



Info sheet

SECURE-BIO-SUPPLY

No 7: February 2026

Utilization of project material to create micro-credentials

What is a micro-credential?

Today, society and the labor market are changing rapidly, partly because of the green and digital transitions. Continuous skills development and opportunities for further education are essential for workers to be able to meet the demands of working life. (European Commission, 2021).

Education systems need to find flexible solutions for continuous learning that are accessible and inclusive, with a focus on the learner. Today's demands in the workplace mean that long courses and degree qualifications, for example, can be perceived as inflexible and not meeting the requirements of working life. (Chausson, 2025). Universities, among others, have therefore begun to focus more on micro-credentials and their usefulness in higher education. (McGreal et al., 2022).

In June 2022, the European Council issued a recommendation on how micro-credentials can be defined and understood: "Micro-credential: a statement of learning outcomes achieved by a learner after a short learning

activity. These learning outcomes are assessed against transparent and clearly defined criteria. Learning experiences leading to micro-credentials are designed to provide learners with specific knowledge, skills and competences that meet societal, personal, cultural or labor market needs. Micro-credentials are owned by the learner, can be shared and are portable. They can be stand-alone or combined into larger credentials. They are supported by quality assurance according to agreed standards within the relevant sector or field of activity "(Council of the European Union, 2022).

Learning materials from projects to micro-credentials

Creating micro-credentials based on project material is an effective way to utilize material and disseminate it to a larger target group. However, it should be noted that some material may need to be modified to make it suitable for use as learning material.

This project contains a wealth of material that is suitable for use as learning material in a micro-credential. The work packages include



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various reports on topics such as the current situation regarding the use and storage of biofuels, peat and coal in Ostrobothnia, as well as reports on the mapping of potential risks associated with the phasing out of peat and coal in energy production in Ostrobothnia and the role that political decision-making can play in the importance of the use of forest biomass and peat for various purposes. In a micro-credential, the reports can be used as a basis for various case studies, reflection and discussion tasks.

An Excel tool for calculating the costs of long-term storage of various solid biomass fuels has been developed in one of the work packages. A simplified version of the Excel tool and a user manual are available. Using the various estimated values in the calculation model, it is possible to calculate the storage costs for different biomass fuels, such as capital costs, land costs, costs of covering the material and the cost of material loss. In a micro-credential, the material can be used in various calculations to determine the costs of storing different solid biomass fuels.

Several info sheets linked to the themes of the work packages have been created. In a micro-credential, these info sheets and associated references are useful as self-study material and as a basis for reflection, discussion and quiz tasks.

The following figure provides an overview of

how a micro-credential can be structured in terms of time. It also provides examples of the different activities and tasks that can be included in a module:

Tidsomfattning: Modulupplägg:	
1 vecka	Modul 1: Introduktion till mikromeriten
1 vecka	Modul 2: Tema Förslag på aktiviteter och uppgifter: - Videoföreläsning - Självstudier av info sheets och rapporter med tillhörande litteratur - Beräkningsuppgifter kopplat till tematiken - Diskussionsuppgift i lärplattformen - Interaktivt quiz i slutet av modulen
1 vecka	Modul 3: Tema
1 vecka	Modul 4: Tema
1 vecka	Modul 5: Tema
1 vecka	Modul 6: Tema
2-3 veckor	Modul 7: Kursuppgift

Read more:

Chausson, S. (2025). *Micro-credentials: Towards flexible recognition of skills*. EPAL – Electronic Platform for Adult Learning in Europe.

European Commission. (2021). *Proposal for a Council Recommendation on a European approach to micro-credentials for lifelong learning and employability* (COM (2021) 770 final). EUR-Lex.

Europeiska unionens råd. (2022). *Rådets rekommendation om en europeisk strategi för livslångt lärande och anställbarhet* (2022/C 243/02). Europeiska unionens officiella tidning.

McGreal, R., Mackintosh, W., Cox, G., & Olcott, Jr., D. (2022). Bridging the Gap: Micro-credentials for Development: UNESCO Chairs Policy Brief Form - Under the III World Higher Education Conference (WHEC 2021) Type: Collective X. *The International Review of Research in Open and Distributed Learning*, 23(3), 288–302.

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SECURE-BIO-SUPPLY- Development of Long-Term Storage of Solid Biofuels to Enable a Sustainable Energy Transition

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abo.fi/secure-bio-supply



Project information:

Time period: 1.3.2024–28.2.2026

Project Owner: Åbo Akademi University

Project partners: Novia University of Applied Sciences, Finnish Forest Centre

Financier: EU-FRO Just Transition Fund (Ostrobothnia's FRO (JTF) call 2/2023.) The Regional Council of Ostrobothnia.

The goal of the **SECURE-BIO-SUPPLY** project is to analyse the challenges and opportunities that changes in long-term fuel storage can create in Ostrobothnia.



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