





European Energy Network

A voluntary network of European energy agencies

Filipa Newton



EnR Water-Energy Nexus Task Force Chair Coordinator of Sustainable Innovation ADENE, Portugal





Smart Finance for the Water Energy Nexus Study Governance



Steering Committee: ADENE, EWA, CRES, dena, ADEME, RVO













Surveys: SEDA, EIHP, MOTIVA, EST











Smart Finance for the Water-Energy Nexus

EnR'22 Study and Report – Water Energy Nexus Financing |



Malta Dias P., Costa C., Cardoso P., Sargento R., Batalha A., Cordeiro S., Newton F. (2023) Smart finance on water&energy nexus: Benchmark and proposals on innovative financial mechanisms for cities and buildings, European Energy Network

Internal presentation and discussion @ EnR M72 meeting

March 28, 09h30 – 12h30 | EnR Full Meeting & Water-Energy Nexus Financing Study Presentation

Smart Financing for the Water-Energy Nexus | Study Presentation and roundtable

EnR Study on Smart Financing for the Water-Energy Nexus | Filipa Newton, ADENE 10:00 - 10:20 10:20 - 11:40

Roundtable: The role of Energy Agencies in the Water-Energy Nexus

- Sofia Santos, PhD, Sustainability Champion in Chief at Systemic
- Case studies from EnR agencies | EWA & MOTIVA
- Wrap-up



SUSTAINABLE FINANCING

EU taxonomy – common language between investors, issuers, project promoters and policy makers

Investments that comply with technical screening criteria for one of the six environmental objectives, do-no significant harm standards for the other five, as well as a set of common minimum social safeguards, can be

communicated as "sustainable"

EnR agencies potential role



Financial intermediaries
that confirm the
"sustainable" investment
aligning with the EU
Taxonomy!

Type of economic activity	Technical Screening Criteria to Climate Change M&A	
	Substantial contribution to climate change mitigation	Do-no-significant harm standards (water)
Constructions of new buildings	 Primary Energy Demand of new construction is at least 10% lower than nearly zero energy building requirements in national measures. Energy performance certified by energy performance certificate. For buildings > 5000m2: life cycle global warming potential calculated, and level of performance is tested post construction, both disclosed to investors and clients. 	Technical specifications for water appliances are attested by product datasheets, a building certification or an existing product label in the Union (detailed in the study)
Renovation of existing buildings	 As applicable in national regulations for major renovations Reduction of primary energy demand of at least 30%. 	



SUSTAINABLE FINANCING

Sustainable Finance Strategy



Standard for European green bonds (EuGB)¹²

- ✓ With these instruments green bond issuers can easily demonstrate that they are
 funding legitimate green projects aligned with the EU taxonomy.
- ✓ Investors buying the bonds will be able to more easily assess, compare and trust that their investments are sustainable, reducing the risks posed by greenwashing.

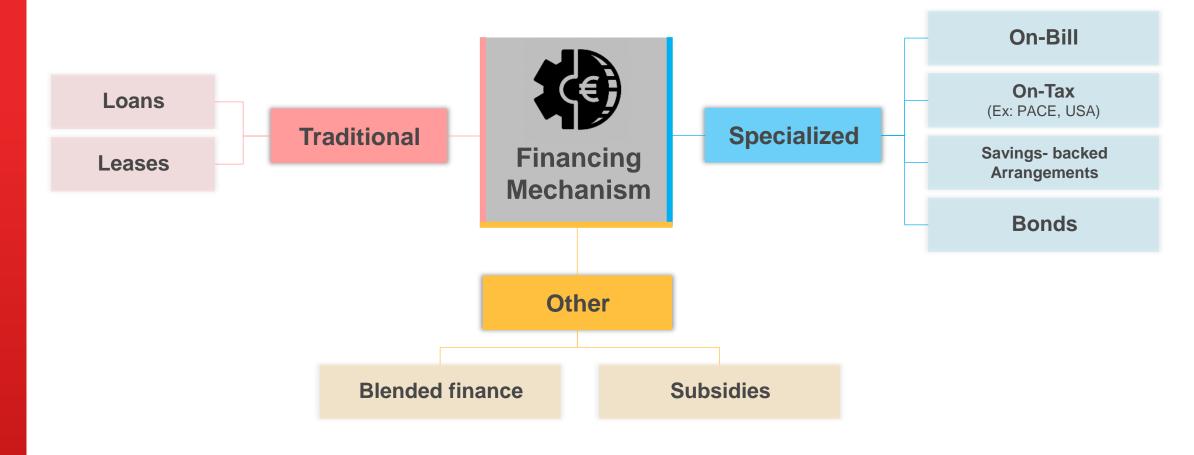


EnR agencies can contribute to:

- Include additional sustainable activities in the EU Taxonomy
- Extend sustainable finance standards and labels that support financing this transition
- Work on green budgeting and risk-sharing mechanisms
- Improve cooperation between authorities to monitor alignment of EU financial system with Green Deal
- Support low-and middle-income countries in their transition efforts to sustainable finance



Existing Financing Mechanisms





Survey Analysis Agencies' Roles on WE and WEN

Organizations' role

- ✓ 4 responding agencies work on WEN (ADENE, CRES, EWA and MOTIVA)
- ✓ WE audits and certification are offered by all, except
 CRES
- ✓ In Malta there are no other organizations working in WEN topics

Role in project finance

- ✓ All agencies work on post-financing monitoring
- ✓ ADENE, CRES and EWA work on policy design and tech specifications



Survey Analysis

Funding mechanisms on EE, WE and WEN

- ✓ Loans and Green Loans are the most used, and preferred mechanisms for all mechanisms in all countries.
- ✓ Service contracts and subsidies have some expression in EE and WEN, but not for WE.

- ✓ Leases and Climate bonds have no expression for EE, WE and WEN.
- ✓ Other instruments used for EE and WEN are cash grant and tax credits, but with little impact



Survey Analysis Barriers and solutions

Financing mechanisms

(loans, green loans, leases, bonds, etc)

Loans and Green Loans are thought to be the most efficient

Most efficient

- Subsidy levels may not be adequate for low-income households;
- Lack of information by funding entities and administrators;
- Lack of specific loans addressing water efficiency

Main Barriers More appropriate solutions based on information and specific needs must be adressed

Instruments that aid in the identification of eficiente products, as well as more Green Loans

Possible Solutions

- Create efficiency labels for water fixtures;
- Need for more green loans;
- Green loans addressing WE na WEN.



Survey Analysis

Barriers and solutions

Public funding mechanisms

(grants and subsidies)

Different funding solutions according to each country

Most efficient

- Household income tax deduction:
- Subsidies to businesses;
- Faster energy services (e.g., ESCOs);
- Environmental subsidies (co-funding);
- · Smart and Sustainable Scheme.

- · Lack of personnel and know-how;
- Subsidy may not be adequare for low-incoe households;
- Low water tariffs to meet investment;
- Risk of proverty;
- · Change of the rules and lack ok prior info.

Main Barriers

Not enough resources and complex guidelines

Development of appropriate tools for the purchase of water-eficiente appliances and fixtures all types of households.

One-stop-shops to facilitate the access to funding solutions

Possible Solutions

- Create efficiency labels for water fixtures;
- Need for more green loans;
- Green loans addressing WE na WEN.



Conclusions

Benchmark analysis

Traditional financing mechanisms

'Green loans'

Can be adapted to cover WE, provided that a certification could be used to assess eligibility

'Green or Sustainability linked loans'

Should target at homeowners and property owners which helps borrowers and lenders by demonstrating eligibility and respective environmental impact arising from several certifications and improvements, including on water efficiency (Nabers)

Specialized Financing Mechanisms

'On-bill financing'

Great potential to help transition existing buildings to water and energy efficiency. Could provide a secondary business revenue for utilities, and a reduced up-front cost approach for small retrofits or for equipment replacement for consumers. (PACE)

'Energy performance contracts (EPC)'

Strong potential to be applied to water efficiency building renovations that can be measure and verified. A good 'Green bond' example is found in Finland, a green bond issued by MuniFin

'Subsidies'

Malta and Portugal, address water efficiency alongside energy efficiency. This example builds on primary energy reduction goals, to which water efficiency solutions must contribute, translating water savings into energy savings and CO₂ emission reduction. doesn't allow for single water efficiency applications, which is a topic to review in the future



Conclusions

Recommendations and guidelines

Energy Agencies can help to create, adopt, or adapt new or existing financing mechanisms

How?

- Expand their scope of action to water efficiency and WEN
- Technical assistance, confirming investment eligibility and their water and/or energy efficiency improvements, aligning with the EU taxonomy and monitoring efficiency gains.
- Manage and/or support product labelling
- Design and/or requirements definition for financing mechanisms
- Promote training, reskilling, and upskilling
- Promote technical and project development assistance facilities, like one-stop-shops
- Address and promote non financing smart incentives
- Develop tools and observatories to monitor their evolution and adoption





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Water Energy Nexus WG



Agência para a Energia

























Water Energy Nexus WG



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Thank you for your attention!

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