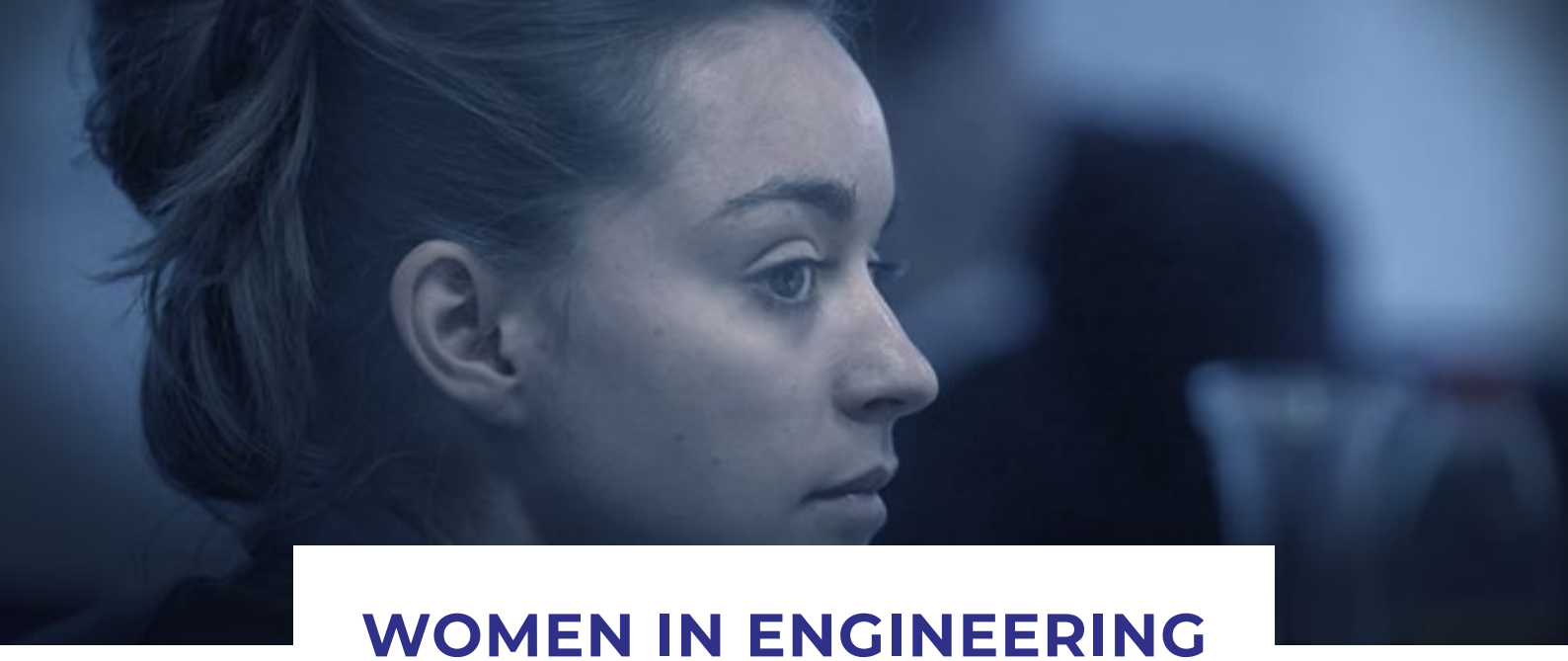

WOMEN IN ENGINEERING STILL STRUGGLING?

> *«I don´t feel that there is a gender issue here. We are almost 50 percent women at work. There is no pressure, no expectation, and no discrimination ever being a woman.»*

Laetitia Anglade is young a photovoltaics engineer and works for the solar energy startup **Insolight** in Lausanne, Switzerland. She is also part of the EU-funded solar energy research project **GRECO**. Among others, it advocates for women in engineering.

Laetitia has perfect working conditions. Lucky her: gender-balanced structures are still the exceptions to the rule.

Apparently, this is an EU-wide phenomenon: The «She Figures report 2018»,[1] stresses the persistence of gender stereotypes in academia. On average, women outnumber men at student and graduate levels. There is also a broad gender balance at PhD level. However, it varies significantly in the scientific fields: "The presence of stereotypes is especially strong in the field of science, technology, engineering and mathematics (STEM), where women remain underrepresented at all levels starting as students (32% at Bachelor, Master or equivalent level) up to top academic positions (15%). Furthermore, women still make up the minority of top academic positions."

Not surprisingly, the reasons for these manifest stereotypes reach far back to our early socialisation:

In childhood, girls and boys learn to understand what society expects from them. Apparently, children understand gender stereotypes by the end of their first year. By the age of two, they imitate the behaviour of other children of the same sex. They have internalised gender stereotypes by the age of four. In general, boys are encouraged to explore the world. Girls are encouraged to engage in social activities. STEM topics are typical «boys' stuff».[2]

1 She Figures report 2018 **https://ec.europa.eu/info/publications/she-figures-2018_en**

2 Crackting the code: girl´s and women´s education in science, technology, engineering and mathematics

Consequently, the EU published in May 2019 the study: «Women, Gender Equality and the Energy Transition in the EU».[3] Though the energy sector has growth potential for jobs, women are still significantly underrepresented. Men dominate the energy sector workforce with 78 percent. Women represent only around 22 percent. Same picture in the renewable energy sector, where women represent less than 30 percent of the positions. And these are mostly jobs in administration and communication.

But what are the reasons for this discrepancy – apart from boys conquering the outside world and girls socialising with each other?

According to Clancy & Feenstra 2019[3], there are additional structural obstacles for women in engineering and other STEM jobs:

- *lack of appropriate skills due to the gender gaps in energy-related education*
- *the difficulty of achieving a work-family balance which discourages women from taking on jobs that involve unpredictable work schedules or emergency travel*
- *insufficient career promotion opportunities and mentoring programmes for women.*

Despite all this, technical engineer Laetitia Anglade is one of the magnificent examples of successful women in engineering. As part of the EU-research project GRECO she counteracts deep-rooted female stereotypes. Such is also the case within GRECO staff: Females even outnumber males. This is in line with the EU Horizon 2020 strategy on gender equality.

The Italian physicist Giuliana Rubbia is a member of the GRECO Social Advisory Board and is particularly pleased with the high number of female researchers in the project. Giuliana is also a member of the board of the European Platform for Women in Science. The EPWS is an international non-profit organisation which gathers networks of women scientists and organisations committed to gender equality. Giuliana supports GRECO with her expertise and applies the gender focus. This is what she has to say about GRECO: “It is exemplary that there are mostly women as work package leaders. Also, the introductory video stresses gender equality and promotional videos display more female researchers than male ones. All these aspects contribute to drawing a different, positive and welcoming picture of solar energy. And this contributes to an overall effect of attracting more women into engineering.”

Let’s keep it up!

Authors: Regina Schwald, Giuliana Rubbia
Design by ESCI

(STEM) UNESCO, 2017 **https://unesdoc.unesco.org/ark:/48223/pf0000253479**

3 Clancy J. & Feenstra M. (2019) “Women, Gender Equality and the Energy transition”. **http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2019)608867**