

Beyond bias: building leadership cultures for the energy transition

According to IRENA, women represent just 32% of the global renewable energy workforce, with even lower representation at senior levels. This is not only a question of representation, but of missed opportunity. Inclusion is a strategic advantage, and unlocking it requires understanding and addressing the subtle dynamics that shape how leadership potential is recognised and developed.

Most professionals would agree that decisions in modern organisations should be based on merit. Yet behavioural research shows that human decision making is rarely free from bias. The International Renewable Energy Agency (IRENA) highlights that the barriers women face are less about skills or interest and more about entrenched cultural and organisational norms. As a result, female representation declines across levels, from 28% in STEM roles to just 19% in senior leadership.

This matters for the energy transition. Sectors such as solar, storage and grid infrastructure are central to delivering resilient, secure systems at scale, and this depends not only on technology but on how organisations mobilise talent and make decisions.

Leadership culture shapes innovation. Diverse teams bring broader perspectives, make better decisions and are more effective in navigating complexity, a link consistently highlighted by McKinsey & Company.

How bias shapes leadership perceptions

Bias does not necessarily mean intentional discrimination. More often, it reflects the mental shortcuts our brains use to process information quickly, shaped by cultural norms, professional environments and long-standing expectations about leadership.

Small, often unconscious assumptions can influence how behaviour is interpreted. Over time, repeated exposure to these assumptions shapes patterns of perception within organisations.

'Bias is rarely about bad intentions,' explains Carmen Madrid, Women in Solar+ Europe Founder. 'It is about the lenses through which we interpret behaviour. Once we become aware of those lenses, we can begin to challenge them.'

For example, the same behaviour may be interpreted differently depending on who demonstrates it. A confident man may be described as decisive, while a confident woman may be seen as aggressive. A cautious man may be perceived as strategic, while a cautious woman may be seen as unconfident. The behaviour itself is identical, but the interpretation differs.

Several well-documented types of bias contribute to these dynamics, including affinity bias, confirmation bias, and performance attribution bias, where success is attributed differently depending on who achieves it.

'These dynamics rarely appear as overt discrimination,' says Claire Gardner, Marketing Manager Europe at Solis and Ambassador within the Women in Solar+ Europe network. 'They emerge through small signals: how

feedback is delivered, whose ideas gain traction in meetings, or how leadership potential is discussed in promotion conversations. Over time, those signals can shape careers.'

Recognising the '10X Effect'

To draw attention to these dynamics in the renewable energy sector, Women in Solar+ Europe (WiSEu) recently launched its International Women's Day campaign, 'Beyond 10X: Leadership Without Double Standards.'

The campaign takes inspiration from the words of chess grandmaster Judit Polgár: 'I had to prove myself 10 times more than if I'd been born as a boy.' Her reflection captures a dynamic that many professionals across industries still recognise today.

Within the WiSEu community, this phenomenon is often referred to as the '10X Effect.' The term describes the invisible pressure some professionals experience when they feel they must demonstrate competence more frequently or more visibly to receive the same recognition.

'It's not always obvious,' explains Zoraida Bejarano, Head of Talent at NextEnergy Group and Women in Solar+ Europe ambassador. 'This might include higher expectations around proof, different interpretations of communication, or success being explained by





external factors rather than expertise. The campaign is about reflection, not blame, and about considering how leadership environments can improve over time!

The initiative invites professionals across the solar-plus ecosystem, women and men alike, to participate in discussions, share experiences and explore ways to strengthen leadership cultures within the industry.

Everyday leadership dynamics

Many professionals recognise how subtle dynamics can influence perceptions of authority.

In fast-paced technical sectors such as solar and energy storage, leadership interactions often take place in meetings, project discussions, and cross-functional decision-making forums. It is within these everyday environments that perceptions of expertise are formed.

For example, professionals sometimes observe situations where ideas gain more attention when repeated or reframed by another colleague. 'Research has shown that women leaders are more likely to receive feedback related to communication style, such as being described as 'too direct' or 'too cautious', while men are more frequently evaluated based on strategic outcomes,' says Gardner.

'Leadership presence is often influenced by informal signals,' adds Zoraida. 'Which ideas gain traction, how expertise is recognised and whose voice carries authority are shaped through everyday interactions.'

Another dynamic that occasionally appears in professional environments relates to how expertise is recognised in discussions. In technical conversations, professionals sometimes offer explanations without first recognising the knowledge already present in the room. While these situations are rarely intentional, they can influence perceptions of credibility if someone's expertise is overlooked.

'As professionals, we all benefit from being mindful about how we engage with expertise,' says Hollie Carek, General Manager UK and Global Head of Partner Marketing Strategy at OpenSolar. 'Recognising the knowledge and experience that colleagues bring into the conversation strengthens collaboration and professional dialogue.'

Awareness of these dynamics allows organisations to ensure that ideas are evaluated on their merit rather than on assumptions about who presents them.

Why psychological safety matters

Leadership culture also plays a crucial role in innovation. Research from Google's Project

Aristotle identified psychological safety, the ability to share ideas and challenge assumptions without fear of negative consequences, as one of the most important factors behind high-performing teams.

In sectors like ours, complex challenges require collaboration across engineering, finance, policy and technology. The ability to bring diverse perspectives into decision making is therefore essential.

'When professionals feel comfortable contributing ideas openly, organisations unlock a broader range of solutions,' explains Aga Michalak, Head of Marketing & ESG Europe at Jinko and Women in Solar+ Europe Ambassador. 'Innovation thrives where people focus on solving problems rather than managing perceptions.'

Creating these conditions is therefore not only a matter of workplace culture but also an innovation imperative for the energy transition.

The role of allies

Improving leadership cultures requires participation from across organisations, including men and other allies. Allies play a vital role in reinforcing environments where expertise is recognised consistently and where professional discussions remain focused on ideas.

One effective practice is credit amplification, ensuring that ideas are attributed to the person who originally proposed them. 'If a colleague's idea is overlooked and later repeated, acknowledging the original contribution can make a meaningful difference,' says Hollie Carek. 'It reinforces the idea that everyone's contributions matter.' Allies can also support balanced discussions by ensuring that all participants have the opportunity to share their perspectives.

Another important step involves clarifying evaluation criteria, adds Gemma Buckley, General Counsel and Chief Corporate Officer at Solarport: 'Businesses do better when people are judged on what they deliver: their results, their values, how they think, how they work with others. When those expectations are clear and applied consistently across the board, you end up with better decisions and stronger teams. Treating people fairly doesn't hold a business back. If anything, it's what drives it forward.'

From WiSEu to Solar+ Leaders: expanding the leadership conversation

These conversations around leadership culture are also shaping how professional networks within the sector are evolving.

What began as Women in Solar+ Europe (WiSEu), a professional network created to support women navigating leadership journeys in the solar-plus industries, is increasingly expanding into a broader leadership ecosystem that includes both women and men.

This evolution reflects a simple reality: addressing leadership dynamics, bias, and credibility gaps cannot happen in isolation. True progress requires shared dialogue and collaborative leadership practices across the entire industry.



To support this objective, the initiative is growing through Solar+ Leaders, a leadership ecosystem designed to bring together professionals from across the clean energy value chain, including solar, storage, grids, EV charging and the wider clean energy sectors to explore leadership development, mentoring and inclusive decision making.

'Leadership challenges are rarely solved in silos,' explains Aga Michalak. 'If we want to create leadership environments where talent can truly thrive, women and men need to learn together, reflect together and build leadership practices together.'

By creating spaces where professionals can openly explore how leadership expectations evolve, these initiatives aim to strengthen the sector's ability to address the complex challenges ahead.

Building the leadership culture the energy transition needs

Our solar plus sectors are entering one of their most decisive decades: one where energy security, resilience and independence have become as urgent as climate goals.

Meeting these challenges will require more than technology. It will depend on how effectively the sector mobilises its talent, fosters collaboration and creates environments where the best ideas can emerge and be implemented.

Leadership culture, therefore, matters.

When organisations recognise talent consistently, encourage psychological safety and remain aware of the subtle biases that influence decision making, they unlock their full capacity to innovate and deliver.

As Carmen Madrid, founder of Women in Solar+ Europe, explains: 'The goal is to create leadership environments where every talent can shine.' Because embracing our differences is precisely where our strength lies. Beyond those differences, our purpose is shared: to overcome the challenges of the energy transition and build secure, resilient energy systems for the future.

Interested in taking part in the conversations? Join WiSEu Network at wiseu.network to start the journey.

