sharing best practices and data on how circular economy policies can advance both environmental goals and social justice.

Finally, future research could examine how gender equality can be mainstreamed across all stages of circular economy development. This could include ensuring women's meaningful participation in design and decision making, collecting and using sex- and gender-disaggregated data, investing in training and reskilling programs targeted at women, or creating incentives and funding mechanisms for women-led circular enterprises. Further work could also look at bringing informal employees in circular economy, most of whom can easily be women, into formal economy and strengthening their safety and security.

SPS 7: Low-Carbon Transition Pathways in Traditional Energy Regions (SPS Energy Transition)

International frameworks, such as the UNFCCC Gender Action Plan and the ILO Guidelines for a Just Transition, recognize that energy transitions are not gender neutral. Because of entrenched gender norms and economic disparities, women and men are differently represented within the energy sector. Women are often responsible for household energy management, and as employees, are concentrated in administrative and lower-level positions, while men dominate technical, managerial, and decision-making positions. Women also have less access to finance, skills training, and networks than men, further limiting participation in emerging green sectors. Without targeted measures, energy transitions risk reinforcing these inequalities and excluding women from accessing new opportunities. Efforts to integrate women's leadership, knowledge, and participation within transition processes can enable more effective and equitable outcomes while strengthening the resilience of communities undergoing transition.

In examining the transition of China's traditional energy regions, the SPS Energy Transition makes several references to gender equality, particularly in the context of employment data resulting from transition processes. The paper emphasizes that women comprise a significantly higher share of workers in the new energy sector compared to the coal industry, highlighting the potential of low-carbon industries to create more inclusive labour markets. Based on this, the SPS projects that approximately 1,400 new jobs for women could be created on a yearly basis through industrial restructuring. The SPS also notes that policies developed for a just transition must include protections for women and groups in vulnerable situations, along with other measures, such as re-employment support, social security, and vocational training. It further calls for monitoring mechanisms to track employment loss in coal industries, and to ensure women have equitable access to retraining and re-employment support in the expanding new energy sector.

These topical references provide important entry points for more in-depth consideration of gender equality within energy transitions of coal-dependent regions. Future research might strengthen analysis by more fully examining the gender dimensions of workforce planning and policy mechanisms, including how projected annual job creation for women materializes in practice and whether gender-responsive safeguards are effectively implemented to support effective, sustainable, and equitable outcomes in the new energy sector.

SPS 8: Green Development Cooperation (SPS Green Development)

The SPS Green Development highlights that China views green, low-carbon development as the only viable path for a sustainable future, and it is accelerating its transition as it moves from the 14th to the 15th Five-Year Plan in 2025. The paper emphasizes that gender equality is not only a fundamental right but also a key driver of effective climate action. It notes that climate impacts are highly gendered—for example, women and children face far higher mortality in extreme weather events and often bear heavier household and resource-related burdens, particularly in poorer regions. At the same time, women contribute essential local knowledge, strengthen policy effectiveness through their participation in environmental governance, and—when economically empowered—help build community resilience. Advancing gender equality alongside climate action, as reflected in the UN's 2030 Agenda (SDG 5 and SDG 13), is therefore presented as critical to a just and sustainable green transition.

The paper includes a standalone section entitled "Gender Impacts in International Cooperation on Green Development." This section outlines gender equality's role and its strategic value in advancing effective and sustainable climate action within global green development. The section also acknowledges the structural barriers and implementation gaps that remain when it comes to integrating gender equality in green development cooperation, including the limited number of countries that identified specific gender-related indicators as part of their national NDCs, women's low level of participation as decision-makers in global protected area management, and a persistent lack of funding for gender-responsive projects. It includes examples of China-supported initiatives that promote women-led green enterprises and South-South capacity building. Importantly, it highlights that economic empowerment, leadership, and gender-responsive adaptation are essential drivers of inclusive green development.

The paper calls on new green development cooperation models to be designed to advance resilient, inclusive, and sustainable pathways for global green development. This means ensuring gender equity principles remain front and centre as we move forward with green development cooperation. In this regard, the paper recommends building a pool of professionals for international cooperation in ecology and environment with particular attention on promoting gender equality and providing sustainable intellectual support and talent pools for international cooperation in green development. The paper also stresses the important role of local communities as key drivers of sustainable development. With their deep knowledge of local resources, social dynamics, and environmental challenges, community organizations can craft practical, place-based solutions and mobilize residents for environmental protection and climate action. Their lived experiences provide models that can inspire and inform green development efforts in other developing countries.

Additional opportunities exist for China to play a pivotal role in championing equity and inclusion as core pillars of global green development cooperation. For example, the country could use its influence to advocate for equity, common but differentiated responsibilities, and inclusive participation in international climate negotiations. It could also ensure that the support it provides is inclusive, equitable, and responsive to diverse local conditions in the Global South. Finally, when looking at building a new model of Al-driven green transition, it will be important to ensure any new model is designed with inclusion in mind to help bridge the digital divide, include gender digital divide, ensure equitable access, and respect of diverse local contexts.

Good Practices in the Integration of Gender Equality Perspectives

The following section highlights good practices from the SPS final research papers that should continue to be incorporated and strengthened within SPS research and development.

- Conducting an initial gender analysis early in the planning process. Some SPSs conduct initial gender
 analyses early in the research planning process. This enables the identification of specific entry points
 for integrating gender into the research topic early on. This proactive approach also enables the
 planning for adequate resourcing for the researching and drafting of this section, by a member of the
 SPS team or an external expert. A more in-depth gender analysis could then be carried out by the
 researcher responsible for that section.
- Including a gender-focused section in the SPS. Many of the SPSs now include a gender-focused section or component. A variety of approaches can be effective in improving visibility of gender equality-related considerations and providing adequate context to raise awareness of the relevance of gender equality to the research topic, such as text boxes, thematic spotlights, or sidebars, in addition to gender-focused chapters or sections.
- Integrating gender considerations throughout the SPS. A few SPSs integrate gender considerations at different relevant points within the SPS and include gender-focused sections. This mainstreaming approach enables acknowledgement of the relevance of gender considerations within many research topics while progressing the normalization of gender mainstreaming. In some cases, the integration of gender within the text follows from the context provided within the gender-focused section or is independent of the context provided in the gender-focused section.
- Inclusion of gender-focused recommendations. SPS papers more consistently include gender-focused recommendations, particularly within the section of the SPS focused on gender equality. The structure of gender sections within SPSs include descriptive text of the relevant gender inequalities within the specific SPS context, and in a reflection of good practice, they are increasingly followed by sections outlining proposed solutions to address these gaps, and on actionable gender-focused recommendations.

Recommendations to CCICED for 2025–2026 Research and Phase VII planning

The following recommendations are intended to strengthen gender mainstreaming within the forthcoming SPS research phase.

Encourage SPS teams to develop plans for how gender will be integrated to deepen analysis.
 Encourage all SPS teams to design a plan outlining how gender considerations will be systematically approached, researched, and financed throughout the life of their projects. These plans could involve the following: define clear objectives for integrating gender analysis into research design, data collection, and policy recommendations; identify resources and budget allocations to support

sustained gender expertise and gender-responsive activities; establish timelines and milestones for gathering and using sex-, gender-, and diversity-disaggregated data; and include mechanisms for regular monitoring and reporting on progress. By embedding gender objectives and financing into long-term research planning, teams can move beyond one-off analyses and generate deeper, more consistent insights to inform evidence-based, gender-responsive environmental policy and practice.

- Formalize the inclusion of gender equality within the research cycle. Ensure that gender perspectives are effectively integrated throughout the entire research cycle by formally integrating gender equality activities and goals within the planning and execution phases. This includes a preliminary gender analysis as part of the development of the detailed research outline, and the integration of gender equality objectives within existing templates that support the SPSs' inception phase and implementation plan.
- Strengthen SPS teams' gender-focused research and data to inform evidence-based environmental policy. Prioritize the design and funding of new, original research that explicitly examines the links between gender and key environmental issues, including the circular economy, climate adaptation, and climate finance. Doing so would help to address the recognized gaps in gender-disaggregated data by supporting projects that collect and analyze sex-, gender-, and diversity-disaggregated data and explore the differentiated impacts of environmental policies and climate action on women, men, and diverse groups. Such research could be co-created with affected communities, including Indigenous Peoples and other underrepresented groups, to ensure relevance and accuracy. Generating robust evidence will enable policy-makers to craft gender-responsive, inclusive, and effective strategies for sustainable development and just transitions. These efforts should also include the allocation of a specific budget.
- Ensure gender considerations are not siloed within the research paper. In addition to the gender-focused sections included in most SPSs, it is important that gender considerations also be consistently integrated, or mainstreamed, where relevant within the remaining sections of the SPS. This includes the executive summary, the introduction, the respective report sections, and the overall policy recommendations. This ensures that gender is not seen only as relevant to a specific topic within the SPS, but that its relevance across technical areas is recognized and normalized.
- Integrate gender-related recommendations within the SPSs' overall policy recommendations. While SPSs are increasingly including gender-related recommendations within the gender-focused sections of the reports, it is important that actionable gender-focused and gender-integrated recommendations at national, regional, and global levels are also included within the overall SPS policy recommendations. This would ensure that gender-related recommendations are given greater visibility within the report, on par with other policy recommendations put forth, and are more accessible to policy-makers.
- Undertake additional research on how environmental degradation and climate change affect marginalized groups and how these groups contribute to solutions. This includes Indigenous

communities, LGBTQI people, persons with disabilities, and ethnic or religious minorities. Research should recognize that people often face intersecting forms of discrimination—by gender, age, disability, ethnicity, or sexual orientation—and therefore examine differences among women, men, and gender-diverse people within these communities. Such analysis supports international "leave no one behind" commitments and will help CCICED to develop a more nuanced, globally aligned approach to gender equality.

• Ensure gender equity is a priority of the 2025–2026 High Level Task Force (HLTF) work. To ensure gender mainstreaming is effectively integrated into the work of the HLTF, several measures can be taken. First, each thematic and synthesis report should explicitly incorporate a gender analysis, examining how environmental and developmental trends affect and are affected by gender dynamics. This includes identifying gender-differentiated risks, access to resources, and participation in green and low-carbon transitions, ensuring that policy recommendations are both equitable and effective. Second, the composition of the HLTF and contributing experts should reflect gender balance and diversity, with the inclusion of specialists in gender equality and sustainable development to strengthen the analytical depth and inclusivity of the work. Finally, the research should use gendersensitive indicators and sex-disaggregated data wherever possible to assess differential impacts and opportunities. Integrating these approaches will enhance the quality, legitimacy, and relevance of the HLTF findings and help to advance China's vision of modernization in harmony with nature in an inclusive and equitable way.

Appendix A. Monitoring, Evaluation, and Learning Plan

Box 1. Monitoring, evaluation, and learning plan: Ultimate and intermediate outcomes

Ultimate Outcome

Strengthened institutional commitment to mainstream gender in science-policy processes

Intermediate Outcomes

Increased capacity to mainstream gender perspectives in SPS research

Increased inclusion of gender considerations across SPS research products

Increased availability of disaggregated data in SPS research products