Qualification Offensive for Climate Protection A Proposal concerning the European Youth Guarantee

1. Youth for a sustainable future

The climate crisis does not allow a postponement of action. When the tipping points towards self-reinforcing global warming are approaching, rapid and drastic measures are called for. Not at some point or other, but here and now.

Climate protection requires commitment, but also creativity, technical know-how and qualified, hard work. Accelerating the transformation of energy systems, developing storage technologies, transforming buildings into zero energy settings or even in producing energy, for environmental sustainable towns and mobility: in each of these areas activities, know-how and the ingenuity of people who are capable to develop and implement ways and solutions to contain the global climate crisis are in demand. Beginning with energy transition, were will be demanded a high rate of qualified crafts(wo)men and engineers in the next years; and continuing with experts called for energy planning and digital control of processes. We need research for necessary technical and social innovations and we need consulting and communication tools to spread these innovations, to overcome acceptance barriers and to adapt solutions to concrete needs.

The need for qualified wo-men power extends far beyond energy-related tasks; to mention only the challenge of redesigning agriculture to be climate-friendly, protecting forests against mega-fires in drought summers, reforesting, redesigning forests, moors and wetlands , adapting cities and the countryside to the harsher circumstances of the climate crisis, and shaping the way we handle water, irrigation and rainwater in such a way that the consequences of aggravated water crises remain manageable in a different global climate.

In many regions and cities of the European Union, young people are in action, demanding climate protection "here and now", in particular with the "Fridays for Future Movement". In addition to the practical commitment, a great deal of technical knowledge and know-how, a wide range of new technical and interdisciplinary skills are necessary in order to successfully implement climate protection. Europe needs a huge amount of young people who are prepared and qualified for the diverse tasks of fighting against climate change. The supply of skilled workers in Europe – in other

world regions as well - at present is far from sufficient for the ambitious "green new deal" we need to fight against climate crisis.

For climate protection, a Europe-wide qualification offensive in many fields of action is therefore on the agenda. How can the European Union contribute to this, after the European elections and without delay? A future-oriented qualification offensive for climate change must be supported by young people - but on average it is precisely this group that is much more excluded from the labour market. At the beginning of 2019, the EU reported an unemployment rate of 6.3%, compared with 10.6% for the age group between 20 and 29 years[1]. The discrepancy is even more pronounced in the southern European countries, i.e. in regions that are particularly hard hit by the imminent climate changes and which at the same time offer great resources in the field of renewable energies. At the turn of the year 2018/19, youth unemployment in Greece amounted to 31.6%, in Spain to 23.8%, in Croatia to 16.6% and in Italy to 23.5%. Despite the fact that a large number of young people until now did migrate, looking for work in Northern European regions.

In principle, the EU since 2013 has developed a regulating instrument against youth unemployment: : **the European Youth Guarantee**. It obliges the Member States to offer young people between the ages of 15 and 24 either paid work in an enterprise or public institution or an apprenticeship within four months and for a certain period. After submission of implementation programs to the Commission , the countries receive funds from the EU budget. By 2018, a total of \in 6.4 billion had been made available for this purpose, now the figure is \notin 9 billion until 2020. It is obvious that this sum can only be used to alleviate youth unemployment. And if the European Commission now refers to the fact that youth unemployment (in the age between 18 and 24 years) has decreased from 24% in 2013 to 14.6% at the beginning of 2019, this is more the result of a certain economic revival and intra-European migration.

It is not surprising, that the Youth Guarantee only had limited effects in fighting against youth unemployment. To hire young people without additional training for a minimum wage improved with public grants, invites frequently to windfall effects in enterprises. Without any economic change, the youth guarantee remains an instrument that only temporarily gives young people career prospects; or it leads to shifts in the labour market. Taken on its own, it does not open up sustainable employment prospects or new jobs. In economic sectors where there is no more work or even less work in the next future, it resembles a zero-sum game.

On the other hand, it can have a positive effect in the long term in economic sectors that will be in demand in the future and are important for the future of society. The training and work of young people should preferably be promoted and supported in such business areas and activities. Thus, we propose an extended form of the Youth Guarantee, giving at the same time strong impulses for a Green New Deal. It should include a targeted training offensive offered to all Member States in line with their youth unemployment rates:

Thus, The EU could offer young and workless citizens work training and empowerment for the subsequent search for a profession, for setting up businesses or cooperatives in occupational fields that are suitable for advancing the sustainable development of the Union. One area that is particularly suitable are activities to improve climate protection and to mitigate the consequences of global warming. **We propose that the European Youth Guarantee should be extended to include an additional EU-funded programme "Youth for a sustainable future".** This offer is intended to provide young Europeans, including young refugees with residence rights, with primary or supplementary training in professions that are important and necessary for climate protection. The training should be closely linked to practical activities and local experience, similar to the "dual model" of vocational training in Germany. The young people should also learn how to be creative in the area of climate protection and energy transition, how to set up start-up companies and funding solidarity-based economic projects. Particularly in energy transition, initiative and creativity are particularly in demand.

The financial resources available to the European Youth Guarantee are far from sufficient to achieve the declared goal of opening the way for all young Europeans to a career and adequate work. Therefore, in the forthcoming discussions of the European budget, the funds earmarked for the youth guarantee must be considerably expanded.

In addition, the proposed educational offer "Youth for a sustainable future" requires that appropriate climate protection activities are actually tackled. However, all EU member states are bound by the Paris Convention on Climate Change, signed by the European Union in the name of all member states. The EU Commission has recently "added", in new directives negotiated with the European Parliament and the European Council, with concrete aims and requirements to be realized by all member states in the coming years. Just to name two directives: Following the directive 2001/2018, the share of renewable energies in the EU's total energy consumption must be at least 32% by 2030. Furthermore, the directive encharges the EU-Commission with the task to increase the share by 2023 if necessary because of an advanced climate crisis. And following the directive 2002/2018, energy efficiency must be increased by 32.5% across Europe until 2030. In view of the drama of the climate crisis, these targets are still too low; but they alone make it imperative to qualify far more than one million young Europeans in the next years to be able to participate in the restructuring of the energy supply.

Precisely the southern regions, which are affected by high youth unemployment, offer favourable conditions for the use of solar and wind energy and they also have a lot of work to do in ameliorating energy efficiency. In the coming years they will also be confronted more severely with the consequences of the deregulated climate and will have to do a great deal to limit desertification, the risk of erosion, suffering severe water crises and negative effects on agriculture. This is another reason why they need qualified young people in their own region, instead of forcing them to migrate to other European regions for being without employment in their native country.

2. A Systemic approach to a Southern European qualification offensive in the field of sustainable construction and renewable energies

A holistic systemic approach is needed to reduce youth unemployment sustainably, giving young people prospects through qualified employment and making use of their competences in the fight against the climate crisis. Such an approach can be used to define and create meaningful fields of activity that will secure a livelihood and are additionally necessary for the climate change.

The approach presented here initially focuses on the areas of sustainable construction and renewable energies. However, it can be transferred to other fields of employment for social change. These are key areas for shaping an ecological turnaround in our societies, for which immense development potential is also predicted in the southern European countries. Both fields of action are already perceived by companies in Southern European countries as future markets.

We refer to two target groups in southern European countries that are affected by high youth unemployment. On the one hand, the approach is aimed at young people before they enter the labour market (2.1.) and, on the other hand, at young people who are willing and able to work in the labour market (2.2.). For both target groups it is proposed to strengthen their technical know-how in the field of green skills and their interdisciplinary expertise in the field of soft skills through the development of educational services tailored precisely to this target group in such a way that on the one hand their employment and future prospects can be improved and on the other hand their potential for climate protection can be used. The educational services will be developed with the support of German experts, but it is an explicitly co-creative development with experts in the target countries. In this way it is ensured that the new educational services are integrated into the education system of the target country and adapt to new challenges.

2.1 Strengthening green vocational education and training and green vocational orientation in the target countries

There is a strong prioritisation of academic education in the Southern European countries affected by high youth unemployment. Vocational education and training is not valued by society; vocational training systems are often strongly geared to theoretical training and do not adapt their offerings to the needs of modern markets. This applies not only to the demand for modern technologies, especially green technologies, but also to the growing need to train young trainees in soft skills, in the sense of empowerment, which enables them to apply and to develop their skills in modern labour markets. The only one-sided focus on academic education and the poor quality of vocational training have led to a shortage of skilled workers at the intermediate qualification level, particularly in technical occupations, which companies are already complaining about. Although it is obvious that diplomas received on highschools and university are often leading to unemployment afterwards, parents continue to make great efforts to bring their children to universities. If one looks at the situation in the areas of sustainable construction and renewable energies in the target countries, the companies speak of immense growth potential, which, however, is not realised due to a lack of experts. At the intermediate qualification level, there is a lack of skilled workers and the opportunity to provide services that require mandatory European certifications (e.g. with regard to environmental protection). At the higher qualification level, the existing know-how is frequently accompanied by a lack of practical relevance. In the southern European countries, where the vocational training system has traditionally been decoupled from the companies, more and more companies are becoming involved in cooperation with the vocational training institutions and in participation in the practical training of young skilled workers. They must be supported both in terms of content and structure.

The vocational training systems in the target countries as a whole (vocational training institutions, companies, intermediary actors) can be supported by know-how from Germany if this know-how is transferred in the form of adapted training services to jointly defined points in the existing vocational training systems. For example, existing job profiles can be sustainably upgraded through "greening" and modernisation and become more attractive and effective for climate protection with technical know-how. At the same time, vocational orientation campaigns in the countries must support a development that brings vocational training back into the minds of young people as a future-oriented perspective. Gender-neutral motivation of young people also plays an important role with regard to technical professions. The green commitment of young women and girls must be supported by campaigns that enable them to discover and develop their technical potential. In Germany, there are also solutions for this that can be used as a model and can be further developed within the education systems of other countries.

2.2 Complementary educational services for "Young Experts" in green technical occupations

The second target group, which is strongly affected by unemployment in the southern European countries and can develop its potential for the "Green New Deal" through targeted support, are young experts who have already undergone technical training at academic or professional level and have not yet been able to implement their skills in local labour markets. They need to develop educational services that provide them with the latest technical knowledge in the field of sustainable construction and renewable energies. New technological developments in particular are creating many new job profiles that are necessary in an economy oriented towards sustainability and green solutions. In connection with international and European regulations, fields of employment in the field of sustainable construction and renewable energies are also emerging that are not covered by

traditional job profiles. It is precisely in these new fields of employment that completely new competence profiles are needed, for example with regard to a new relationship with potential customers and the task of establishing a sustainability culture at different levels of society. The changed organisational forms of modern qualified work also require potentials that have not been taken into account in traditional training programmes to date. It is crucial here to train skills that enable young experts to develop their employability on the one hand and promote new, creative and social entrepreneurship on the other. In this way, new creative solutions for a climate-friendly, sustainable society can be developed and employment prospects in the target countries themselves can be created.

2.3 Youth without work and vocational training

In the breakdown of youth unemployment, the high proportion of so-called NEETs in EU jargon is particularly worrying. The abbreviation "NEET" refers to young people who are neither in a registered job nor in training or a work-related training programme. In 2017, 14.5% of Europeans between the age of 15 and 34 were in this situation. The breakdown by country was 25.5% in Italy, 24.4% in Greece, 19.5% in Bulgaria, 18.9% in Croatia and 17.9% in Spain. For the age cohort of up to 25 year olds, the balance is even less favourable, especially in Southern Europe[2]:

- Italy: 29.1%
- Greece: 23%
- Spain: 21.2%
- Romania 23.6%
- Bulgaria 22.7%.
- Cyprus 22,7%

Even if reliable statistics are difficult to avail, it must be assumed that a considerable proportion of these so-called NEETS have a low level of education on primary schools, often dropping out the school career. In order to stop or at least substantially reduce a socially unacceptable marginalisation and exclusion of these youngsters without work or in illicit work under precarious and bad conditions, the proposed qualification offensive should have to be extended in such a way that it also fits this population group.

We therefore propose training courses in occupations and professions for which low-threshold training requirements do exist. Here, a serious policy of climate protection and resilience to the ongoing climate crisis opens up large fields of important and urgently needed work. The landscapes, especially in the southern European regions, are exposed to increased erosion, accumulating water crises and the danger of widespread desertification as a result of the

intensifying climate crisis. If ruthlessly geared to product maximisation, agriculture accelerates the threatened degradation of entire regions.

In addition to an ecological turnaround in agriculture, a wide variety of protection and safety measures in the landscape and in the water balance will therefore be necessary in the coming years. Qualified work in large numbers is also required for this purpose, for which young people with little previous knowledge of school and work can be trained. Especially young people in rural areas, who are often already familiar with rural work, would find a viable alternative to permanent local unemployment or the often unsuccessful search for a job under precarious conditions in urban conurbations. Reforestation, the transformation of forests into more climate resilience and the rehabilitation and renaturation of rivers and wetland are further fields of action. In urban settlements, the increasing frequency of extreme weather events alone is leading to a much stronger commitment to greening settlements and to intelligent rainwater management. Finally, in the upcoming comprehensive energetic refurbishment of buildings, besides qualified specialists, a large number of building craftsmen with "only" a basic training are needed.

3. Recommendation for action

On this basis, we recommend the planning and implementation of an action programme "**Youth for a sustainable future**" within the framework of transnational cooperation, which should start in priority with the following initial measures:

a) A comprehensive survey on the modernisation requirements in the climate-protection relevant areas of vocational education and training should be carried out with the participation of vocational institutions and business associations in the target countries;

b) piloting measures for the modernisation, dualisation and exemplary greening of occupational profiles in the fields of climate protection, energy efficiency and sustainable construction in the target countries (e.g. Spain and Greece), using research on the internationalisation of vocational education and training (the authors have been active in this field of research for years);

c) Pilot measures for needs assessment, modelling and implementation of further training concepts for fields of competence relevant to climate protection (Solar, Wind, Smart Home etc.) for the target group 25 - 29 years.

d) Modelling of measures for the promotion of soft skills (empowerment, self-management, communication) for the promotion of start-ups in markets relevant to climate protection for the target group 15 - 29 years.

e) Modelling of measures to promote the employability of young experts in order to prepare them for the requirements of modern labour markets and to improve their work design capacities.

f) Measures for career choice orientation to reduce the shortage of skilled workers in 'green tech' occupations (target group: 15-24 years)

g) Measures campaigns to increase the social appreciation of vocational training in the Green-Tec sector.

(h) To bring together the results of the development of a framework programme "Youth for a sustainable future" of the European Union.

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Empirical background of the article are relevant activities of the authors, presently and in the past years:

SFZ e.V.:

- Mas trabajo con menos energía", a three-month training course from unemployed young people to municipal energy consultants in a small town in the province of Cádiz, 2014; financed by private donations and the Heinrich Böll Foundation, Brussels.

https://www.hartwig-berger.de/cms/mehr-arbeit-mit-weniger-energie/; https://www.hartwigberger.de/cms/viel-wind-viel-sonne-wenig-arbeit-ein-landort-in-andalusien/; https://www.hartwigberger.de/cms/category/textos-en-espanol/videos-sp/

- How to Reduce Youth Unemployment by Fighting Climate Change. A Study in Greece and Southern Spain". A feasibility study by the University of Technic and Economy Berlin (HTW), the University of Cadiz (UCA), the NGO Wind of Renewals (WoR) in Athens and the Secretariat for Futures Studies Berlin (SFZ), 2018. Financed by the European Climate Initiative (EUKI) of the Ministry for the Environment, Nature Conservation and Nuclear Safety in Germany.

https://www.hartwig-berger.de/cms/against-youth-unemployment-by-fighting-climate-change/

- Young Energy Experts working for climate-friendly Schools (YESclima)",

Project of UCA, WoR, SfZ and the Energy Agency of the Province of Cádiz, 2018-2020, financed by the European Climate Initiative (EUKI) of the Ministry of Environment, Nature Conservation and Nuclear Safety in Germany.

https://sites.google.com/gm.uca.es/yesclima.; https://www.hartwig-berger.de/cms/young-energy-experts-working-for-climate-friendly-schools/

FIAP e.V.

- For the activities of the FIAP see http://www.fiap-ev.de/ and here in particular the current projects GRÆDUCATION and Youth Impact (see below). As a research institute, FIAP has been carrying out evaluations and analyses of labour market policy measures for years and is involved in various projects on the topic of innovative technologies for climate protection. Since the beginning of 2019, the Institute has been operating a Virtual Reality Laboratory in which ideas for VR applications in the field of education for sustainability are developed and implemented.

- A particular focus of the Institute's research work is on international cooperation in the field of vocational education and training. In various projects in and outside Europe, educational and advisory services have been developed with the aim of modernising vocational training systems in order to make them an effective instrument in the fight against unemployment and to improve the economic situation in the target countries. Both scientific and transfer-oriented publications have been produced.

- GRÆDUCATION project:

GRÆDUCATION, a project funded by the BMBF, is being developed in cooperation with the Greek Employment Agency (OAED) and the Institute for Education Policy (IEP) in order to modernise the Greek vocational training system, especially in the field of sustainable technologies. Furthermore, educational services for interdisciplinary skills will be developed. Together with the cooperation partners and Greek secondary schools, an approach for vocational orientation with regard to "green skills" has been designed and implemented to motivate young people for vocational training and to sensitise them to sustainable technologies.

- Project Youth Impact:

The Youth Impact project is funded by the EEA and Norway Grants Fund for Youth Unemployment. Together with Czech, Polish and Slovakian partners, tools and services are being developed to strengthen the self-evaluation capacities of youth unemployment agencies (NGOs, public and private institutions) and to support them in optimising the implementation of their measures. A further goal is the establishment of a transnational research network on the topic of impact evaluation in the field of unemployment. - FIAP supports the project "Young Energy Experts working for climate-friendly Schools (YESclima)" with an empowerment approach in relation to the topics "Employability" and "Entrepreneurship".

^[1] All statistical dates in our text are from https://ec.europa.eu/eurostat/de/home, the European Institute for Statistics.

^[2] europa.eu/eurostat/statistics_on_young_people_neither_in_employment_nor_in education, 2016