

Baltic Hub

Gender balance in STEM – what it is and what could be done?

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Executive summary:

One of the statistical indicators showing the level of participation of males and females in the labour market is a distribution of opportunities and resources between women and men, and/or the representation of women and men. If this distribution or representation is equal, it is considered that a gender balance is present. The transport sector is considered to be one of the most unevenly gender balanced fields. The result is that females have limited access to these particular branches of the labour market and there is also occupational gender segregation.

However, research demonstrates that a diverse workforce can have an impact, in increasing productivity, competitiveness and profitability. It also enables enterprises to get access to a wider market of talents and specialists with different types of skills, which contributes to overall enterprise performance.

Key messages:

- **PURPOSE:**

To inform everyone interested about the present situation of gender balance and the impact of its absence in the STEM field; to introduce ongoing practical measures in raising awareness about the importance and necessity of gender and diversity balance, as applied in one of Lithuania's tech-oriented education institutions and to assess the gender related context of Baltic countries regarding STEM fields of study.

- **AUDIENCE:**

This policy brief presents the topic for general society as well as for women who are interested in pursuing a career in transport and smart mobility. It aims to raise awareness in the academic environment and to inspire other fields to be more inclined to address the gender balance and the challenges women face in different fields.

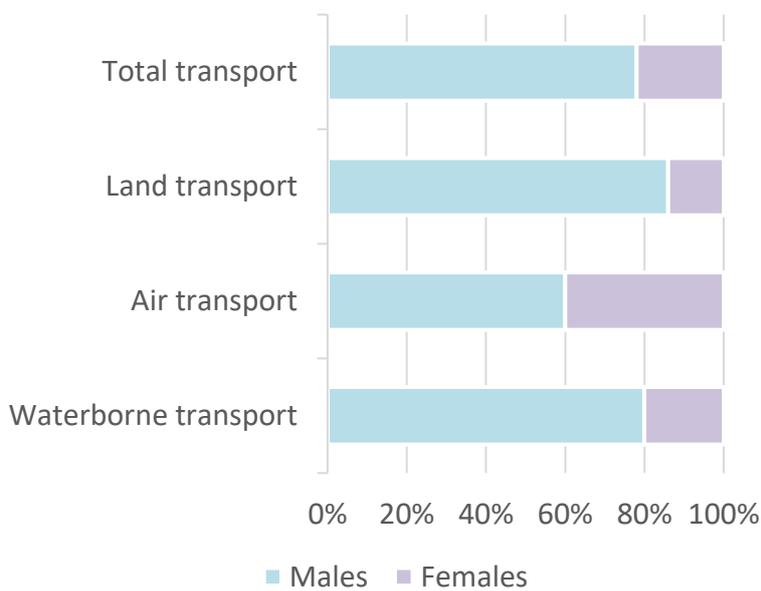
- **FOCUS:**

Transport companies (especially public transport entities, rail, air and sea transport companies), STEM studies, transport and tech-oriented universities which tend to lack gender balance, both among students and employees.

The data shows that although the gender balance and related topics (e.g. gender pay gap) are being addressed for some time now, the much needed change is yet to come. Only over 22 percent of females are working in the transport sector with the highest results in air transport (see the chart below).

In this brief this topic is being addressed within the context of a STEM and transport-oriented education institution – the university – while raising the question of ‘what is the role of technical universities and what could be done?’.

Share by gender and transport mode

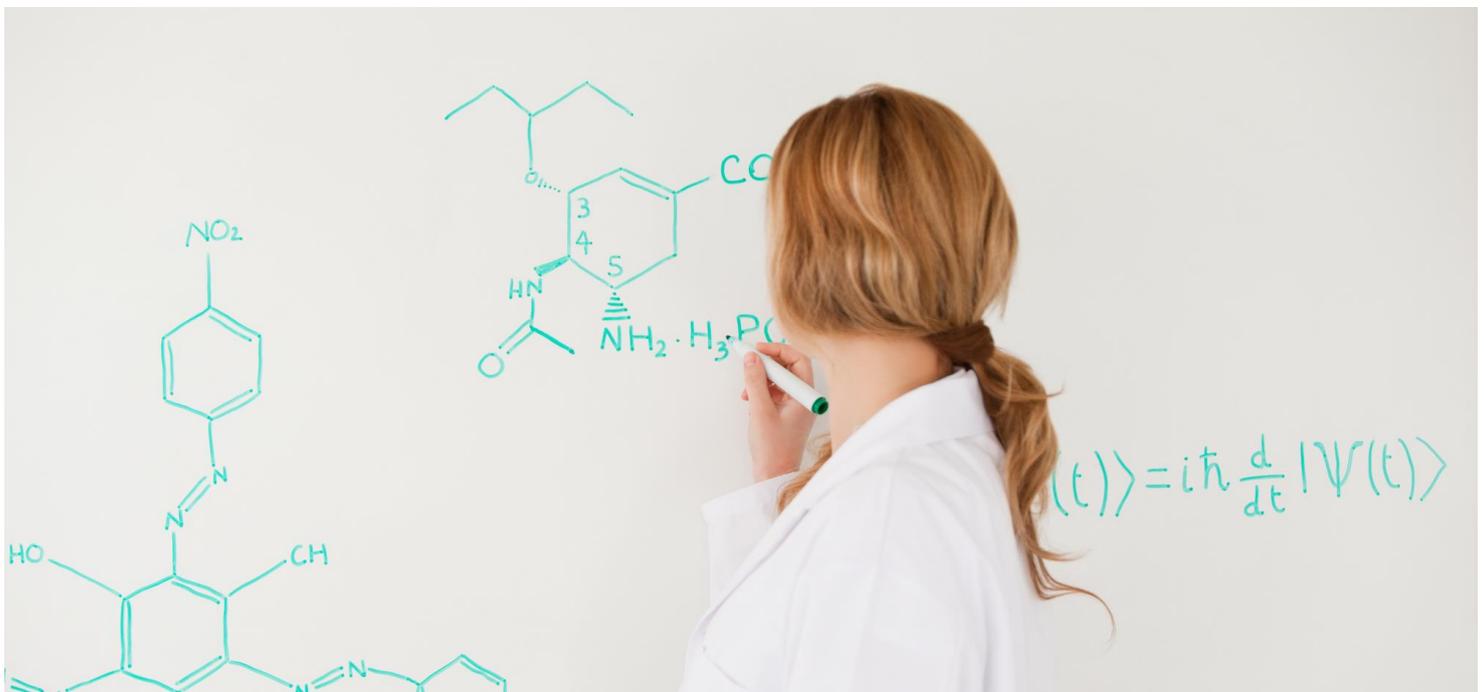


Source: Eurostat, 2017

Research overview

Significant importance in increasing gender balance in the transport sector lays within the role of the higher education institutions, especially those focused on STEM, transport and tech-oriented institutions. A more diverse study environment in technical universities would bring benefits to their achievements in the context of studies and transport innovation through different diversity-inspired approaches towards the aspects studied as well as motivation to make the study field or the results of the studies more inclusive. It would also have the benefit of a more gender balanced future work environment for the graduates (workplaces are enriched by the aspect of gender and diversity, with awareness of employers about gender-oriented facilities and other workplace aspects).

That is why the Baltic hub decided to contact one of the tech-oriented universities in Lithuania and perform gender and diversity-targeted activities: to inspect the gender balance situation in the university, evaluate the present situation and establish cooperation with the institution aiming to set up a plan and agenda specially for it.



At the beginning of the process, analysis of the statistical data and conversation with the representatives of the administration of the university took place. During the discussion, the general vision towards the topic in the institution was addressed: what is the perspective of the university on the gender balance, what policy of gender and diversity aspect is being applied (if it is), are there any specific actions taken by the administration or the employees, do they see the need to make any (or more) efforts so that the situation would be improved.

The statistical analysis demonstrated that the university is not much different from the general situation – in 2019 females constituted almost 42 percent of all STEM students. It is important to notify that the share of females has significantly risen from 2015 when it was reaching almost 32 percent.

The discussion with the representatives showed that the university does not really have gender and / or diversity-oriented policy and has applied no specific actions related to the topic.

It means that despite this inactivity on the topic of gender balance, a significant increase of females in STEM fields is being spotted.

Despite the fact that the gender balance among the students is changing for the better, it does not mean that no additional measures should be taken. The transport sector is still strongly male-dominated and the present gender exclusion in this field is still relevant.



With an aim to inspire more females to start their career in the STEM and transport fields and to keep the number as stable as possible during the study times and beyond – while pursuing a career in the field as an employee – the Gender and Diversity Action Plan (GaDAP) for the university was formed.

The aim of this plan is to establish a more diverse study environment regarding gender balance, both among the students and the staff. The ambition is to bring achievements in STEM studies and in transport innovation in general as well as create a more gender balanced future work environment for the graduates.



Conclusions and recommendations

Based on the job done and strategy created, the stakeholder will work on improving their practices towards gender and diversity aspects in the university. The knowledge gained and instructions gathered, together with examples of best practices are set to inspire and motivate staff to pursue a more gender balanced environment. Certain strategies will be followed to make further progress in the field. The strategies will concern inclusive communication (i.e., being cautious of referring gender to specific professions, professional skills, educational paths, subjects in schools, etc.) with students at school and university; improvements of gender balance and diversity both between students and staff; as well as gaining experience on how to gain more social and strategic impact and profits of becoming a more open and supportive institution for gender and diversity. Taking into account the limited budgets of schools, the positive attitude would be suggested by active involvement of the schools themselves into these practices with an ambitious perspective of financing a specialized school-oriented body.

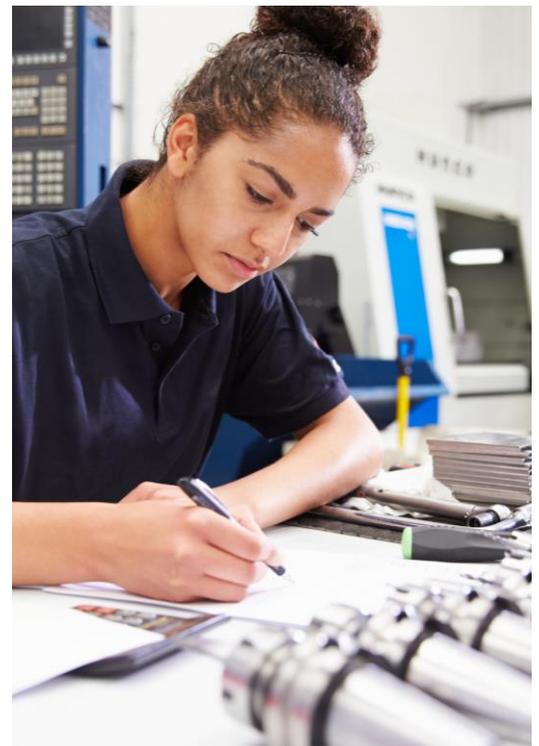
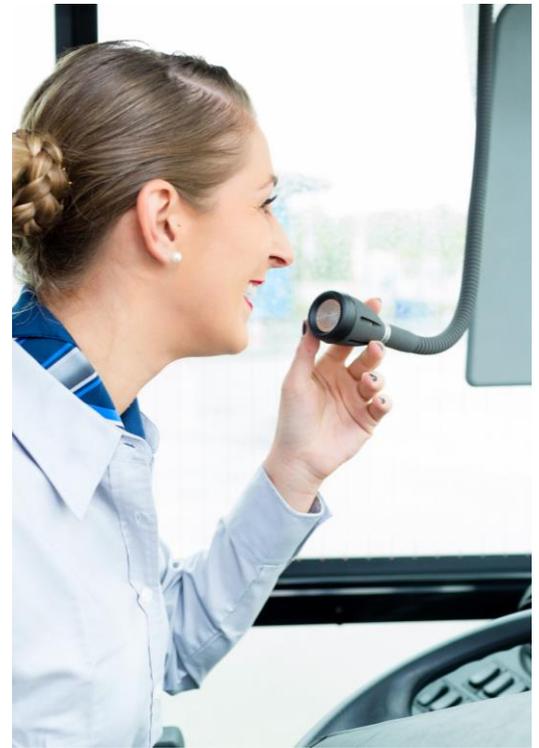
Moreover, during the practices of the Baltic hub, the presence of female role models in the transport field strongly encourages the younger girls not to hesitate and not to rely on gender stereotypes, but follow the path they are sincerely interested in. Hence, the representatives of successful females of STEM and transport fields are strongly encouraged to be present in the eyes of youngsters.

The GaDAP of the Baltic hub is set in accordance with the following gender smart dimensions:

- Attractive: successful attraction of female students to the educational field of STEM.
- Effective: successful retention of female students in STEM by providing an education that meets their expectations. Successful preparation of future human capital for a better gender balance in the transport sector.
- Inclusive: the improvement of STEM studies and transport related education field as a gender and diversity inclusive environment.

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