



European
Commission

EU CITY FACILITY

Support to cities and municipalities in mobilising sustainable energy investments

Policy Update. Financing for energy efficiency
Covenant of Mayors Investment Forum–Energy Efficiency Finance Marketplace 2022

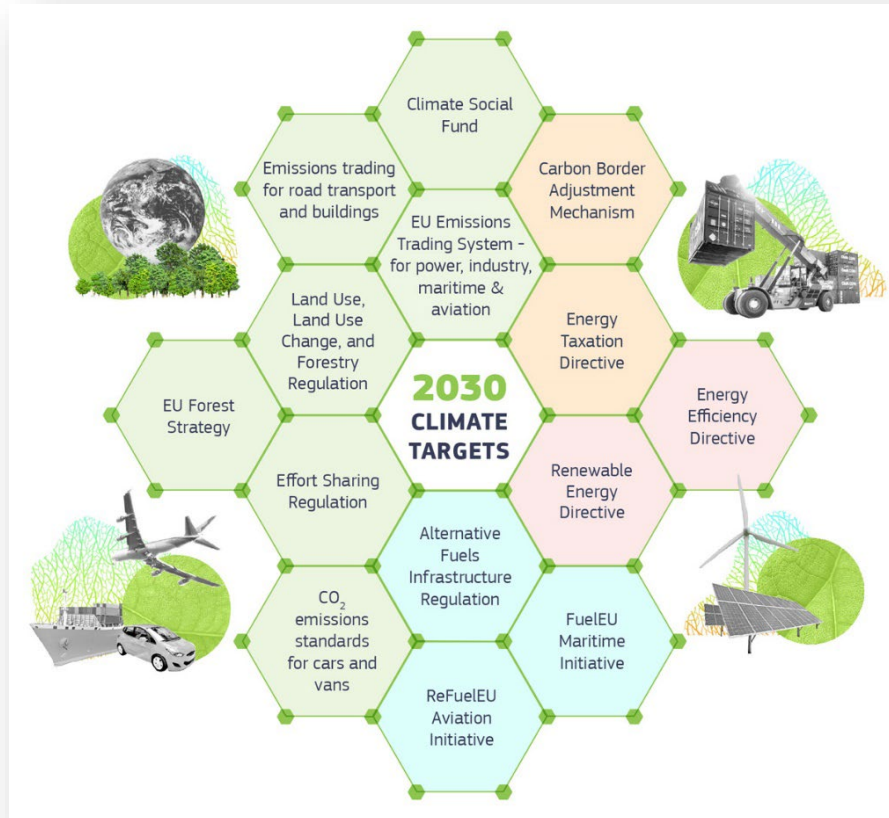
17 October 2022

Carlos Sanchez Rivero, Team Leader Financing for Energy Efficiency,
Energy efficiency unit, ENER.B2

Policy context – the European Green Deal



The Fit for 55 Package – Overview



The package aims to make the EU 'fit for 55' and **deliver the transformational change** needed in a

- **fair,**
- **cost-efficient** and
- **competitive**

way.

It cements the **EU's global leadership** by action and by example in the **fight against climate change**

REpowerEU

REPower EU is the European Commission's Plan to end the dependency on Russian fossil fuel imports.



SAVING

With lower supplies from Russia, every citizen and business will have a responsibility to use energy more carefully. Small behavioural changes, if we all commit to them, can make a significant difference. Contingency measures for supply interruptions will also be needed.



DIVERSIFYING

The EU is working with international partners to find alternative energy supplies and end our dependence on Russia. In the short-term, we need supplies of gas, oil and coal as quickly as possible, and looking to the future we will need hydrogen too.



SUBSTITUTING

Renewables are the cheapest and cleanest energy available, and can be produced domestically, reducing our need for energy imports. **REPowerEU** will speed up the green transition and spur massive investment in renewable energy. We also need to reduce the use of fossil fuels in industrial processes and transport to bring down emissions and dependencies.



INVESTMENT AND REFORM

Additional investments of €210 billion are needed between now and 2027 to achieve our independence from Russian fossil fuel imports. The Commission proposes that Member States develop national **REPowerEU** plans to implement these new priorities.

REpowerEU – EU Save Energy Communication

A DUAL approach: 1 – Achieving short-term energy savings through small behavioural changes by everyone; 2- Accelerating and strengthening structural energy efficiency measures.









Accelerating energy efficiency through mid- to long-term measures

In July 2021, the Commission proposed an increase of the EU energy efficiency target of 9% by 2030, as part of the 'Fit for 55' package. **It is now necessary to go even further.**

EU energy efficiency target by 2030



In addition, the Commission invites the Parliament and Member States to consider **other improvements to the Fit for 55 package** that they are currently negotiating:

-  • Increasing the ambition of the **national energy savings obligation**
-  • Introducing **obligations** to reduce energy consumption, stop fossil fuel subsidies, and promote renewable energy technologies in transport and industry
-  • Strengthening the **implementation of energy audit results**
-  • Extend **buildings Minimum Energy Performance Standards**
-  • Strengthen **national energy requirements of new buildings**
-  • Tighten **national heating system requirements** for existing buildings
-  • Introduce **national bans for boilers based on fossil fuels** in existing and new buildings
-  • Advance the end of Member States subsidies for fossil fuel-based boilers from 2027 to 2025

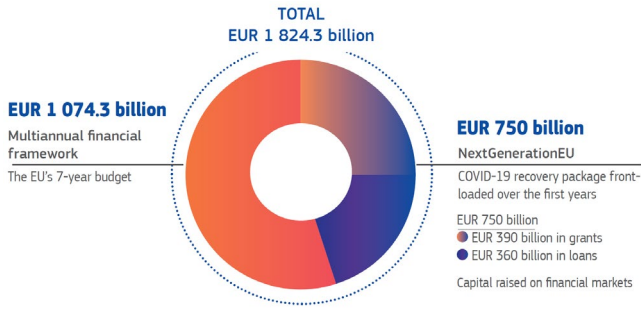


The European Commission, in collaboration with member States, will launch a Energy Efficiency Financial Institutions Coalition

Financing for energy efficiency

Investment needs

- **FF55 package** estimate an **additional annual investment** need to achieve 2030 energy efficiency targets at **around 150€bn.**
- **REPowerEU:** additional **300€bn** investments from now until **2030** (210€bn the end of 2027) to phase-out dependence on Russian fuels.
- **REPowerEU:** specifically **56€bn** additional investments in **energy efficiency and heat pumps**, plus solar rooftop initiative.



Financial resources

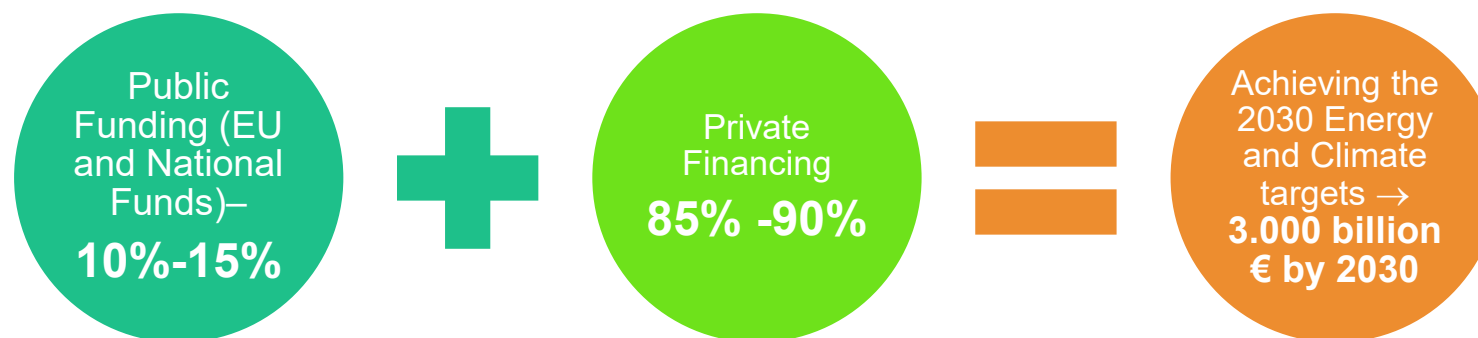
- Out of the total 1.800€bn (NGEU + MFF 2021-2027), 30% of these resources, **around 550 billion euro, earmarked to deliver the climate goals** of the European Green Deal.
- **Energy efficiency plays a key role** in clean energy transition.
- The **resources dedicated to climate action have more than doubled** compared with the period 2014-2020.
- While there is **no earmarking for energy efficiency**, EU-budget support for energy efficiency could be estimated **around 110€ bn.**

EU-funding landscape



Energy Efficiency Financing – Leveraging Private Investments

Leveraging private financing and investments **is conditional** to achieve the Union's climate and energy targets.



Drivers:

- Strengthen the cooperation with financial institutions (EEFIG Coalition)
- Public Funds as a catalyst for private investments (grants models are insufficient).
- Combination of grants, financial instruments and technical assistance
- Development of financing schemes at scale/innovative/performance based.
- Project development assistance (e.g. Replicating ELENA model) and technical assistance (e.g EUCF).
- Stimulate demand, including removing up-front costs, with measures that can be sustained over time.
- Development of energy efficiency lending products
- De-risking investments

Thank you

Carlos Sanchez Rivero, Team Leader Financing for Energy Efficiency, Energy efficiency unit, ENER.B2

UTILIZATION OF GEOTHERMAL ENERGY POTENTIAL IN THE CITY OF KARLOVAC

Vlatko Kovačić, City of Karlovac
Geotermika Ltd



Co-funded by the Horizon 2020 programme
of the European Union



ABOUT US

The city of Karlovac, together with partners, companies GeotermiKA Ltd. and Gradska toplana Ltd. Karlovac, intends to implement a project of research and exploitation of geothermal energy from the Karlovac geothermal field, mainly for the needs of the existing heating system of the city, but also for the production of electricity.



SITUATION



CITY DISTRICT HEATING

The city heating plant supplies heat through the **central heating system** for approximately half of the urban population of the city of Karlovac.

ENERGY EFFICIENCY

Reduction of the impact of energy poverty, energy efficiency of residential spaces, introduction of renewable energy sources in order to reduce **energy dependence on energy imports** as well as global influences on the movement of energy prices.

INFRASTRUCTURE

City of Karlovac is currently implementing the project "**Revitalization** of the hot water network in the city of Karlovac" within the mechanism of Integrated Territorial Cooperation (ITU)

GREEN ENERGY

More pronounced need for the introduction of **renewable energy sources** in order to diversify the production and supply of energy in the city area and reduce greenhouse gas emissions in energy systems.



EUROPEAN CITY FACILITY

Investment Concept for project
“Utilization of geothermal energy
potential in the city of Karlovac –
GEO4KA”

SOLUTION

GEOTHERMAL ENERGY

Investigate and determine the possibility of exploitation of geothermal water in geothermal field Karlovac.

GREEN AND SUSTAINABLE

Thermal energy and electricity from renewable sources – geothermal heat plant and geothermal power plant.

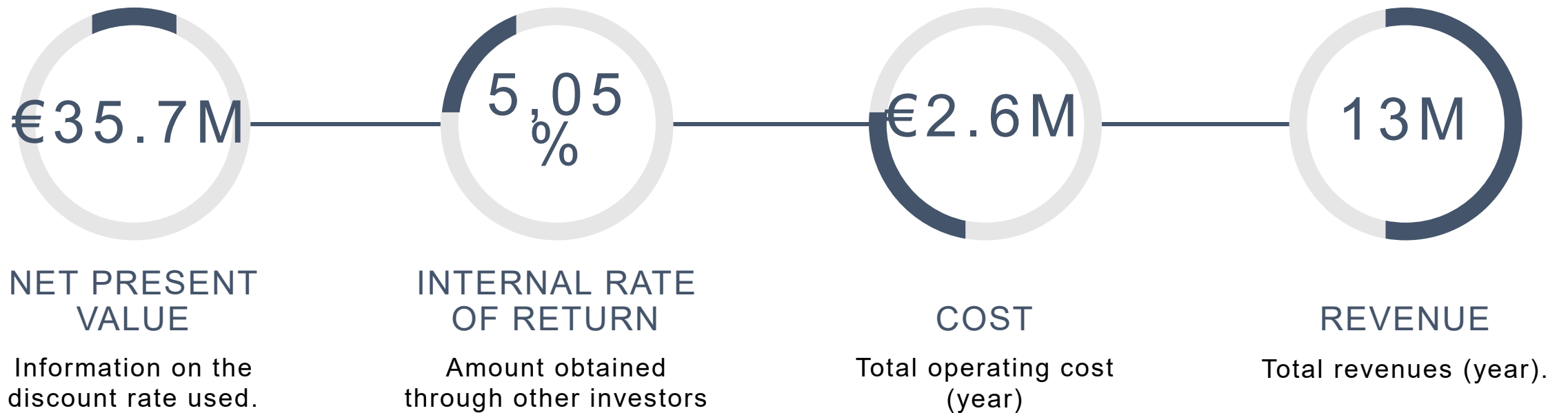
REPLACING THERMAL ENERGY

By replacing thermal energy produced from natural gas with geothermal energy will lead to an annual reduction in the amount of natural gas consumed. Reduction GHG emission.

FINANCE

The financial and economic analysis carried out showed the justification of the selected project. The financial analysis has shown that the project requires financial support from the EU.

FUNDING



THANK YOU

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There is a lot ahead of us that we can and should do for our place, from which we live and for which we are responsible. We believe that together we will make Karlovac a pleasant and energy-independent city for all of us, and as such it will be our greatest reward.

Vlatko Kovačić, mag. iur.
Director

More →





COMIF Brussels 18th October 2022

Mauro Cornaglia
Energy Management of Municipality of Pinerolo



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PINEROLO



ENVIRONMENT
PARK Parco Scientifico
Tecnologia per l'Ambiente

INVESTMENT CONCEPT

Pinerolo Area



Energy Efficiency First in Pinerolo territory!



Project selected in the 1st EUCF call 2020



Lead Municipality:

Municipality of Pinerolo – 35.970 (ab.)

- SECAP (2020-09-23)
- Sustainable Urban Mobility Plan (SUMP)
- Energy Management Service from 2019

Partners:

Municipality of None – 8.009 (ab.)

- SEAP (2012-11-26)
- Municipality of Pomaretto – 998 (ab.)
- SEAP (2012-09-24 / 2015-11-25)



INVESTMENT CONCEPT PROPOSALS

Energy efficiency of public buildings and public street lighting

- Energy renovation of **48 public buildings** (38 Pinerolo - 10 None) through the implementation of **EPC contracts**
- Replacement of obsolete lighting points with efficient new ones (475 None)

Renewable energy production plants

- New **PV systems** integrated in public buildings (**450 kWp Pinerolo – 60 kWp None**)
- New **hydroelectric plants** installed in the municipal aqueduct network (**21 kWp Pomaretto**)



Grant

External Experts in
Project Development
Assistance (PDA)

Energy audits of public buildings and street lighting to define energy performance improvement and RES potential

Economic analyses to define investments, incentives, revenues, economic indicators and EPC parameters (duration, value of fees, economic savings)

Legal Expert in EPC,
Public Private
Partnership and
Public Procurement

Legal analysis necessary to define the public procurement procedures most suitable for the implementation of EPC contracts and the selection of ESCOs



Co-financing

Energy Management

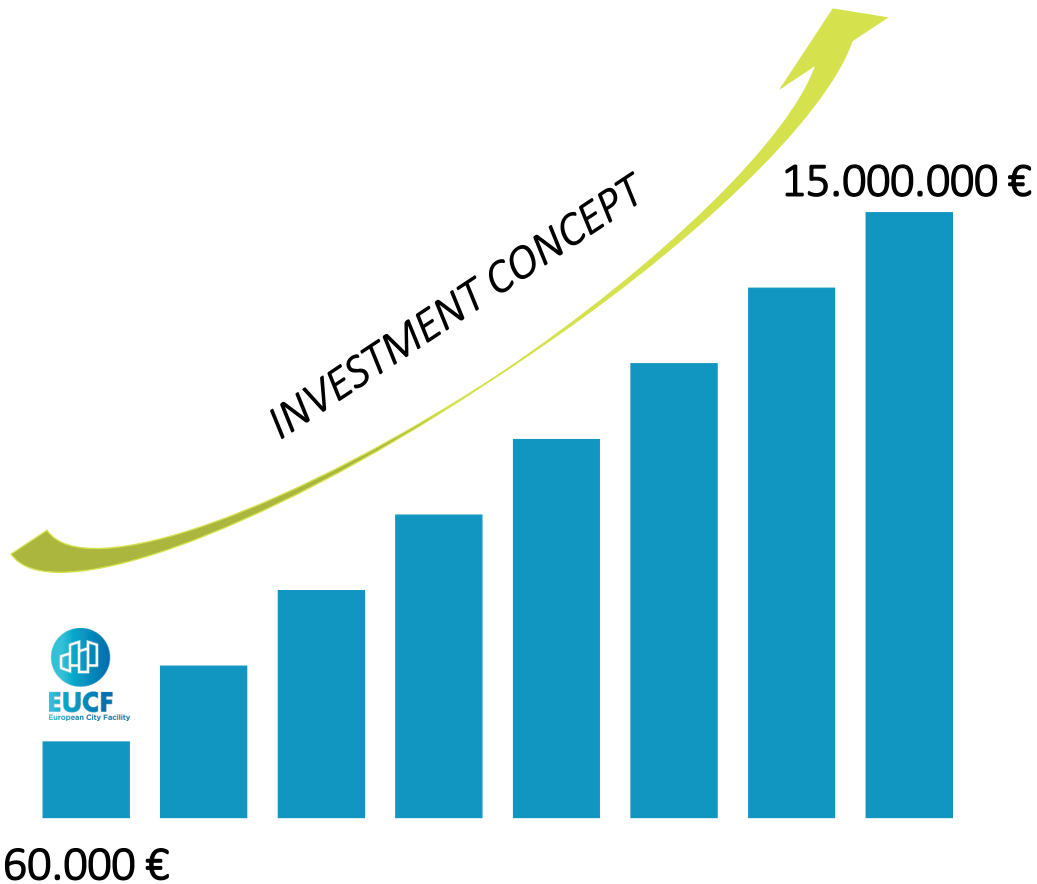
Energy consumption monitoring

Monitoring production from RES

O&M service monitoring

Monitoring of energy and O&M costs





Investment value [M€]	Investment asset	Financing	On going activities
8,2	Energy refurbishment and installation of RES systems (Pinerolo, None, Pomaretto)	EPC	Dialogue with in-house ESCOs
5,8	Demolition and reconstruction of school buildings (None)	PNRR	Awaiting confirmation of contribution
1	Relamping of street lighting (None)	CONSIP	Started the procedure



Energy Saving
3.500 MWh/y



Renewable Energy
640 MWh/y

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THANK YOU FOR THE ATTENTION!

COMIF *Brussels 18th October 2022*



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EUCF
European City Facility

Convenant Of Mayors Investment Forum Decarbonisation-Click Brussels (D-Click Brussels)

18/10/2022

This project has received funding from the
European Union's Horizon 2020 research and
innovation programme under grant agreement
No 864212





D-Click Brussels

EUCF project D-Click Brussels

- Scope : **buildings owned by local public authorities** in the Brussels-Capital Region (BCR), mainly offices, schools, nurseries, nursing homes, workshops, cultural & sports centres
 - Focus on global, ambitious, sustainable & exemplary renovations that reduce energy consumption by min 35%
- EUCF grant of 60.000 €: used to finance a **PM led mission to develop the IC**
 - On basis of 6 tracks : business model, finances, data and projects, purchasing, processes and tools, communication
- The IC served as basis for the ambitious **RenoClick** program = **a building renovation one-stop shop set up by Sibelga since March 2022**

Services offered by Renoclick

- **Support to Brussels municipalities** in selecting the best projects and identifying technical solutions
- **Energy consumption monitoring** (SCAN software)
- **Central purchasing organization for procurement** (studies and public works)
- **Fundraising & grants facilitation**
- **Project results & energy savings monitoring**



Objective

Contribute to reach the targets of the Brussels-Capital Region's Sustainable Energy and Climate Action Plan (**SECAP**)

Expected values from 2040

- 197 GWh/y **Energy savings**
- 45.995 tons/year **Avoided CO2 emissions**
- 13 GWh/y **Renewable energy production**
- 886 000 000 € **Investment size**

Governance

- **Regional Minister** of Energy + Regional Environment & Energy Agency
- The **19 municipalities** (Schaerbeek coordinating)
- **Inter-municipal cooperative SIBELGA**, the operator of electricity & gas distribution networks in the Brussels-Capital Region, with other missions regarding energy transition facilitation in BCR



Main dimensions of renovation projects

Deep energy retrofits in public buildings

- **Building envelope** (insulation, window frames,...) (new challenge for Sibelga)
- **HVAC systems** (previous experience with the Sibelga NRClick program)
- **Renewable energy** (in-situ production – Sibelga SolarClick program)

Progress report (October 2022):

- **42 buildings audited**
- **24 buildings pre-selected** after audit
- **14 buildings** formalizing the commitment of the competent authorities to concretely **start a renovation project**
- **Central purchasing organization** set up since January 2022 – On going: framework contract for study missions (available spring 2023) and for public works (available spring 2024)
- **Facilitation** to help municipalities access regional “Renoclick” grant available since April 2022 and partly **funded by EU Recovery and Resilience Facility (RRF)**

Financing sources & support for renovation projects

Financing

Municipalities

- Direct funding by 19 municipalities in BCR (including Schaerbeek)

Other public investors/grants

- Regional authorities (RBC, WBF,...)
 - European funds (ex. RRF, FEDER,...)
- > Ex. : Grant RenoClick = RBC regional grant supported by RRF

Private investors

- Private banks
- (ESCO's for Energy Performance Contract)

Support

Regional authorities & agencies

- **Sibelga** : operational leader for implementation
- **Minister of Energy & environnement.brussels** : ensuring steering and consistency with the Regional renovation strategy ("Renolution") & SECAP + with energy efficiency legal & technical frameworks
- **finance&invest.brussels** : privileged interlocutor with the banking sector



EUCF
European City Facility

www.eucityfacility.eu



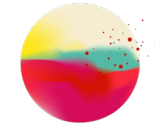
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