



Konieczna, P. (2021). Local Currencies Supporting the Implementation of the Concept of Sustainable Development in Europe. *Copernican Journal of Finance & Accounting*, 10(4), 67–77. <http://dx.doi.org/10.12775/CJFA.2021.015>

PATRYCJA KONIECZNA*

Wroclaw University of Economics and Business

LOCAL CURRENCIES SUPPORTING THE IMPLEMENTATION OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT IN EUROPE

Keywords: financial market, money, local currencies, sustainable development.

J E L Classification: E44, F39, G00, Q01.

Abstract: Local currencies represent an alternative to fiat money. They contribute to the development of local communities, primarily by supporting small and medium-sized enterprises, which remain fundamental for the economy of every European country. The purpose of the study is to identify both ways and methods focused on supporting the implementation of the concept of sustainable development by the selected local currencies in the area of Europe, analysed in the years 1932–2020. The paper takes the form a descriptive analysis based on the studies covering Polish, Czech, Dutch, German and English source literature as well as the Community Currencies in Action (CCIA) publications, websites of the analysed local currencies and other studies in the field of financial law. The method of comparative analysis was used to examine the similarities and differences in supporting the implementation of the concept of sustainable development. The basic conclusion formulated after conducting the research is the fact that each local currency does support sustainable development in an indirect way. In addition, certain local currencies can be identified, in the case of which the support of sustainable development is the essence of their functioning. The effectiveness of the impact exerted by local currencies on sustainable development depends on the involvement of the creators of these currency systems and the specificity of the existing conditions.

Date of submission: May 27, 2021; date of acceptance: August 29, 2021.

* Contact information: patrycja.konieczna@ue.wroc.pl, Ptasek 35, 58-400 Kamienna Góra, Poland, phone: 603509362; ORCID ID: <https://orcid.org/0000-0003-2195-0788>.

The ability to establish partnerships between non-governmental organisations, business entities and public administration may also play a significant role.

■■■ INTRODUCTION

In 1932, the first local currency was created, however, back then it was not yet expected that it could initiate the development of similar projects worldwide as an actual alternative to traditional money. The idea of a local currency is simple in its application, whereas its task is to imply the development of the local economy. The German-speaking countries, with their oldest currency in use – WIR, are considered the pioneers in implementing the concept of local currencies. In addition, the local currency system – Regiogeld has been functioning in the German-speaking countries. The system is designed to unite local currencies and their creators, provide assistance in introducing pilot currencies and support the functioning of the already existing currencies (Gelleri, 2020).

Usually, the phenomenon of local currencies is not fully regulated by law. Australia has the most liberal regulations along with a favourable approach of the authorities towards local currencies with approx. 200 systems in operation, and New Zealand – approx. 70 systems, while the political parties, already in the 1990s, expressed active support for the local currency systems in their political programs (Reichel, 1997). Switzerland is also worth highlighting, where the local currency WIR operates alongside the Swiss franc – in 2004 WIR Franc became an officially registered currency, and in 2005 the Swiss introduced WIR Euro as the third national currency (Borowska, 2016).

The concept of a local currency is closely correlated with the idea of the social economy, and more specifically with the idea of the sharing economy. The intention of local currencies is to constitute the “core” in the development of local communities. The area of their operation is usually limited to a county or a region, although in some cases the local currency covers several regions or even the entire country. Local currencies can represent both traditional and virtual money (Łukasiewicz-Kamińska, 2014, p. 209). In principle, the local currency should be introduced to support the socially and economically degraded areas, which are characterised by a high share of unemployment, social exclusion and poverty, and have a deficit of financial resources to perform social changes (Stępnicka, 2017).

THE RESEARCH METHODOLOGY AND THE COURSE OF THE RESEARCH PROCESS

The conducted research takes the form of a descriptive analysis and its main goal is to identify the impact of local currencies on the implementation of the concept of sustainable development. The method of comparative analysis was applied to examine the similarities and differences in supporting the implementation of the concept of sustainable development by the chosen local currencies. The subject matter of the carried out research covers the selected local currencies in Europe. The data has been retrieved from the websites supporting the development of local currencies in Europe and around the world, the websites of the analysed local currencies, and also the review of scientific papers and publications. The following research problem was formulated: "Does every local currency, either directly or indirectly, support the implementation of the concept of sustainable development?". The collected information on the studied local currencies covers the years 1932–2020.

THE ESSENCE OF LOCAL CURRENCIES

Local currencies are not transferred outside the region in which they operate, they feed the local market alone acting as a catalyst for the local entrepreneurship through supporting local enterprises and integrating the community in a given area (Maroszek, 2015). The main assumption of the local currency programs is to stimulate economic growth and reduce unemployment (Łukasiewicz-Kamińska, 2014, p. 209).

In order to meet its role, local money should fulfil only two of the functions played by traditional money, i.e. the function of a measure of value and an exchange intermediary. Thus, local money should be free from the store of value function, which is aimed at increasing circulation. Local currencies have a greater turnover than the circulation of traditional money, and this goal is achieved through, e.g., demurrage tax, commissions, administrative charges or turnover-dependent fees (Konieczna, 2018). An important advantage of local currencies is also the absence of the possibility to become the subject of speculation, which distorts both the essence and the role of traditional money (Maroszek, 2015).

Borowska (2016, pp. 22–23) distinguishes three fundamental goals of local currencies: economic, environmental and social. The economic goals con-

sist in stimulating and supporting the local economy as well as preventing the outflow of local capital. The environmental goals focus on environmental protection, whereas the social ones concentrate primarily on counteracting unemployment, poverty and social exclusion.

In the years 2012–2015, the organisation Community Currencies in Action was functioning in Europe and was partially financed by the European Union. As of May 2015, CCIA was running 6 pilot currency programs: SoNantes in France, Makkie and TradeQoin in the Netherlands, E-Portemonnee in Belgium, Brixton Pound and Spice Timebanks in the UK (Scott Cato & Dodd, 2015).

LOCAL CURRENCIES IN EUROPE

The first local currency in the world was created in a small Austrian town of Wörgl in 1932. The Mayor Michael Unterguggenberger, struggling with the problems of rising unemployment and advancing economic crisis in the city, issued the Wörgl shilling which was convertible at the rate of 1:1 into the Austrian schilling. The result of this innovative venture was the reduction of unemployment rate in less than a few months and an improvement in the economic situation of the city. Poverty declined, the city implemented planned investments, many jobs were opened and new residential buildings as well as a ski jump were constructed (Brzozowiec, 2012, pp. 52–54). Every month, the holders of the local currency visited the office to get a stamp, the cost of which was 1% of the currency nominal value. The creator of the Wörgl system, Silvio Gesell, called this charge a demurrage tax, i.e. a negative interest rate. It imposed 13 times faster turnover in the economy than the one of the Austrian schilling (Mazurek, 2017). Unfortunately, the Central Bank of Austria closed the venture after a year, however, in spite of that the Austrian Wörgl became the precursor of many local currency systems worldwide.

Following the example of the Austrian Wörgel, the local currency WIR was established in Switzerland in 1934. The WIR system consists of two basic elements: the first of them allows financial settlements in the WIR currency, the second one grants interest-free loans (Maroszek, 2015). In this system the WIR Bank takes the role of the central bank, which is responsible for the proper functioning of the system, control of the money supply and non-cash payment transactions. The WIR franc corresponds to the value of one Swiss franc. As of 2013, the WIR system had 60,000 users, more than half of whom were small and

medium-sized enterprises (Dubois, 2014). According to the WIR Bank (www1), in 2020 the financial result amounted to 14.4 million francs, customer deposits reached 4.1 billion francs, and the total amount of loans granted achieved the level of 4.7 billion francs. The pension scheme launched by the WIR Bank in November 2017, i.e. the first fully digital retirement solution in Switzerland, gathered approx. 40,000 customers at the end of 2020.

In Luxembourg, the local currency under the name Beki has been functioning since 2012. The currency is convertible into Euro in a 1:1 ratio and was designed to put the canton on the path of sustainable environmental development and to support local small and medium-sized enterprises, which aims at contributing towards strengthening the autonomy of the region. Although the currency is fully convertible into Euro, its users are forced to incur an administrative charge of 5% (www2) to exchange Beki into conventional currency. At the beginning of 2016, 500,000 Euros were exchanged into Beki currency. The users of this currency include farms selling organic vegetables and EIDA – the local green power plant (Rao, 2016). The Beki currency is a part of Regiogeld – the German local currency network.

In the Czech Republic, in 2017, a small municipality of Křižánky populated with 370 permanent residents introduced the local currency called Křižánecká Koruna. The parity of Křižánka koruna was kept in the proportion of 1:1 to the Czech koruna (www3). Commencing from 2017, a new issue of Křižánecka Koruna has been taking place every year, and each issue is valid for the period of one year. In June 2020, the fourth issue of this currency was held, and the next one is planned for 2021 (Sałatka, 2020). The project was developed along with the financial support of the European Social Fund and the Operational Program Employment. The introduction of the local currency was the result of the municipal development strategy entering into force in 2017, which provided for a significant increase in property tax and the implementation of instruments to prevent depopulation of the municipality. The raise in the real estate was carried out along with the simultaneous compensation for the permanent residents of the municipality and local entrepreneurs in the amount of 2/3 of the raised tax amount, and also the owners of holiday homes – 1/3 of the increased tax amount. This compensation was paid in the local currency (www4).

A program in the form of the local currency LimbU is functioning in Belgium. It is a rewards program and an incentive to reduce household waste and expand both composting and recycling. The local administration is responsible for issuing the currency and for the offer of goods and services to be pur-

chased for the collected points. The examples of goods include energy-saving light bulbs and garden accessories. In addition to better waste management, the project aims at promoting the use of energy-saving devices and supporting senior citizens (www5). The University of Hasselt conducted a study in 2019 which showed that 50% of the active volunteers are willing to help more often in exchange for the LimbU currency. 34% of non-volunteer users of the LimbU currency declare their willingness and readiness to provide assistance. In turn, over 82% of the LimbU users would recommend this system to others (van Paris, 2020).

In addition to the LimbU currency, also such local currencies as Torekes, Buurtijd and TalentO are functioning in Belgium, the main intention of which is reaching the socially vulnerable groups, i.a. the long-term unemployed and minority groups. One of the successes of the Torekes currency is the strong commitment of volunteers to help those in need who are difficult to reach through social services. Torekes is a tool for organising aid activities and appreciating volunteers' work. The currency of Buurtijd attracts particular attention to the socially vulnerable groups. It has a social fund at its disposal to strengthen solidarity between the participants. In turn, the TalentO currency, which was developed based on the pilot project of the Fedasil organisation, follows three major goals: integration and social inclusion, increasing competences of the local community and encouraging to take advantage of free time in a productive way, i.e. in the form of volunteering (van Paris, 2020).

In the years 2002–2004, the Dutch NuSpaarPas loyalty program was implemented and financed from the EU funds as a public-private partnership system. The points collected for making the environmentally friendly shopping allowed receiving either ecological products or services (Miszczuk, 2018, p. 87). The residents of the area covered by the program returned used equipment and other waste to the collection points three times more frequently than before the launch of the local currency system. In addition, the share of organic products' range offered by many sellers increased in the course of the project implementation (Żwawa, 2012).

The Kiwah local currency was developed by Edgar Kampers and Rob van Hilten from the Community Currency QOIN foundation in the Netherlands and Norway. The Kiwah program was launched in 2009 at the Copenhagen Climate Summit. This local currency was based on renewable energy and each Kiwah corresponded to the value of 1 kilowatt-hour, i.e. approx. 10 Eurocents (Żwawa 2012). The entrepreneurs who joined the system paid a fee for the

emission of Kiwah. The funds accumulated in the system were invested in renewable energy, e.g., windmills, solar panels and hydropower plants. Moreover, the program assumed using the local money in the future to cover electricity bills directly with the suppliers (Ryan-Collins, Greenham & Schuster, 2013). The Kiwah local currency supported sustainable economic development through: stimulating investments in renewable energy sources and encouraging the consumption of the environmentally friendly products owing to the possibility of receiving Kiwah free of charge as a bonus for making the purchase. The exchange of Kiwah into the traditional currency was associated with a fee payment, whereas the purchase of Kiwah was carried out following preferential terms (Żwawa, 2012).

In the UK, there is an ecovillage community functioning based on the sustainable development rules. Findhorn ecovillage includes charities, non-profit and for-profit organisations, cooperatives and social enterprises. The ecovillage has its local currency – Eco, introduced in 2002, which primarily supports reforestation, organic farming and renewable energy. There are 20,000 Eco Pounds introduced into circulation in four emissions (www6).

LOCAL CURRENCIES FOR SUSTAINABLE DEVELOPMENT

The local money involuntarily supports the sustainable production and consumption of goods through supporting enterprises in a certain region. Obviously, sustainable consumption cannot apply to all types of products. As a result of intense competition and high specialisation, the availability of various groups of goods and services developed on the local market may turn out insufficient or their quality may prove unsatisfactory. The examples of such products include electronic equipment, energy and mineral resources. However, in the case of most of the consumed food one can or even should speak about localism, the scope of which remains different in relation to Switzerland than in the case of Norway, which is determined by the different climatic, geographic and cultural situation of these countries (Żwawa, 2012).

In addition to supporting the sustainable production and consumption of goods, local currencies can reinforce other aspects of sustainable development. Table 1 presents the selected local currencies, including their country of origin, the period of operation and the main areas of sustainable development they support.

Table 1. Local currencies in the selected European countries taking into account the period of operation and the supported areas of sustainable development

Name of the local currency	Country	Year of creation	Is it still functioning? (as of December 31, 2021)	The area of sustainable development:
Wörgl	Austria	1932	No	<ul style="list-style-type: none"> – fighting poverty – supporting innovation
WIR	Switzerland	1934	Yes	<ul style="list-style-type: none"> – promoting stable and inclusive economic growth, full and productive employment
Beki	Luxemburg	2012	Yes	<ul style="list-style-type: none"> – ensuring unlimited access to the sources of stable, sustainable and modern energy
Křižánecká koruna	Czech Republic	2017	Yes	<ul style="list-style-type: none"> – promoting stable and inclusive economic growth
LimbU	Belgium	2017	Yes	<ul style="list-style-type: none"> – ensuring unlimited access to the sources of stable, sustainable and modern energy – reducing the level of waste generation through prevention, reduction, recycling and reuse
Torekes	Belgium	2010	Yes	<ul style="list-style-type: none"> – fighting poverty and exclusion
Buurtijd	Belgium	2014	Yes	<ul style="list-style-type: none"> – fighting exclusion
TalentO	Belgium	2018	Yes	<ul style="list-style-type: none"> – fighting exclusion
NuSpaarPas	The Netherlands	2002	No	<ul style="list-style-type: none"> – sustainable production and consumption of goods – reducing the level of waste generation through prevention, reduction, recycling and reuse
Kiwah	The Netherlands and Norway	2009	No	<ul style="list-style-type: none"> – sustainable production and consumption of goods – ensuring unlimited access to the sources of stable, sustainable and modern energy
Eco	Great Britain	2002	Yes	<ul style="list-style-type: none"> – promoting sustainable industrialisation – ensuring unlimited access to the sources of stable, sustainable and modern energy

S o u r c e : author's compilation based on the websites of local currencies.

The data presented in table 1 are intended to systematise the content of the paper. Each local currency fosters the implementation of the concept of sustainable development. The support may be of indirect nature, thus representing a side effect of implementing the programs for individual local currencies. The latter may also be created following the direct intention focused on achieving the goals of the concept of sustainable development. Sustainable development areas supported by local currencies may address more efficient waste management, such as, e.g., NuSpaarPas and LimbU currencies. Local currencies can promote sustainable industrialisation, just as the UK Eco currency. On the other hand, the Kiwah and Beki currencies support renewable energy. The Kiwah currency invests the funds accumulated in the system in windmills, solar panels and hydropower plants. There are also such currencies as Buurtijd, TelentO and Torekes which counteract social exclusion and poverty.

■■■ CONCLUSIONS

Each local currency supports sustainable development in an indirect manner. The respective currencies include the Austrian Wörgl, the Swiss WIR and the Křižánek Koruna. There are also local currencies in the case of which support for sustainable development is the essence of their functioning, e.g., Beki in Luxembourg, LimbU in Belgium, NuSpaarPas in the Netherlands, Kiwah in the Netherlands and Norway, or the British Eco currency.

Local currencies represent an innovative instrument supporting the implementation of individual sustainable development goals, such as: fighting poverty and exclusion; sustainable production and consumption of goods; reducing the level of waste generation through their prevention, reduction, recycling and reuse; promoting stable and inclusive economic growth as well as full and productive employment; promoting sustainable industrialisation and fostering innovation; making cities and human residential areas balanced, sustainable and enhancing social inclusion, but also providing everyone with access to the sources of stable, sustainable and modern energy.

The effectiveness of the impact exerted by local currencies on sustainable development depends on their creators' involvement and the specificity of the existing internal and external conditions, and also the ability of establishing partnerships between non-governmental organisations, business entities and public administration, with particular emphasis on the local authorities.

REFERENCES

- Borowska, A. (2016). Waluta lokalna czynnikiem rozwoju gospodarki lokalnej. (Local currency as a factor in the development of the local economy.) *Przedsiębiorstwo & Finanse*, 2(13), 21-32.
- Brzozowiec, D. (2012). Cud w mieście Wörgl. (A miracle in the city of Wörgl.) *Nowoczesny Bank Spółdzielczy*, 7-8, 52-55.
- Dubois, H. (2014). Faszination WIR: Resistent gegen Krisen, Spekulationen und Profitgier. (Fascination WE: Resistant to crises, speculation and greed for profit.) *Faro*. <https://docplayer.org/5758738-Faszination-wir-tickt-anders-faszination-wir-resistent-gegen-krisen-spekulationen-und-profitgier-herve-dubois-herve-dubois.html> (accessed: 20.05.2021).
- Gelleri C. (2020) Komplementärwährungen und monetäre Werkzeuge als soziale Innovation. In H.W. Franz, G. Beck, D. Compagna, P. Dürr, W. Gehra, M. Wegner (Eds.). *Nachhaltig Leben und Wirtschaften. Sozialwissenschaften und Berufspraxis*. Wiesbaden: Springer VS. http://dx.doi.org/10.1007/978-3-658-29379-6_8.
- Konieczna, P. (2018). Local currency systems in german-speaking countries – selected issues. In Association of Economists and Managers of the Balkans. *Conference Proceedings: 2nd International Scientific Conference ITEMA 2018*. <http://dx.doi.org/10.31410/ITEMA.2018.315>.
- Łukasiewicz-Kamińska, A. (2014). Waluta alternatywna jako dobro wspólne. (Alternative currency as a common good.) *Myśl Ekonomiczna i Polityczna*, 4(47), 206-218.
- Maroszek, W. (2015). Alternatywa dla pieniędzy. Po co wprowadza się lokalne waluty? (An alternative to money. Why are local currencies introduced?) <https://www.forbes.pl/wiadomosci/alternatywa-dla-pieniedzy-po-co-wprowadza-sie-lokalne-waluty/m62xbvh> (accessed: 20.05.2021).
- Mazurek, A. (2017). Waluty lokalne. Nie tylko sposób na niespokojne czasy. (Local currencies. Not only a way for troubled times.) <https://www.computerworld.pl/news/Waluty-lokalne-Nie-tylko-sposob-na-niespokojne-czasy,408773.html> (accessed: 14.04.2021).
- Miszczuk, M. (2018). Waluty lokalne jako instrument realizacji koncepcji zrównoważonego rozwoju. (Local Currencies as an Instrument for Implementing the Concept of Sustainable Development.) *Problemy ekorozwoju*, 13(2), 83-90.
- Rao, S. (2016). The Beki celebrates half million in circulation. *Luxembourg Times*. <https://www.luxtimes.lu/en/luxembourg/the-beki-celebrates-half-million-in-circulation-602d27f6de135b9236054cab> (accessed: 20.05.2021).
- Reichel, J. (1997). Rzecz o pieniądzu dla lokalnych społeczności czyli małe jest najpiękniejsze. (The thing about money for local communities, small is the most beautiful.) <https://www.zb.eco.pl/BZB/19/index.htm> (accessed: 13.04.2021).
- Ryan-Collins, J., Greenham, T., & Schuster, L. (2013). Energising Money an introduction to energy currencies and accounting. *New Economics Foundation*. https://b3cdn.net/nefoundation/d5efb739f3fb9a137c_q2m6y7916.pdf (accessed: 19.05.2021).

- Sařatka, P. (2020). Důvodem byla podpora místní ekonomiky. V Křiřánkách už řtyři platí vlastní měna. (The reason was to support the local economy. In Křiřánky, four already pay their own currency.) *Vysořina*. (accessed: 21.05.2021).
- Scott Cato, M., & Dodd, N. (2015). *People Powered Money*. London: New Economics Foundation.
- Stępnicka, N. (2017). Waluty alternatywne jako řrodki wymiany międzynarodowej oraz narzędzie ekonomii społecznej. (Alternative Currency as a Mean of International Exchange and a Tool of Social Economy.) *Przedsiębiorczość i Zarządzanie*, t. 18, 11(3), 125-137.
- Van Paris, S. (2020). Opvallende weetjes en cijfers over gemeenschapsmunten. (Notable facts and figures about community currencies.) <https://www.muntuit.be/blog/opvallende-weetjes-en-cijfers-over-gemeenschapsmunten> (accessed: 12.04.2021).
- řwawa, A. (2012). Lokalna ekonomia w służbie społeczeństwa i řrodowiska. (Local economy at the service of society and the environment.) *Portal organizacji pozarządowych*. <https://publicystyka.ngo.pl/lokalna-ekonomia-w-sluzbie-spoleszenstwa-i-srodowiska> (accessed: 14.04.2021).
- (www1) Bank WIR - WIR Bank erneut mit Gewinnplus und stabilem Wachstum, <https://blog.wir.ch/news/wir-bank-erneut-mit-gewinnplus-und-stabilem-wachstum> (accessed: 20.05.2021).
- (www2) Beki - Funktionnement, <https://www.beki.lu/beki/funktionnement> (accessed: 20.05.2021).
- (www3) Obec Křiřánky - Lokální měna v obci Křiřánky, <https://www.obeckrizanky.cz/lokalni-mena> (accessed: 21.05.2021).
- (www4) Dobrá praxe - Křiřánky: "Křiřánecká koruna" - místní měna, <https://ekonomika.dobrapraxe.cz/cz/priklady-dobre-praxe/krizanky-2> (accessed: 20.05.2021).
- (www5) Netwerk gemeenschapsmunten - LimbU, <https://www.muntuit.be/munten/limbu> (accessed: 21.05.2021).
- (www6) Findhorn Ecovillage - Circular economy, <https://www.ecovillagefindhorn.com/index.php/economy> (accessed: 12.04.2021).