

A powerful force in renewable energies



"I want to influence the key decisions made on energy transition and contribute to moving the needle on climate action."

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In the transition to renewable energy, Excellence Scholar Nabila Salsabila is set to play an active part. Her own energies in this area focus on the challenges facing her home country of Indonesia.

Nabila Salsabila has to think for a moment when asked who her role models are. "I admire people in leading political positions who are steering their country towards net zero as well as environmental activists like Tiza Mafira, who helped initiate a drastic reduction in single-use plastic bags in Indonesia. Inspired by different people, I want to forge my own path." The young woman from Indonesia has a clear goal in mind: an influential position in which she can take effective action in the environmental politics of her home country. At ETH, she's building the toolkit she needs with a Master's degree in environmental sciences, specialising in environmental systems and policy, supported by an Excellence Scholarship.

Pushing for systemic change

For her Bachelor's in bioprocess engineering at the University of Indonesia, Nabila Salsabila delved deep into energy, climate and sustainability-related topics. When it came to her thesis, she modelled a renewable energy system for productive usages of hybrid power generation and household-scale biogas generation, using an underdeveloped Indonesian village as a case study. Taking techno-economic, financial, political and environmental

aspects into account, her analysis covered wide ground.

In order to take this holistic approach a stage further, she decided to pursue a Master's degree at ETH. Her enthusiasm was fuelled not only by the courses and the infrastructure available but also the green spin-offs that the university has generated: "Synhelion and Climeworks, for example, both play an important role in the battle against climate change. And Zurich-based South Pole is at the top of the list of companies I'd like to apply to after graduating," Nabila Salsabila says. "I'm grateful that the Excellence Scholarship allows me to study in such an inspiring environment."

Her view of the impending energy shift is influenced by her origins. "In low- and middle-income countries, the challenges of phasing out fossil fuels and converting to renewable energies are even bigger.

Many people don't even have access to a reliable electricity supply in the first place. Social inequalities therefore push the topic of clean energy into the background," Nabila Salsabila explains. In her opinion, a systemic change is required – and this needs to be driven by political intervention. "Although solar panels or hydroelectric and wind power plants are expensive to build, they're cheaper to run. Subsidies provided by the state could make renewable energy more attractive than fossil fuels." And this could be a way of making the industry more accountable too. In the student's view, further prerequisites for an effective energy transition include reducing bureaucratic obstacles and upgrading the electrical grid to allow for higher renewable penetration. Many of these points also apply to Switzerland and Europe, she says. But the path to transition is not as long here as it is in her home country.

A true energy nerd

There's no question for Nabila Salsabila that her generation puts environmental issues high on the agenda and wants to find solutions. This was made clear by the 5000 young people participating in the questionnaires and dialogues she carried out as the Southeast Asia Regional Coordinator for the Global Youth Energy Outlook at Student Energy, a global youth organisation set up to empower the next generation to achieve a future where energy supply is more sustainable and fairer. Nabila Salsabila was able to vocalise her generation's aspirations and demands in a presentation at the 2021 UN Climate Change Conference (COP26) held in Glasgow.

The young woman is resolute in the pursuit of her goal. For her it's clear that the decisions taken this decade are crucial in light of what's yet to come. She keeps on top of things with a daily to-do list and a social media timeline filled with articles and news on energy and climate topics. In addition to her studies, she's now expanding her language skills in Indonesian and English with German and French. "My boyfriend says my biggest hobby is gaining new knowledge," the student laughs. And adds: "He's probably right."

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