

Research Project

Transition to a 'Green Open Economy': Labour Market Effects and Implications for the Swiss Economy

Third-party funded project

Project title Transition to a 'Green Open Economy': Labour Market Effects and Implications for the Swiss Economy

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This research project investigates the labour market challenges associated with stricter Swiss environmental policy, taking into account both the economic and environmental effects of this policy. The project thereby focuses on green jobs and green skills and emphasises Switzerland's 'small open economy' characteristics. The main scientific innovation of this project is to investigate the Swiss labour market in terms of green jobs AND green skills in the context of a small open economy. Investigating jobs and skills required for the transformation towards a green economy should yield new insights regarding the readiness of the Swiss labour market to cope with a transition towards a green economy. Supplying the necessary qualifications will be a central challenge and also condition for success. Hence, deeper knowledge of potential mismatches between demand and supply may help to introduce appropriate measures that enable a successful transition path towards a green economy. The project is structured in three parts. In the first part, we analyse how stricter environmental regulations affect the relative demand for input factors. The main aim of this analysis is to understand the relative importance of labour as an input factor relative to other input factors, such as intermediate inputs or capital investments, in a green economy. With regard to green jobs and skills, we will study (a) to what extent the shift towards a green economy leads to an increased demand for jobs and skills, which are, based on existing studies, commonly labelled as green jobs and skills and (b) whether we can identify an increased demand for new jobs and skills, which are currently not labelled as green jobs and skills. If we find an increased demand for such jobs and skills, we will include them in our final list of green jobs and skills. In the second part, we analyse whether the Swiss labour force can provide the green jobs and skills that are required for the green transformation and/or whether the Swiss education system (private, public) is prepared to provide these skills in the near future. To achieve this, we will (a) quantify and characterise the demand and supply for green jobs and skills, respectively, and bring together demand and supply in order to identify evidence for possible skills shortages and mismatches, (b) focus on migration as a way to acquire the needed skills to cope with a skills shortage or mismatch due to a transition to a green economy, and (c) differentiate the analysis by industry to learn about the relative demand of specific industries for jobs and skills. In the third part, we build on the results of the first two parts and identify possible deficits in green skills in Switzerland's work force and show under which circumstances this might be a major problem (e.g., in the tradeable sector) or only a minor problem (e.g., under certain requirements in the non-tradeable sector). Next, we put these results together and investigate the relationship between green skills and environmental outcomes in the light of several circumstances, such as migration or the reloca-

tion of production. Finally, we show how the supply of green skills has to be adapted in order to meet the future demand for these skills. We thereby show in which fields of education or training course changes need to be made, so that students and/or trainees can obtain the necessary (green) skills to carry out green jobs. The necessary changes in the selected curricula will be identified and analysed in detail. This part thus delivers key insights about which conditions have to be fulfilled for Switzerland's transition to a green economy so that its resource use reaches a sustainable level, a positive environmental impact can be achieved and the Swiss economy is not overburdened.

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