

Interreg
Europe



FEMINA
Interreg Europe



FEMALE PARTICIPATION IN HIGH-TECH ENTERPRISES



The FEMINA Project

FEMINA partners believe that increased female participation can make high-tech SMEs more competitive. This belief, based on academic studies and practical experience, must become part of mainstream policy.

The gender gap is still visible in high-tech sectors across EU-28: women represented 29% of entrepreneurs in 2014 and 32.5% of employees in high-tech manufacturing and knowledge-intensive services in 2015. This is not a question of social inclusion. It is about economic growth: studies show that the women's specific skills can help to diversify and consolidate enterprises; that closing the gender gap could generate an EU GDP increase of 13%.

In this context, FEMINA partners cooperate at interregional level to reach their overall aim: to ensure that selected policy instruments are integrated with measures to promote female engagement in their high-tech sectors, with a focus on sectors in their RIS3.

FEMINA considers how to identify, implement, monitor and evaluate policy measures that break down barriers to female high-tech entrepreneurship, to employment and career progression in high-tech SMEs and to the gender dimension of innovation in funding schemes for high-tech start-ups and SMEs.

Policy improvements are foreseen through specific projects funded to address these barriers, through improved policy management (e.g. gender criteria in monitoring) and through strategic focus, whereby partners work to include female participation in high-tech as a fundamental principle of their policies for SME competitiveness.

FEMINA's main outputs are Action Plans, detailing these desired changes, which partners and selected stakeholders will implement and monitor over a 2-year period. The results of this implementation will benefit SMEs and the territory. An increase in female participation in high-tech entrepreneurship, employment and leadership should establish a culture of gender parity in these sectors, with impact on inclusive growth and regional competitiveness.

TABLE OF CONTENTS

The FEMINA Project	2
Policy context	4
Action – introducing a horizontal domain for gender dimension in Dalarnas´ s S4 through a strategic regional partnership.....	5
Details of the action envisaged	5
1.1 Policy need addressed	5
1.2 Overall topic	6
1.3 Description	6
Background	7
Transfer of Femina solution	8
Activities and time frame	8
Partners involved	9
Costs and funding	10
Risk and contingency plan	11
Monitoring	11

Policy context

In the FEMINA project application, Dalarna stated that the policy instrument to be improved would be ROP 2014-2020 for North Middle Sweden. However, since the programme period will finish in a couple of months, it has become more relevant to focus on influencing the coming ROP 2021-2027 and more specifically Thematic objective 1 and Dalarna's Smart Specialisation Strategy. Thematic objective 1 is strengthening research, technical development and innovation.

The OP 2021-2027 for North Middle Sweden is at the moment under development by Region Dalarna, Region Gävleborg and Region Värmland and is expected to be finalized and approved by the EU commission later this year.

Simultaneously, each region in North Middle Sweden is updating their Strategy for smart specialisation. Smart specialisation is central to EU cohesion policy and all regions in EU must develop a Smart Specialisation Strategy to guide the use of EU regional funding for research and innovation.

The S4 (RIS) is a place based strategy developed and promoted by the EU commission as a method and tool to develop and transform European region's economy and industry and increase our competitiveness. S4 set priorities at regional level to build competitive advantage by developing and matching research and innovation own strengths with business needs, to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts. They are also a backbone of national or regional research and innovation strategic policy frameworks in Europe. Smart specialisation is a way of working where thorough analysis and dialogue are key words.

In Dalarna, we have decided our smart specialisation strategy should not only be smart but also sustainable. Therefore, we call it S4 – Smart Sustainable Specialisation Strategy.

Region Dalarna is at the moment in the process of updating our S4. Since S4 is an enabling condition for ROP 2021-2027, the process of updating S4 is crucial for identifying new areas for specialization and roadmaps consisting of goals and measures for each area of specialization. This process is done in dialogue with regional key stakeholders in the innovation ecosystem and the process is called the Entrepreneurial Discovery Process and is another enabling conditions for ROP 2021-2027. The Entrepreneurial Discovery Process (EDP) should be a continuous process during the whole program period. An EDP uses entrepreneurial knowledge existing in a region and takes an entrepreneurial approach, focusing on market opportunities, differentiating from others, taking (and managing) risks and seeking alliances to optimise the access to and use of resources (physical, financial, intellectual, market knowledge, etc.). This means that policy-making should involve all types of innovation actors (e.g. businesses, technology and competence centres, universities and public agencies, science and business parks, business angels and venture capitalists, civil society, etc.) in an entrepreneurial process for the design of S4, and assess their proposals for future development and investment. Simple surveys among these actors are not sufficient. The essence of the EDP lies in its interactive nature that brings the different actors together in a participatory leadership process to carve out jointly the smart specialisation fields and develop a suitable policy mix to implement them.

Action – introducing a horizontal domain for gender dimension in Dalarnas´ S4 through a strategic regional partnership

Region Dalarna will use the EDP process in order to modify the strategic focus in our S4 and consequently ROP 2021-2017.

A horizontal domain for gender equality will be introduced in our S4. This will be followed by a roadmap, defining what kind of measures and actions are needed in order to achieve the defined goals. Each domain will also develop a financial plan where financial sources for each measure and activity will be identified.

The content of this domain will be developed through an EDP where the regional strategic partnership will be the main player. The partnership will be involved in the EDP and have the main task in the development of a road map and monitoring of the horizontal specialization area Gender Equality.

The strategic regional partnership will involve stakeholders providing activities in the field of gender equality in general, but especially those who are involved in activities to increase the number of women in STEM.

Details of the action envisaged

1.1 *Policy need addressed*

Sweden is an innovation leader in the European innovation scoreboard and the leading nation according to the 2019 edition (Hollanders, Es-Sadki, & Merkelbach, 2019). As of 2016, Sweden had the highest gross expenditure on research and innovation (GERD) in the EU. Sweden also performs well in similar rankings (c.f. Cornell University, INSEAD and WIPO, 2019) consequently placing near or at the top of different measurements of innovation.

Dalarna has some of the world leading industries in the fields of steel and electrical equipment. However, as we lack head offices and R&D departments, Dalarna cannot demonstrate the above-mentioned level of innovation or expenditures in innovation. Dalarna needs to deal with issues connected to the transformation from a traditionally industrial region to a knowledge-based economy, with among other things relatively low levels of education and R&D in SMEs. The mains sectors where transformation is needed are manufacturing of electrical products, machinery and components, as well as digital services, mainly but not exclusively directed at the advanced industry sector.

Across all these sectors, female participation is around 20%. We need to address these issues and improve the executions of policies and innovative actions.

Although the ROP includes gender equality as a horizontal principle, there is no direct connection between this principal and its potential to promote competitiveness in high tech sectors.

In our upcoming ROP 2021-2027 and our updated S4, we need to unlock our potential by integrating the EDP as a decision-making tool by utilizing entrepreneurial knowledge existing in our region and taking an entrepreneurial approach.

Since the start of the FEMINA project, important stakeholders have met regularly and discussed how to increase female participation in STEM inspired by good practices from partner regions. The stakeholder group also assessed what kind of activities have been carried since 2005 and on-going activities in Dalarna. The group made the conclusion

that there have been a wide range of activities among different kind of stakeholders, both by private and public actors and on both local and on regional level. The assessment concluded that there have been approximately 30 projects and activities carried out since 2005. However, there has not been any coordination or exchange of experiences among the various stakeholders and activities. We have identified a strong need of a platform and partnership where stakeholders with an interest of increasing female participation in STEM can meet and coordinate activities and exchange experiences. The stakeholder group is convinced that with a regional partnership aiming at coordinating activities would increase the total impact of the different measures. The partnership should consist of stakeholders from both local and regional level, representing both public and private sector.

Our updated S4 will consist of 4-5 vertical areas of specialization and 3 horizontal areas where gender equality is one of the horizontal areas. The horizontal areas of specialization is a new approach. We have realized that we need to pay more attention to areas such as gender equality.

In order to execute this change of strategic focus and improved decision making, we need a strategic partnership addressing female participation in STEM and gender equality. The partnership will have an important role in the EDP in identifying a vision and objectives for the horizontal domain gender equality, but also in developing a road map describing how to achieve the objectives.

1.2 Overall topic

Introducing a horizontal domain for gender dimension in Dalarna's S4, through a strategic regional partnership. It will represent a strategic change for the ERDF investments in 2021-2027 by introducing a new horizontal domain into S4 with the overall aim to into S4 and result in a road map and a financial plan for action needed for gender equality. This is a strategic change designed to support female participation in R&D activities within the high-tech sectors in Dalarna.

1.3 Description

As described above, Region Dalarna is currently updating the S4. This is an enabling condition for ROP 2021-2027. The updating process will be running until December 2021. This Action will contribute to the updated S4 by introducing a Horizontal Domain on Gender and a connected road map. In smart specialisation strategies, regions identify vertical areas or domains for specialisation. A vertical area for smart specialisation or domain can involve one or several sectors and a direction of what kind of transformation the domain should contribute for the regional economy. A horizontal domain should contribute to a transformation of all sectors or domains. In this case Region Dalarna wants a transformation into a higher degree of gender equality in all vertical domains but especially focus on the high-tech sector and industry.

Each domain will set up their own vision and objectives and a roadmap or action plan on what kind of measures and action needed in order to achieve the defined goals. Moreover, each domain will also develop a financial plan where financial sources for each measure and activity will be identified. Since Smart Specialisation Strategy is an enabling condition for ERDF 2021-2027, the roadmaps and financial plans will be an indication of actions needed for the ERDF.

In order to achieve this, Region Dalarna will set up a regional stakeholder partnership for the horizontal domain gender equality. The partnership will have an important role in the Entrepreneurial Discovery Process developing and monitoring the Smart Specialisation

Strategy in Dalarna and the horizontal smart specialisation area for gender equality. The partnership will be involved setting up a vision and objectives for the horizontal area but also in the process identifying measures needed in each vertical smart specialisation area for increased female participation in STEM. Monitoring the progress of the S4 in a gender equality aspect will also be an important task.

In addition, the partnership will continue on going or planned activities. It will have an important role in identifying future needs for actions and measures and in the ongoing monitoring of the Horizontal Domain in this new programming period.

Background

During autumn 2020, Dalarna University College made an assessment of all reported GP from the partner regions. The results were presented and discussed during several stakeholder meetings. The stakeholder group made following conclusion; there is a strong correlation between a successful implementation and the existence of a strong regional partnership addressing gender issues. The representatives in the stakeholder group can report a long list of activities and actions which have been executed in Dalarna during the last 10-15 years and ongoing activities. However, we lack a body or an arena with the responsibility to coordinate this kind of activities. The stakeholder group finds the work to be too fragmented and activities could have a bigger impact if they were more coordinated. The stakeholder group represents some of the actors who have carried out some of the activities and can therefore witness the need of coordination and exchange of experience. Actors who have not been represented in the stakeholder group but have activities aiming at increase female participation in High Tech businesses have been contacted and have expressed their interest in participating in proposed partnership.

The FEMINA project has through webinars, workshops and mentoring group sessions (Mentoring group meeting held in December 2020, with mentors from LP, Partners 3 and 6 and members from Partner 3 Advisory Board) allowed us to be inspired by two good practices that demonstrate the importance of a technology pact (Netherlands) or a regional committee for Gender Equality (Greece) with committed partners in order to mainstream gender dimension within regional strategies.

Transfer of Femina solution

Description of solution	Elements to be transferred for my policy improvement	Exchange process
Techniek pact Noord – multilevel mobilisation of stakeholders	Techniek pact Noord is a joint initiative encompassing both organised business community, the trade unions and the education sector and the regional level. The national Technology Pact coordinates measures and monitor the implementation of agreed objectives and inspired Dalarna to mobilise stakeholders in a regional partnership in order to address and coordinate actions within the field of female participation in R&D and High-Tech sector.	This Good Practice was identified by FEMINA Partner 10 and shared with the consortium in the project intranet and during the exchange session at project Convention 3 in Norway (October 2019).
Regional Committee for Gender Equality, Region Sterea Ellada	The organisation of the regional committee that supports and influence the integration of gender equality into the regional development policy and promotes measures that increase effective gender equality in all areas. We want to transfer the component of gathering important stakeholders into a committee for monitoring the progress of gender equality and coordinate needed measures (the idea of the strategic regional partnership).	This Good Practice was identified by FEMINA Partner 5. It was first presented and discussed in the occasion of FEMINA Convention 2 in Greece (March 2019). After the meeting, partner 5 shared more detailed information about the structure and functioning of the Committee in the project intranet.

Activities and time frame

June 2021	Written description of the role for the regional partnership when updating the S4 for Dalarna. The partnership will have an important role in developing vision and objectives for the horizontal area for specialisation – Gender Equality and later on monitoring the progress and results. The description will be written by Region Dalarna in collaboration with the stakeholder group.
June 2021	The first meeting and the establishments of the Regional Strategic Partnership for female participation in STEM Dalarna. The meeting will be

	organised by Region Dalarna together with the members in the stakeholder group.
August 2021- October 2021	<p>Identifying needed projects, activities and collaboration between regional stakeholders in the EDP for the horizontal area for smart specialisation – Gender equality.</p> <p>Meeting 1- August. Setting up vision and objectives for the horizontal domain.</p> <p>Meeting 2 – September. Developing a roadmap/action plan for the horizontal domain consisting of needed actions/measures to increase gender equality.</p> <p>Meeting 3 and 4– October-November. Integrating above actions into the vertical domains.</p> <p>Meeting 5 December Identification of indicators for the monitoring process.</p> <p>Region Dalarna will invite and organise the meetings.</p>
November 2021 – June 2023	<p>Political decision on the new S4 for Dalarna</p> <p>The partnership monitors and follows up on the progress of actions and measures carried out and when needed suggest new measures or changes of the roadmaps.</p> <p>Region Dalarna will invite and organise the meetings two times a year.</p>

Partners involved

Name of Organisation	Role in Action Plan
Region Dalarna	Region Dalarna is the responsible body for the development and monitoring of S4. Region Dalarna will have an important role in coordinating the work in the partnership together with the members in the stakeholder group.
Dalarna University College	Dalarna University College has a very strong competence in gender equality. They have long track record in organizing training and education addressing gender equality and more specific within the industry and high-tech sector. They will be an important member in the partnership.
IUC (Industrial Development Center)	IUC have and has carried out several activities and projects aiming at increasing the gender gap within the industry. They will have an important role in the partnership since they have direct contact in their daily work with SMEs.

HVV (High Voltage Valley) (Samarkand)	HVV is a cluster organizing the value chain surrounding Hitachi ABB Power Grinds. They work active to increase women participating in STEM and have direct contact with companies in the value chain and R&D.
Industry Council	A new established council gathering stakeholders for coordinating the supply and demand of education for the industry. The industry Council will be represented in the partnership and vice versa.
Dalarna Science Park	Dalarna has a Science Park who operates an incubator. Dalarna Science Park is an important actor in our innovation eco system and contributes with knowledge and experiences in innovation processes and projects management.

Costs and funding

Costs	Funding Sources
S4 updating / EDP process: costs covering the activities required to create the regional partnership and develop the proposed S4 horizontal domain / road map. The costs consists of expenses for meetings and staff costs.	Until the ERDF ROP 2021-2027 will be operational (Q1 2022) the activities will be financed by Region Dalarnas own funds.
Costs for S4 monitoring: Costs mainly for meetings and monitoring of the progress of actions and measures of the implementation of projects in the S4. . The partnership will monitor the horizontal objective equality of the projects implemented and when necessary suggest additional actions. The costs mainly consist of meeting costs for the partnership and statistical support	40 000 euro from the ERDF 2021-27
Implementation costs: Measures identified during the EDP will be financed by ROP 2021-2027.	ERDF ROP 2021-27

Risk and contingency plan

Description of Risk	Level of probability (High, Medium, Low)	Description of Contingency Plan
Not enough support from stakeholders	Low	One-to one meetings with stakeholders

Monitoring

Self-defined Performance Indicators		
Indicator	Target	Means of Verification
Road map S4 and the horizontal area for specialization; Gender Equality	1	Smart Sustainable Strategy for Dalarna 2021-2027
New measures and/or collaborations identified and financed by ERDF. It could be projects or components in projects that address gender equality in high tech sector.	5	Smart Sustainable Strategy for Dalarna 2021-2027 –road map
Output Indicators		
Indicator	Target	Means of Verification
Number of meetings in the Regional Partnership for female participation in STEM	6	Minutes
Number of new female stakeholders involved in the EDP	10	Participation lists

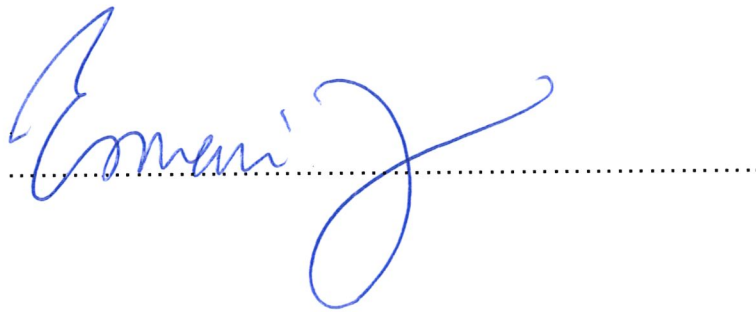
Signature

Institution: Region Dalarna, Department for Regional Development

Name of Signatory: Elsmari Julin

Position: Director, Department for Regional Development

Date: 2021-09-01



A handwritten signature in blue ink, appearing to read 'Elsmari Julin', is written over a horizontal dotted line. The signature is fluid and cursive, with a large loop at the end.



