

Energy loan & citizen identity

How the city of Ghent used identity wallets and verifiable credentials (in an extensive POC and pilot) to enable citizens to apply for energy loans and simplify administrative processes.

About Howest and District 09

[Howest University of Applied Sciences](#) is a creative, atypical, innovative and entrepreneurial university. Howest University of Applied Sciences has 8,500 students and 800 staff and is also a partner of the Association University of Ghent, which is the second largest in Flanders with nearly 70,000 students.

[District09](#) is the unique ICT partner of the City of Ghent, which provides a stable, reliable and safe ICT environment, on which the City, its inhabitants, visitors, commuters, students and employees can always build. The core focus areas of District 09 are IT infrastructure, application development, digital innovation and e-inclusion.

The Challenge

The status-quo application process for energy loans is very cumbersome and time-consuming for citizens. One of the key reasons that makes the energy loan application process so complex, is the high number of actors involved in the process. In addition, citizens need to communicate with all of them individually (as there is no common trust framework or trusted and regulated data exchange networks between all of these actors). Gathering all necessary documents to prove that a citizen meets the loan requirements is inefficient for citizens and it is difficult for administrators to verify those documents and award the loans to those who meet the criteria. Hence, in order to simplify

those processes, the digitization of documents as well as the empowering of citizens through identity wallets were evaluated.

The Solution

The context of this pilot takes place in the NSR Interreg project BLING (Blockchain in Government). Blockchain was being explored, and more specifically how it could help in administrative situations. Participants quickly investigated Self-Sovereign Identity on a deeper level. Concluding that research, it was established that the main benefit of Self-Sovereign Identity (SSI) was that “verifiers” of identity documents did not need to be in contact with their “issuers” (which was a main challenge). That aspect makes the whole process smoother. That vision fitted beautifully with District09, as they wanted to continue innovating in the SSI field and gather more experience with how Verifiable Credentials can improve data minimisation, privacy and user experience.

After considering various options, the City of Ghent and the Howest team opted for walt.id’s solutions to build a proof of concept and pilot “Citizen Energy Portal”. This decision was based on several factors such as:

- Open source under permissive license
- EBSI & eIDAS compliance
- EU spirit
- Reputation
- Flexibility (of the team and the product)

- Clear and detailed documentation

The solutions of walt.id ensure a high level of security and trust in the identity verification and credential management process, which is essential when dealing with data such as the ones involved in an energy loan application.

It is relevant to note that for this project, the VIDwallet (by [Validated ID](#)) was used as the mobile wallet demonstrating interoperability and openness of walt.id's solutions based on open standards. This wallet allowed citizens to hold and share their verifiable credentials claimed during the process.

The Results

The project resulted in the creation of a proof of concept [Citizen Energy Portal](#) for the city of Ghent. The portal combined with the identity wallet enabled citizens to gather all their necessary documents in one place and share those documents with just a few clicks. On the administration side, it automated the document verification process and reduced the number of human errors possible.

The following illustrates the process that citizens went through to claim their energy loan step by step:

Step 1: Get a wallet

Citizen downloads and sets up the identity wallet application (in that case the VIDwallet).

Step 2: Request a VerifiableID at BOSA

Citizens visit BOSA's website (Federal Public Service Policy & Support) and request a digital identity document. This service provider for the federal government offers a gateway to the authentic data sources of the ministry of economy, finance and other relevant actors for this case.



Claim Verifiable ID credential

Enter your personal identification number:

Confirm

Claim Verifiable ID credential

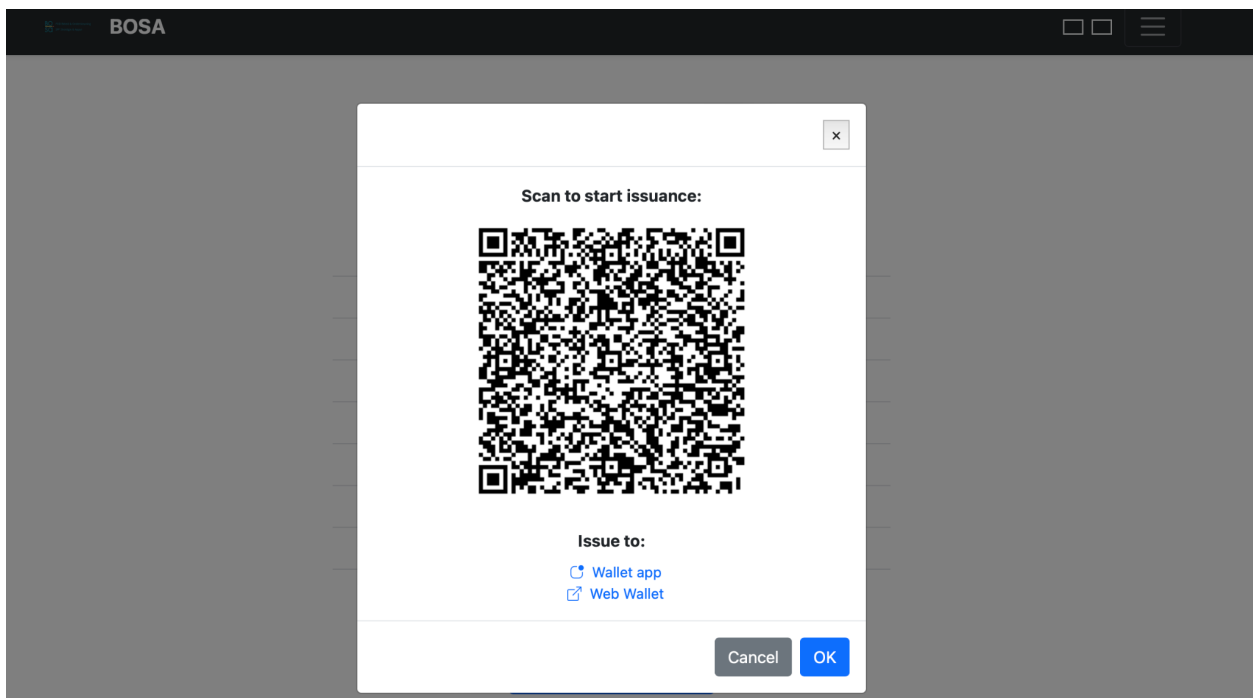
Citizen data:

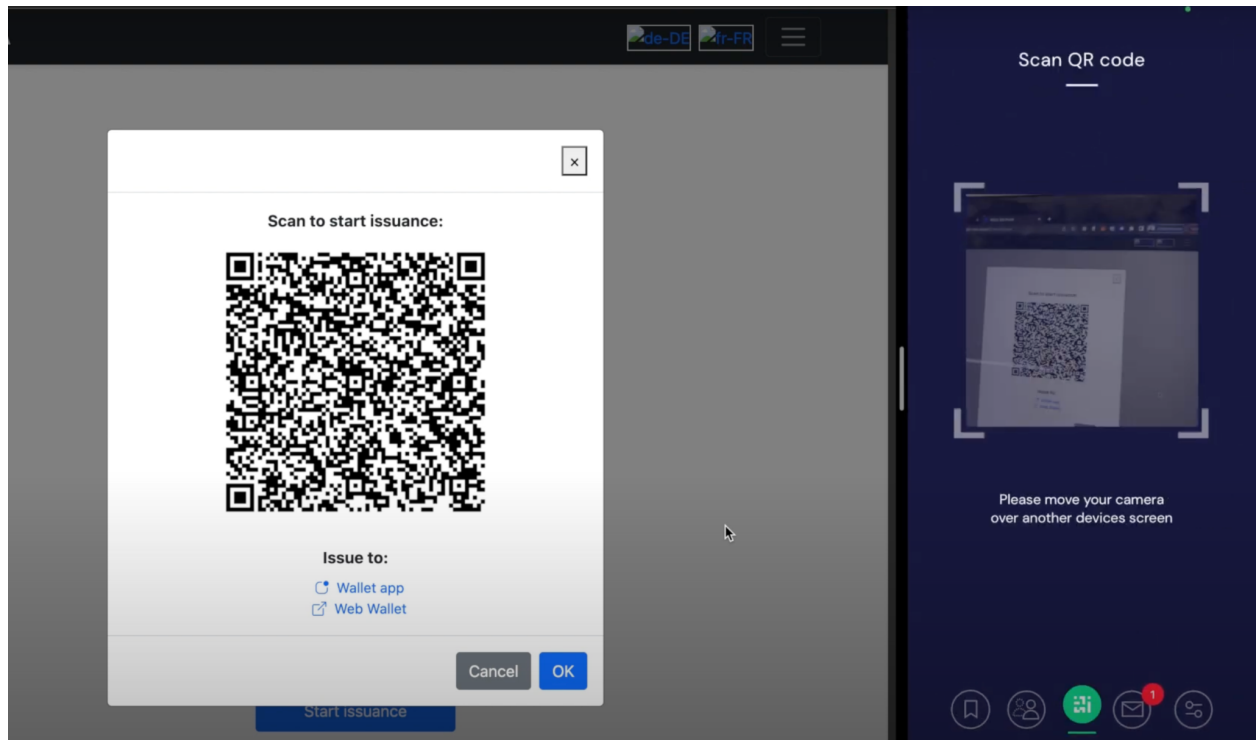
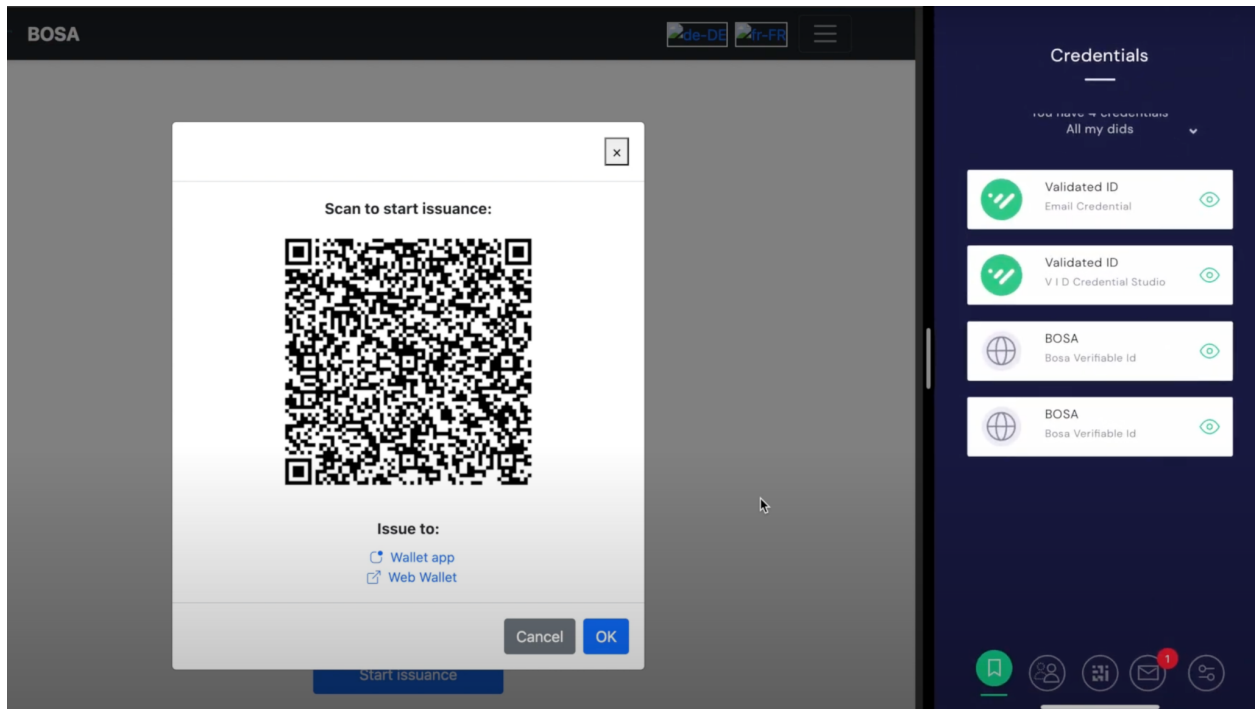
Personal Identifier	01.01.01-001.01
First Name	Ellen
Family Name	Devos
Gender	Vrouw
Current Address	["Vrijdagmarkt 1, Gent"]
Date of Birth	2001-01-01
Name at Birth	Ellen Devos
Place of Birth	Gent, België

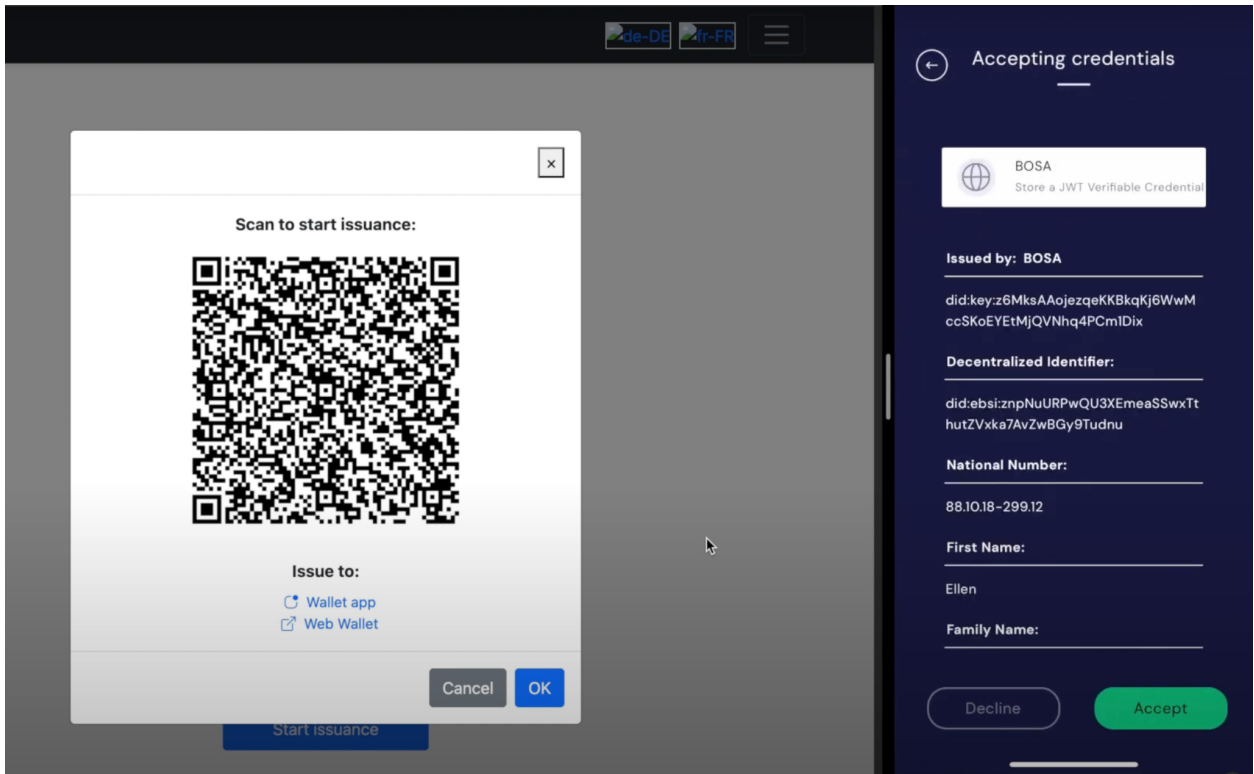
Pre-authorized

Requires user PIN

Start issuance

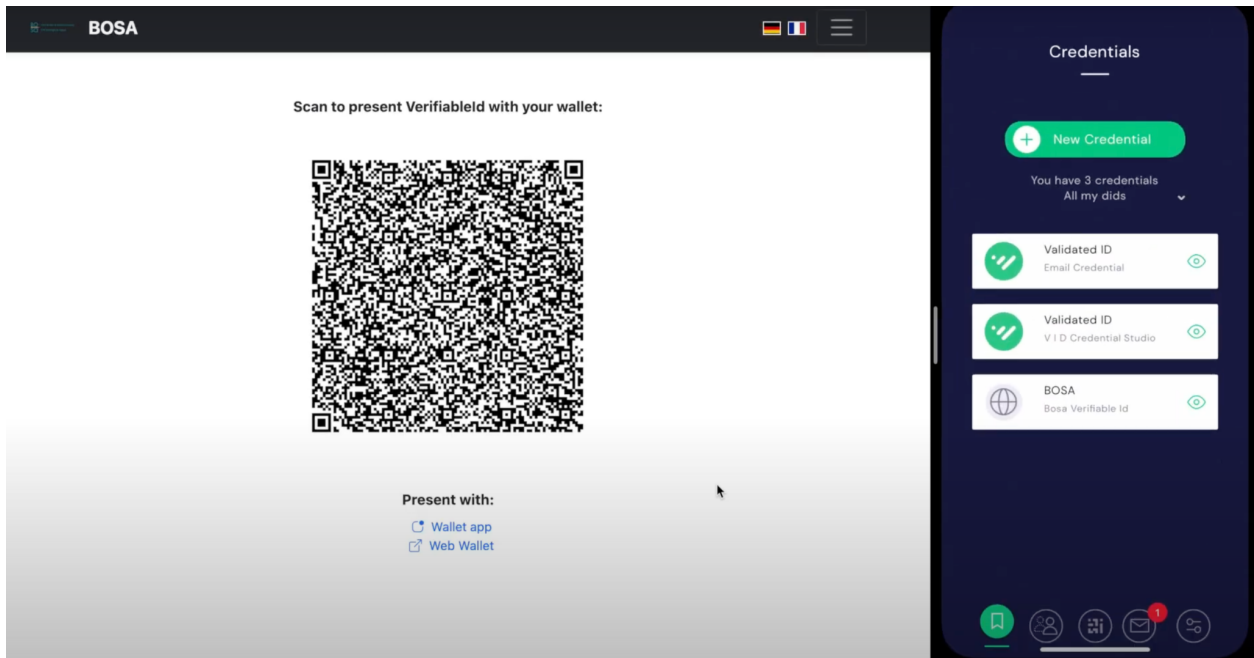
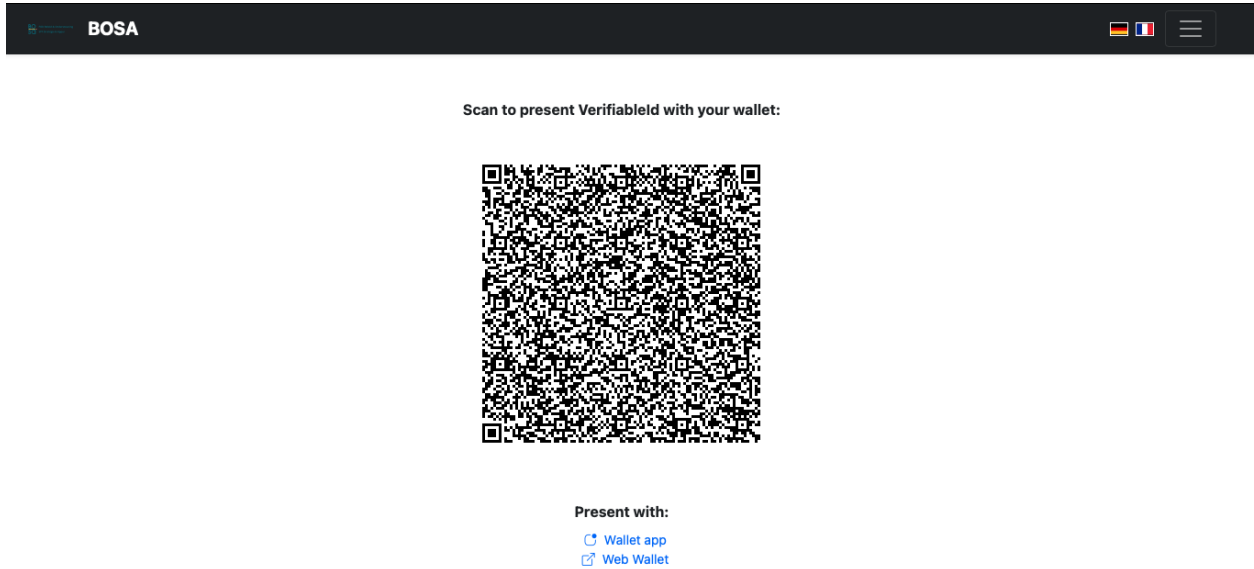


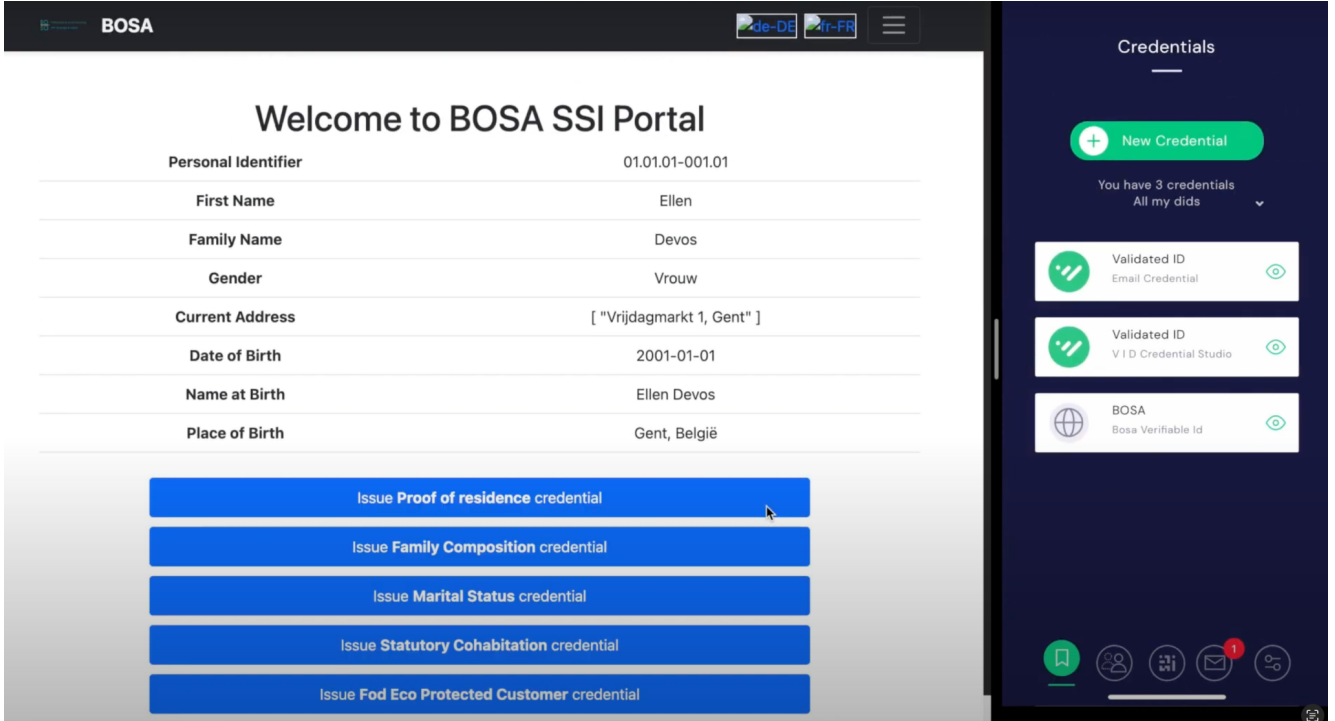
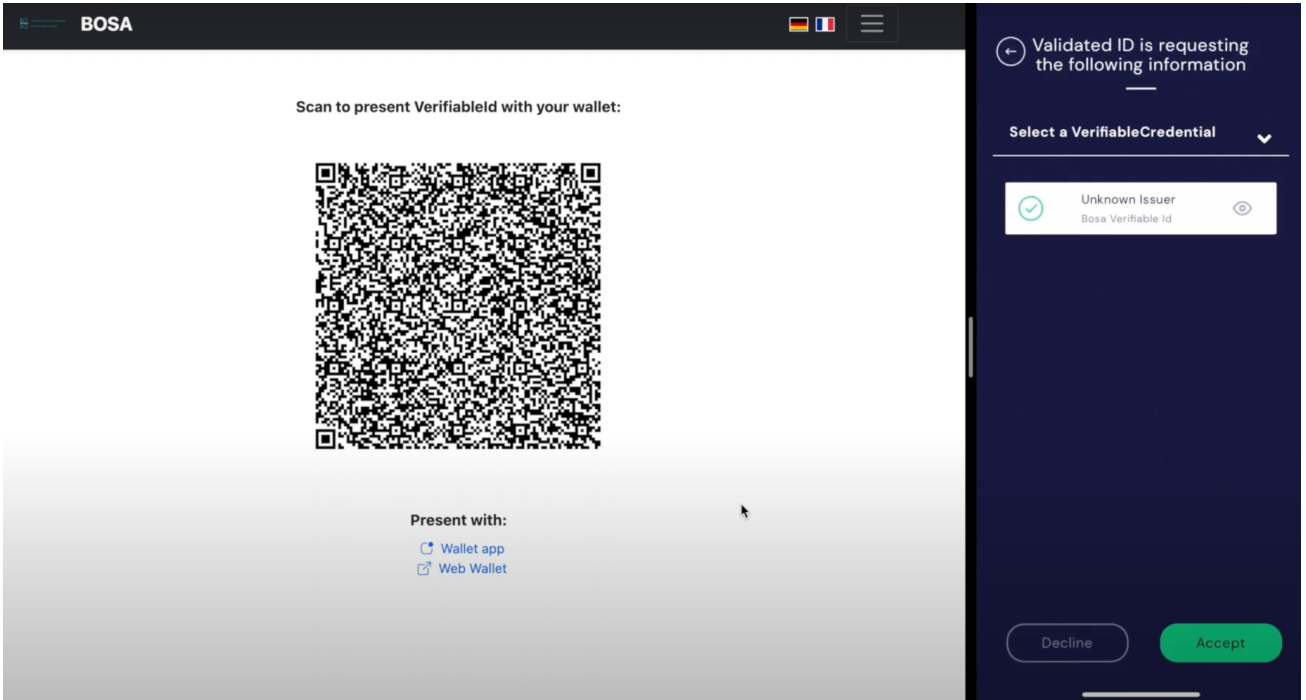


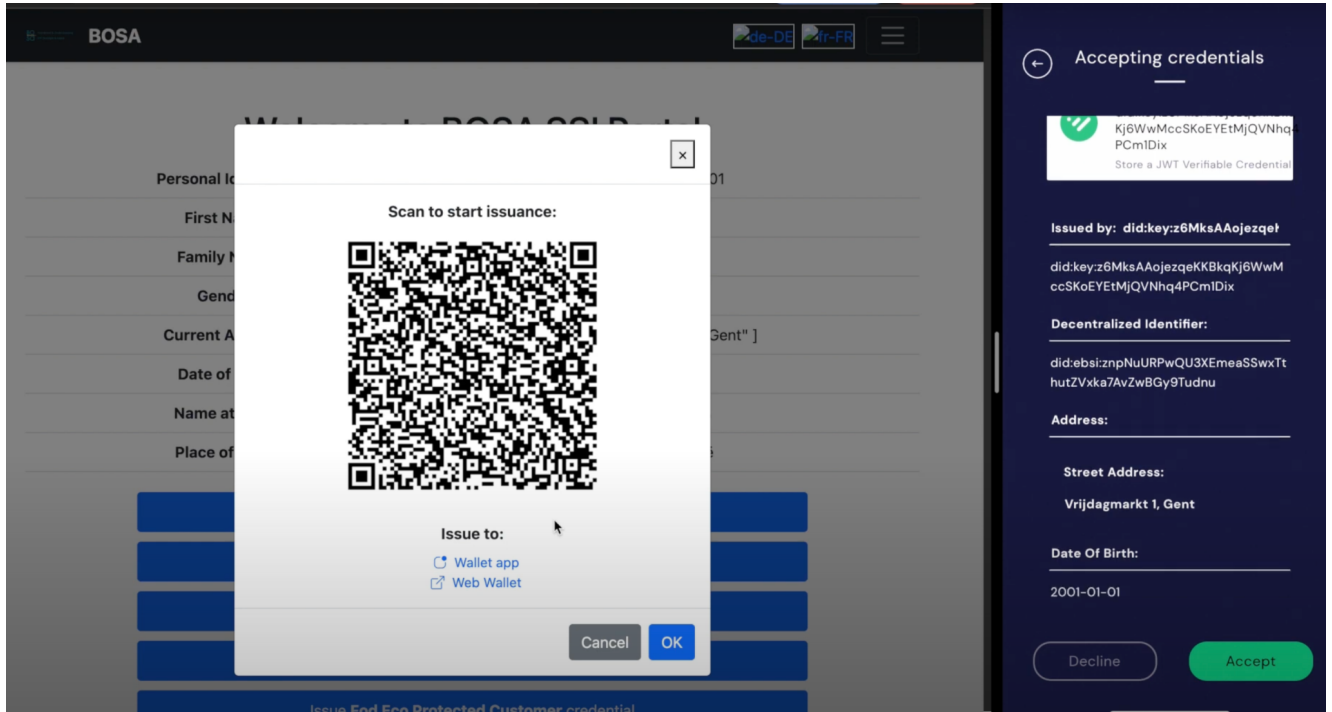


Step 3: Request your Verifiable Credentials at the Federal Portal

Citizens authenticate themselves with the VerifiableID previously claimed from federal government services. This authentication allows citizens to claim all sorts of verifiable credentials.

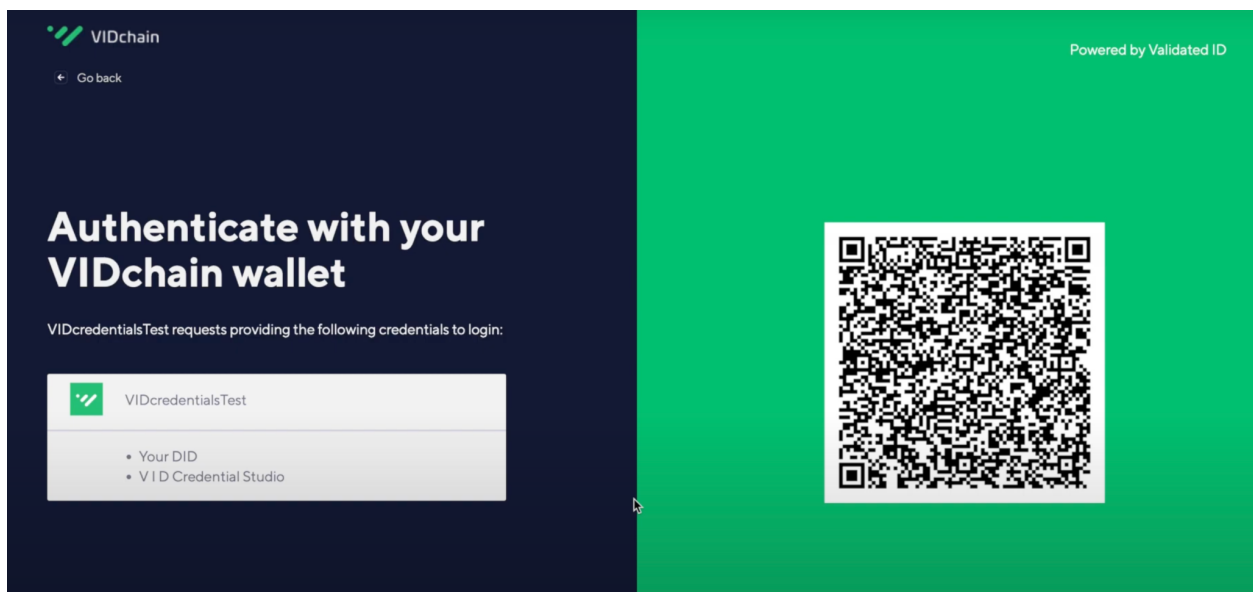






Step 4: Request your Confirmation Debt Mediation credential at the Public Center for Social Welfare

At Social Welfare you can authenticate yourself with your VerifiableID to obtain your OCMWConfirmationDebtMediation Verifiable credential.



Credential Request ID: c0e4a8ee-1298-4b8e-9f08-afd4e6c34688

Credential type: SocialWelfareClient

Email of the receiver:

Requested At: 17-4-2023 12:40:06

User Language:

Identity verification method: Face-to-face

User Details

Full name:

Legal ID:

Credential Subject

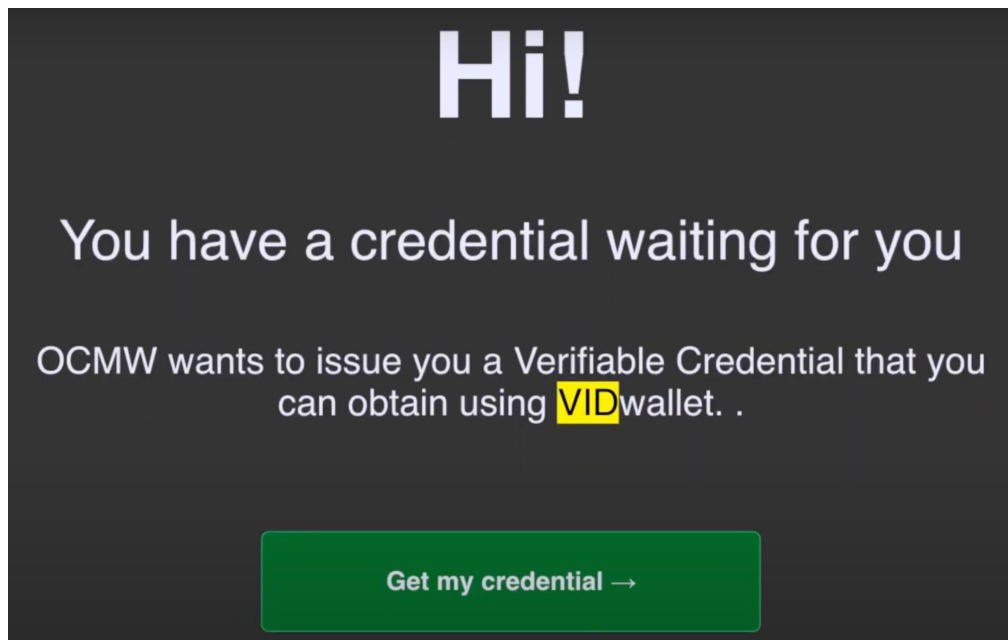
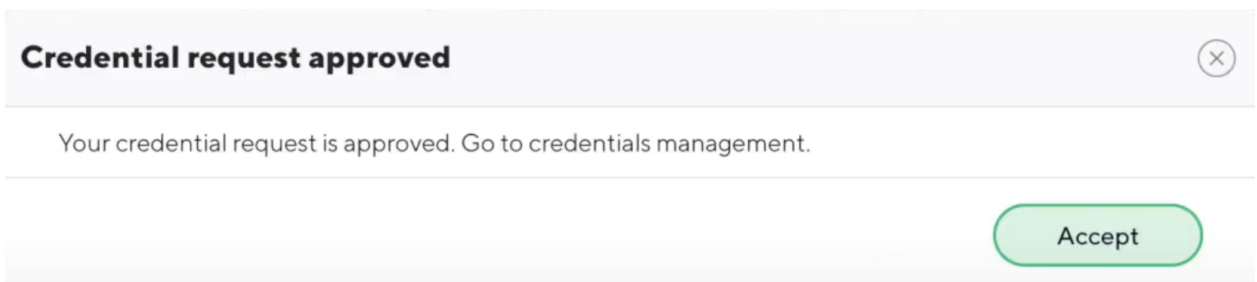
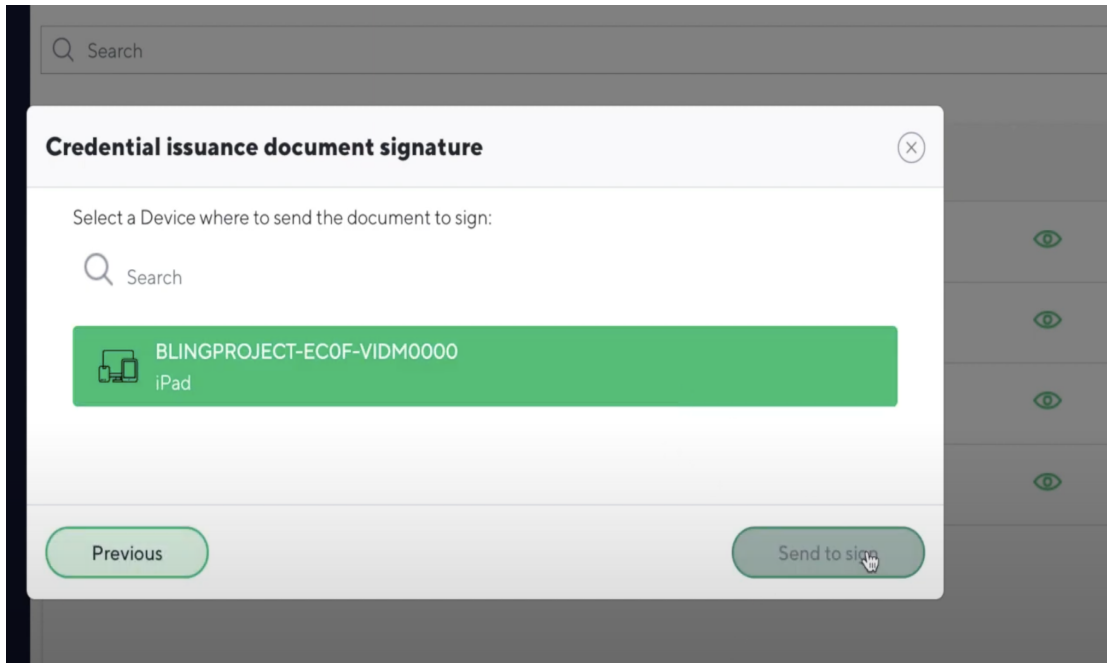
knownClient:

paymentDifficulties:

DebtMediation:

Reject

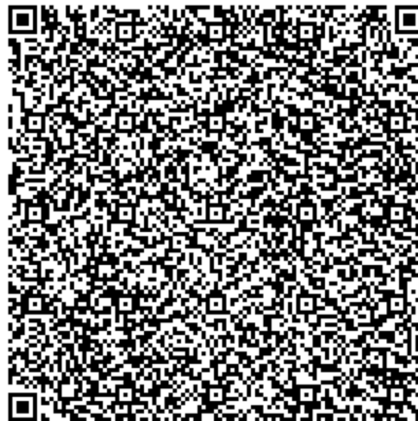
Approve



Step 5: Request your Energy Loan

Citizens scan a QR code with their wallet to present the required identity credentials to the Citizen Energy Portal and obtain an energy loan approval.

Scan with your wallet, to present the required credentials:



Present with:

-  Wallet app
-  Web Wallet

“[Walt.id](#) met all our requirements. For example, they offer holistic open source products with great documentation, support for multiple identity ecosystems like EBSI and have long-standing experience and expertise.”

Shane Deconinck

*Research Coordinator
Howest University of Applied
Sciences*

“[Walt.id](#)'s products helped us demonstrate the feasibility of an EBSI (European Blockchain Service Infrastructure) compliant architecture, where the conditions to get an energy loan can be verified in a faster, more reliable, more secure and more privacy friendly way. Minimizing the amount of data involved, it is quite a transformation from the conventional resource-consuming practices of collecting proof from the different parties involved. E-mailing, processing, evaluating and archiving documents is practically eliminated. [Walt.id](#)'s

Tim Van Achte

*Digital Innovation Lead
District09*

products gave our citizens and all actors involved in the process a glimpse of the future of citizen-centric public administration.”

Ready to get started?

[Contact us](#) or simply [book a meeting](#).

We are happy to help.

... or [get in touch](#) with Howest

... or [contact](#) District09



[walt.id](https://www.walt.id) develops digital, decentralized identity and wallet solutions for governments and businesses across industries.

Developers and organizations rely on our open source products as an easy and fast way to use digital/decentralized identity including Europe's new digital identity ecosystem based on the EU Blockchain and the EU SSI Framework (ESSIF).

To ensure client's success, our industry-leading experts provide holistic services including from conception over the implementation of pilots and production system to enterprise support and managed cloud services.

For more information visit www.walt.id or get in touch via [mail](mailto:info@walt.id).



[Howest University of Applied Sciences](#) is an atypical, creative, innovative and enterprising institution. By exploring talents and passion, Howest coaches its students to become team-oriented, highly-skilled and directly employable professionals who are able to anticipate developments in our global society.

Howest integrates socially relevant and competence-oriented education, valorisation-oriented research and services into its portfolio. Consequently, Howest is a strong “knowledge partner” working in close collaboration with and for the regional and international work field. Howest University of Applied Sciences has 8,500 students and 800 staff and is also a partner of the Association University of Ghent, which is the second largest in Flanders with nearly 70,000 students.



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Together with our colleagues from the City of Ghent and partner organizations, we are turning our city into an innovative and inclusive technology capital that:

- Builds a stable, reliable and secure IT environment.
- Uses both revolutionary and accessible technology and digitization to tackle urban challenges.
- Collaborates with citizens, education and knowledge institutions, civil society and other government institutions, innovative start-ups and scale-ups.