

Accelerating Nature-Based Climate Action Through the Eyes of Women Climate Leaders

Where do you see the biggest opportunities for corporate leadership (such as UBS) and private investors to advance climate change and nature-based solutions? And what do you see as the biggest challenges for them in ramping up their ambitions for climate action?

Amy Lo
Head & Chief Executive Officer
UBS | Hong Kong Branch

UBS has been a global leader in sustainable investing since the 1990s, when we first launched our Sustainability Focus Fund. As one of the world's largest wealth managers, together with our investment bank and asset management capabilities, we have the responsibility to ensure we know how to influence and support our clients to invest in solutions, which can achieve the Paris Agreement goals. I believe that to achieve this goal, we need to work in partnership with all the stakeholders.

Globally, since the beginning of the year, our sustainability focus and impact investing assets have grown 63% to US dollars to 207 billion. This shows a major trend we are seeing with the clients. They want to ensure that investments have a positive impact on our planet and our people.

In terms of opportunities, I may share three points here, under the area of planet, people, and partnership, which reflects UBS's overall approach to sustainability and impact. Now, from a climate perspective, UBS is already leading the way, setting an example in targeting net-zero for our operation scope, cutting one-half by 2025, and reaching net-zero by 2050. To demonstrate our commitment, we were also the founding member of the Net Zero Banking Alliances and Bank for Impact, where we are collaborating with peers to find the fastest and most effective routes to a net-zero economy. We were also an early adopter of the TCFD - the Taskforce for Climate-related Financial Disclosures. And more recently, also the TNFD, which is the Taskforce for Nature Financial Disclosures, which is particularly relevant to nature-based solutions.

Both frameworks can also help increase the transparency and ensure that investing in nature can be part of our corporate net-zero commitment. Then talking about the second area from a people perspective at UBS, we also help create a fair, more prosperous society. Addressing the inequality at its root cause and nature-based solutions have a role to play, because it helps to drive better social outcomes, increasing the quality of life and future prospects. And in particular, you have heard me earlier, through our philanthropy effort and the UBS Optimus Foundation, we believe there's an opportunity to build on efforts in education and health and demonstrate how nature-based solutions can benefit the local community.





ANSWER CONTINUED

I'm very, very passionate about this topic. Last but not least is from a partnership perspective, most of our skill set has also traditionally been Europe. With the increase in global demand, access to expertise is proving very difficult. Therefore, I believe there is a clear opportunity to contribute to the upscaling of the overall ecosystem. We also see the opportunity to support policymakers and other key stakeholders who can influence the investment in nature at a larger scale.

I think that's why UBS is also heavily investing in upscaling our staff and supporting the industry, working with academia and regulatory and the industry associations, because we want to address this and build the next

generation of the ESG financial professionals. UBS was also chosen to co-chair with our local regulator on the capacity building for ESG. I think that shows the leadership position we are in the space.

In terms of the challenges, transparency is key to a sustainable finance agenda and helps prevent green and impact washing. I sit in some of the advisory committees of the regulator. This requires standardized, comparable, accurate data to allow investors to price the risk and also the opportunity efficiently. That applies both to traditional financial investments as well as to nature-based solutions.

Where do you see the biggest opportunities for corporate leadership (such as UBS) and private investors to advance climate change and nature-based solutions? And what do you see as the biggest challenges for them in ramping up their ambitions for climate action?

That's also why UBS Optimus Foundation is focused on developing a robust evidence base and framework to support this growth potential of nature-based solutions. This will help us to show our clients that these solutions are truly focusing on developing and delivering that impact.

From your perspective, how can Governments, Corporations, NGOs and Research Institutions better collaborate to accelerate nature-based climate solutions?



Fan Dai

Director of the California-China Climate Institute

Amid the second week of the COP26 UN climate talks, we have seen increasing attention to nature-based action. We know perhaps more than ever that nature-based climate solutions are critical to advancing climate action sustainability and to our well-being as one of many species on this planet. Nature-based climate solutions sequester carbon from the atmosphere in our soils, forests, and oceans, avoid emissions from catastrophic fires - like the ones we've seen this summer in California - and help build resilience to climate impacts. This combination makes these strategies integral to meeting our carbon neutrality goals. At the same time, nature-based solutions also help secure clean air and water and make sure the ecosystems we all depend on are healthy. Therefore, they advance not only climate goals but also other important objectives.

Collaboration is necessary to achieve our climate goals. Climate change does not stop at a border between cities, states, or even countries. It's an issue we all face globally. This makes collaboration both necessary and important.

At the California-China Climate Institute, we are focused on where there can be coordination gains through collaborating across jurisdictions, particularly with China, as we have many lessons-learned to share from the California context with other parts of the globe. We have found that strong partnerships can accelerate NBS through:

- Sharing information and lessons learned
- Dialogue at the political and working levels
- Joint research across jurisdictions and between science and policy communities
- Capacity building and training on the tools needed to build and implement effective policies

Implementing NBS requires working across different stakeholder groups, and in California, this can be very complex as land is owned by private citizens, state and federal governments, and others. It's through multidisciplinary collaboration that we can make stronger and more effective climate policies that work for the constituencies they serve.

Betty Yee California State Controller

When I think about collaboration among these entities, it really starts with a shared goal. The shared goal when confronting climate change is to ensure an equitable present and a sustainable future.

While these are all important entities, they have already been included in the conversations. Frankly, some of these entities have contributed to the crisis that we are currently facing. Speaking from a government perspective, governments have historically silenced indigenous communities in land and resource management.

We have excluded voices from our disproportionately affected communities that have borne the brunt of climate impacts. Including more voices in the list is just the start of real engagement.

Also accelerating the attention and, hopefully, actions on nature-based climate solutions are our young people who will be forced to live with the untenable decisions of generations before and certainly past government actions. All of these voices should be included and have either been ignored or muted in the past. The role of government as a change agent is clear.

We have a lot of levers to pull from policy change to regulatory change to investment decisions.

I am also a board member of Ceres, and I see the power of corporations in pushing for change at both the federal and state policy level and in their business practices. From the investor perspective, we must advocate for regulations to ensure more robust carbon emissions reporting, supply chain issues, and human capital management practices. Without greater transparency, investors cannot make sustainable investment decisions, including those that incorporate nature-based climate solutions.





Dr. Ming Luo
Deputy Director of Land Consolidation Center,
China's Ministry of Natural Resources

First, NBS is characterized by cross-departmental, cross-level, and interdisciplinary and is a comprehensive solution. To accelerate NBS, we must first give full play to our respective advantages and communicate and cooperate. Government departments must have strong political will and mobilize collective actions. This requires government departments to have the courage to take responsibility and enhance their governance capabilities. They must have a master plan and action guide and a road map and action plan to create a good environment and specify the goals of collective action.

Second, the government must listen to the voices of scientists. Climate change is at hand, and it must believe in and rely on science. Make science-based decision-making.

At the same time, the role of scientific and technological experts is to create choices for decision-makers. Research institutions such as science and technology should help the government propose quantifiable and evaluable methods and evidence.

Third, it is not enough for the government to expand the scale of NBS. More than 90% of China's NBS projects are government investments. Incentive policies should be formulated for private investment, including that the government should open its doors to the private sector when bidding for procurement and purchasing services and invest in natural enterprises. Enterprises should strengthen technological innovation and knowledge renewal and take the initiative to transform.

Fourth, NBS is inseparable from the participation of non-governmental organizations. NGOs and research institutions should strengthen knowledge dissemination and introduction, and non-governmental organizations should show more cases to help the whole society understand and increase NBS knowledge and achieve mainstream.

What does nature-based climate policy look like in California? And how is California applying nature-based solutions to meet climate goals?

Fan Dai

Director of the California-China Climate Institute

California has incredible biodiversity. More than 90% of the state is forests, wetlands, farmlands, and urban green spaces. Integrating nature-based climate solutions in California is an obvious choice and a huge opportunity.

At the same time, California is facing a significant issue - increasing emissions have led to increasing wildfires in many parts of the state - and in the process, it's likely that land here will become a net source of emissions instead of a carbon sink.

To address this challenge, California has released a range of plans and has put forward the funds to implement them. It has also placed equity as a central component in its strategies.

Here are some examples from California's experiences:

- California has a goal to protect 30% of its lands and waters by 2030. The Biden Administration has now taken this up.
- Governor Newsom recently signed the biggest climate package in the history of the states, with billions for NBS, including 1.5 billion for forest and wildfire resilience strategy, 5.2 billion for Drought and Water protections, 3.7 billion for climate resilience, and 1.1 billion for supporting healthy agriculture.
- The State's recent Natural and Working Lands Climate Smart Strategy sets a comprehensive plan for integrating California's land into its climate policy.
- California is also collecting data it needs to make better decisions through an inventory of carbon emissions.



How can nature-based solutions contribute to China's carbon neutrality commitment? What is China doing to utilize nature-based solutions, and how can they be mainstreamed into China for its climate mitigation and adaptation goals?

Dr. Ming Luo
Deputy Director of Land Consolidation Center,
China's Ministry of Natural Resources

China has issued the "Opinions of the Central Committee of the Communist Party of China and the State Council on the Complete, Accurate and comprehensive Implementation of the New Development Concept to Do a Good Job in Carbon peak Carbon Neutrality" and the "Carbon Peak Action Plan before 2030", which have constructed a top-level design of 1+N for China to achieve the carbon peak carbon neutrality goal, and clarified the timetable, road map, and construction drawings for carbon peak carbon neutrality. Put forward ten key tasks and actions. NBS is one of the top ten. This action is called the Carbon Sink Capacity Consolidation and Upgrading Action.

The overall requirement is to "adhere to the systematic concept, promote the integrated protection and restoration of mountains, rivers, forests, fields, lakes, grass and sand." NBS improve the quality and stability of the ecosystem, and increase the increment of ecosystem carbon sinks.

Specific actions include:

- Consolidate the carbon sequestration effect of the ecosystem. (Protection).
- Enhance the carbon sink capacity of the ecosystem. Implement major ecological protection and restoration projects. By 2030, the national forest coverage rate will reach about 25%, and the accumulated forest volume will reach 19 billion cubic meters. (Recovery).
- Promote carbon reduction and sequestration in agriculture and rural areas. Vigorously develop green and low-carbon circular agriculture actions, and strengthen NBS technological support and other actions (Sustainable Management).





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China has promulgated the national level NBS plan of the "National Master Plan for Major Projects for the Protection and Restoration of Important Ecosystems (2021-2035)". By 2035, the forest coverage rate increased from 23% to 26%, and the accumulated forest volume reached 21 billion cubic meters (17.4 billion in 2020). The comprehensive vegetation of grassland increased from 56% to 60%. The wetland area did not decrease, and the protection rate increased from 52% to 60%.

The government should coordinate issues where departmental policies and regulations are inconsistent or conflicting. For example, in the field of NBS, we have more than 3,200 standards. Different departments have formulated these standards, such as forestry, grassland, agricultural land, and water conservancy in different historical periods. Use the system concept to coordinate and coordinate. Strengthen government procurement of NBS.

The private sector needs to change its thinking, use it for innovation, and master new technologies. Scientists must do a good job of popularizing science and have convincing evidence. Non-governmental organizations should play the role of a third party and improve their professional authority.

As California State Controller, you sit on the boards of two of the largest retirement systems for public employees and teachers, CalPERS and CalSTRS. You also sit on the Board of Ceres, a nonprofit that mobilizes investors for sustainability. How can these retirement systems and other investors rapidly accelerate climate action, especially nature-based climate solutions?



Betty Yee

California State Controller

Nature-based climate solutions are still quite new to investors, which means there is some education and analysis that needs to take place. To date, investors interested in transitioning their portfolios to low carbon to make them more sustainable are focused on three main areas:

- Advocacy and policy engagement,
- Corporate engagement, and
- Low-carbon investment opportunities, including natural solutions, aligned with their portfolio.

The CalSTRS Sustainable Investment and Stewardship Strategies (SISS) team has traditionally managed a broad public equity investment portfolio focused on strong governance practices, ESG-focused investments and a Low Carbon index. Today, these investments have an AUM of approximately \$8 billion.

The Board recently approved a SISS private market portfolio to expand the already significant number of investments in low-carbon solutions across CalSTRS private markets. When combined with the existing SISS investments, this new portfolio has a target AUM of 5% of the Total Fund (about \$15.6 billion currently) will allow us to create a systematic platform to expand investment opportunities across our private asset classes.

Initially, staff will focus on investing in low-carbon solutions related to energy, technology-enabled resource efficiency, water and waste management, land, and agriculture management. CalSTRS has recently undertaken a PRI-led collaboration with asset owners and asset managers. The conversations focused on supply chain issues related to deforestation and sustainable commodities, among other items, and how to mitigate exposure and develop goals and engagement plans.

As California State Controller, you sit on the boards of two of the largest retirement systems for public employees and teachers, CalPERS and CalSTRS. You also sit on the Board of Ceres, a nonprofit that mobilizes investors for sustainability. How can these retirement systems and other investors rapidly accelerate climate action, especially nature-based climate solutions?

ANSWER CONTINUED

These discussions aim to integrate these issues into their current stewardship. Transparency and metrics will be crucial to adequately measure the impact of nature-based climate solutions, which will require effective reporting and regulations.

CalPERS has invested more than \$20 billion in low-carbon solutions and green investments. This includes renewable energy and sustainably certified buildings, green bonds, and low carbon transition solution investments. CalPERS convened and co-founded Climate Action 100+, now at 615 investors (including CalSTRS) with \$60 trillion AUM and 167 companies. As of August 2021, 111 of the 167 companies have set net-zero or equivalent targets.

BNEF estimates that by 2050, these 111 companies will reduce GHG emissions by 9.8 billion metric tons. Equivalent to over a quarter of the global GHG emissions today or almost the same as China's annual emissions.

CalPERS has joined with Carlyle to create the ESG Data Convergence Project, backed by more than \$5 trillion private equity AUM. This group has identified six metrics to standardize ESG reporting of private equity portfolio companies, which will help drive focus on lowering carbon emissions in private equity investments and helping to promote nature-based solutions in that asset class.



The California China Climate Institute has partnered with the Nature Conservancy to advance nature-based climate action in California and China. How do you see that partnership being used to move policy forward to lead to better outcomes?

Fan Dai

Director of the California-China Climate Institute

At the Institute, we have found a strong partnership in accelerating nature-based solutions through several ways like sharing information and lessons learned mutually from California and China.

We also set up dialogues on those policies at both political and working levels and join research across jurisdictions between science and policy communities to advance those actions.

We also found capacity building and training on the tools needed to build and implement effective policies to be powerful to support those exchanges and sharing between California and China and other parties.

We find these activities helpful and instrumental for advancing mutual understanding of the policy and events and implementing those policies.



What are some substantive examples of nature-based solutions in China? How does one avoid green-washing that is, how does one assure that nature-based solutions are generating real results?

Dr. Ming Luo
Deputy Director of Land Consolidation Center,
China's Ministry of Natural Resources

Real NBS is an NBS that meets the eight criteria of IUCN at the same time. On October 29, Minister Lu Hao pointed out when he further improved the scientific nature of the ecological protection and restoration work, "The central government emphasizes the overall consideration of landscapes, forests and fields. It must be systematic and holistic."

This is true NBS. On the contrary, we should not plant trees. For example, the "Third National Land Survey" shows that 8.8 million mu (15 mu = 1 hectare) of forest land with a slope of 25 degrees or more has been cultivated into cultivated land in the past years.

At the same time, another 180 million mu of arable land with a slope below 25 degrees was planted with trees. There is also planting trees in dry areas where the precipitation is less than 400mm or even 200mm. These actions are not NBS if the trees are not planted in the right place. We must strengthen the application of IUCN standard self-evaluation tools to prevent false ecology and real damage.



How are attitudes and practices changing
in the investment world to address
climate change?



Betty Yee

California State Controller

I find it encouraging that our conversations are changing rather quickly. The climate challenges – and nature-based solutions – that were still up for debate even a year or two ago are now accepted and considered part of governance. Scaling will happen because of policy; policy will occur because of carbon pricing.

The Biden administration is an enthusiastic partner. No matter what form the infrastructure bill ultimately takes, we have already seen a willingness of regulators to strengthen disclosure to ensure investors understand the carbon impact of their portfolios. This is crucial for investor initiatives like Climate Action 100+ and other engagements to succeed.

Over the past five years, corporations have begun responding to these expectations and incorporating ESG and sustainability issues into their planning and operations.

As more investors conduct a carbon footprint of their portfolios, we see an increase in engagements with the companies they invest in. This is not an issue that is going to fade away. But it is not enough for investors to simply divest away from heavy carbon emitters. That just allows bad actors to seek shareholders that do not care about emissions.

We also see innovative companies and start-ups working on nature-based solutions and low-carbon products. Although it is difficult sometimes to know which companies will be successful, there is a place for investors to conduct careful due diligence and invest where it makes sense for the portfolio. For example, CalSTRS was a very early investor in Tesla and maintained its position even as the value dropped precipitously in the early years.

How can women make a difference in accelerating climate action and nature-based solutions?



Dr. Ming Luo
Deputy Director of Land Consolidation Center,
China's Ministry of Natural Resources

China persists in taking multiple measures to effectively play the role of carbon sequestration in forests, grasslands, wetlands, oceans, soils, and frozen soils and continues to consolidate and enhance the carbon sink capacity of the ecosystem. China is the country with the largest increase in forest resources and the largest afforestation area in the world and has become the main force in the global "greening."

From 2010 to 2020, China will implement about 108 million mu of returning farmland to forests and grasslands.

During the "13th Five-Year Plan" period, a total of 545 million mu of afforestation, 637 million mu of forest tending were completed, 10.978 million hectares of sand prevention and control tasks were completed, 1.65 million hectares of rocky desertification control were completed, and 310,000 square kilometers of comprehensive soil erosion control were completed.

467,400 hectares of degraded wetlands were restored, and 202,600 hectares of wetlands were added.

By the end of 2020, a total of 800 million mu of high-standard farmland has been built, 1,200 kilometers of coastlines have been renovated and restored, and 23,000 hectares of coastal wetlands have been effectively protected.

Tomorrow is Double Eleven, China's e-commerce shopping festival, our shopping day. The total amount of consumption on Double Eleven in 2019 was 1.48 trillion Yuan, which is equivalent to a per capita consumption of 1,000 Yuan. The proportion of women shopping online is about 66%.

For the same green products and energy-saving products, women are more willing to buy; this is a very interesting conclusion.

Women play a leading role in green consumption. The Beijing survey found the proportion of women in garbage sorting is nearly five percentage points higher than that of men.

In short, in the face of climate change and the promotion of NBS to meet the challenges, women who can hold up half of the sky and all mankind should play a role. Thanks!

Fan Dai

Director of the California-China Climate Institute

As I think we can see from this panel, women are already making a significant impact in this space. In particular, women can help make sure climate policy is inclusive of all types of stakeholders, especially traditionally underrepresented groups, including women and people of color, indigenous peoples, youth, and other groups.

We know climate policy is most effective when it is inclusive. I think all of us - women and men - need to uplift women's work in climate policy and make sure everyone's voices are heard and solutions are implemented.

We also know that gender equality and equity more generally is essential for us to address climate change -- which all of us want to do.





Betty Yee

California State Controller

Women elevate all voices, and women are the connectors in a community. We are caretakers of families and caretakers of the land. Climate action depends on the changes we make now and a climate-diplomacy mindset for future development.

We should invest more in women's voices and women-owned companies. As more women take seats on corporate boards and in the C-suite, we benefit from their diverse experiences, voices, and view points to help lead corporations to a more sustainable future.

Women also traditionally steer their family's purchases, which companies are responding to by focusing on the sustainability of their products and supply chains.

We are at the point where all climate solutions must be considered, and development that does not include sustainable assets – whether in tech, supply chain, water, and waste – should not be considered viable.

Women will be the key to climate solutions.

Amy Lo
Head & Chief Executive Officer
UBS | Hong Kong Branch

I'm so honored to be in this women's panel. As I mentioned earlier, having sessions like this can make a difference as it brings together the woman leaders from different sectors, different parts of the world, to combine and amplify our voices on why it is important to accelerate climate action and the nature-based solutions there. Hearing the interesting insights from the speakers today has given me the confidence that women can play a critical role in driving that kind of action. We can help to lead women by supporting others to think about making a positive difference for families and people. For example, from a bank perspective, we do the surveys regularly, and we know that women have a strong interest in sustainable investing.

The latest survey showed that 76% of female investors are very interested globally and think sustainable investing is extremely important, versus 63% of men.

I also have the privilege of also hearing directly from our female clients, who are women leaders in the APAC region, driving innovation to address climate change. I got inspiration from one of the top women leaders. We joined forces to launch some of the COP26 related events, talking about food and sustainability, and how we can help to reduce carbon emissions there.

It's the collaboration we have to do to drive the whole initiative. I believe that a lot of the clients we work with on the philanthropy side are also matriarchs or daughters of the family. So, we can make a huge difference in driving climate action for nature-based solutions.



