

Final Evaluation Report

Ministry for Foreign Affairs of Finland

Final project evaluation of the Finland Ukraine Trust Fund at NEFCO

Evaluation team

**Sari Laaksonen, Team Leader
Julia Popova**

10.06.2024

Contents

Executive Summary	3
Key Findings, Conclusions and Recommendations	7
1. Introduction	10
1.1 Rationale, purpose and objectives	10
1.2 Scope of the Evaluation	10
1.3 Users of the evaluation	11
1.4 Report Structure	11
2 Approach and methodology	12
2.1 Evaluation approach and analysis methods	12
2.2 Data collection methods and data sources	13
3 Evaluation context	14
3.1 Evaluation context and background	14
3.2 Policy framework	15
3.3 Description of the Evaluand	15
3.4 FUTF Mid-Term Evaluation (2020)	17
4 Findings	18
4.1 Relevance	18
4.2 Coherence	20
4.3 Effectiveness	23
4.4 Efficiency	26
4.5 Impact and Sustainability	27
5 Conclusions	32
6 Lessons Learned and Recommendations	34
7 Annexes	38
7.1 Evaluation Matrix	38
7.2 Terms of reference	42
7.3 List of interviewees	50
7.4 List of key documents consulted	51
7.5 Peer review	52
7.6 FUTF projects status and outlook	59

Executive Summary

The purpose of the final project evaluation was to assess the overall relevance, efficiency, effectiveness, impact, coherence, and sustainability of the Finland Ukraine Trust Fund (FUTF) and activities financed by it. The evaluation assessed the operational viability of the Trust Fund, taking into account the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022 and the effect of restrictions during the pandemic COVID-19.

The evaluation analysed the overall performance of NEFCO's FUTF management activities, performance of State Agency on Energy Efficiency and Energy Saving's (SAEE) collaboration with the FUTF, and the technical assistance provided by the Coordination and Management Consultant (CMC) engaged by NEFCO.

The priority issues for the evaluation included:

- Assessment of the operational viability of the Trust Fund, at the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022.
- Assessment of the added value of FUTF compared to other private sector funding instruments at the MFA's disposal.
- Analysis of the implementation strategy and added value of collaboration with SAEE.
- Identifying lessons learned for Finland's support to reconstruction in Ukraine.

Approach and methodology

The theory-based evaluation took into consideration political economy-related aspects. The evaluation was conducted as a participatory and iterative process, ensuring ownership and participation of all relevant stakeholders. It built on the knowledge already available in the form of the results of the FUTF Mid-Term Evaluation. The evaluators applied of mixed methods: an operational analysis was required to understand the viability of the FUTF operation and to identify its strengths and weaknesses. A contribution analysis was required to analyse and assess to what extent and how FUTF has contributed to its outcome and impact objectives, as well through the Finnish human rights-based approach and crosscutting objectives. A comparative perspective in the evaluation was required to explore how does the Trust Fund compare to other private sector funding instruments in the sector and to peer countries and institutions in areas of blended financing, partnering with private sector and innovation. The evaluation was forward-looking and utility focused.

Finland Ukraine Trust Fund (FUTF)

The Finnish Ministry for Foreign Affairs (MFA) and the State Agency on Energy Efficiency and Energy Saving of Ukraine ("SAEE") signed a Memorandum of Understanding (MoU) in January 2017. SAEE is a central executive authority governed and coordinated by the Cabinet of Ministers of Ukraine through the Ministry for Regional Development, Housing, Construction and Municipal Services of Ukraine. The MFA-SAEE MOU covers the fields of Energy Efficiency, Renewable Energy and Alternative Types of Energy Sources. The MFA made available funds for the purpose of financing projects in the agreed fields of cooperation and established a Trust Fund. Nordic Environment Finance Corporation (NEFCO) was made responsible for the management of the Trust Fund.

Evaluation Findings

Relevance

The evaluation found that FUTF's thematic focus remained relevant, but the context of Russia's full-scale invasion and war brought about new needs which the Trust Fund did not fully consider. Evidence proposes that the Trust Fund's operational viability was not robust enough to address emerging priority needs presented to it, and this limited its relevance in the context of Russia's war. The Trust Fund's operational viability faced some limitations pertaining to its design and management of expectations and this hampered its perceived relevance, notably amongst its beneficiaries.

Coherence

In FUTF's implementation strategy, except for the period from 2023, SAEF's value added was limited both as a partner in the overall Trust Fund and in managing and benefitting from its projects. At the same time, NEFCO's value added was significant, particularly in terms of service delivery, professionalism in fund management, and follow-up to progress towards investments/implementation projects.

The evaluation found that compared to other private sector instruments (PSI) at the MFA's disposal, FUTF's strengths included its geographic and sectoral focus. FUTF's key weakness is that its scope is rather limited to technical assistance and demonstration projects, with implementation leaning heavily towards early-stage project support in form of pre-feasibility, feasibility and other studies, and this does not allow it to bridge the gap in Finland's PSI continuum for funding or any guidance and support.

Effectiveness

FUTF's overall operational viability suffered blows related to its difficult, changing context but the Trust Fund managed risks and remained resilient. The evaluators' judgement is that not disbursing the total EUR 6 million available for the Trust Fund does not only relate to the difficult, changing context but on one hand, it is also an indication of NEFCO's robust due diligence and risk management, and on the other hand, it indicates FUTF's inability to adjust to the challenging reality in Ukraine.

The evaluation found that FUTF succeeded to attract project ideas and produce outputs that *could have* supported the achievement of the planned outcomes of the Trust Fund. Yet, neither initially planned nor revised FUTF Results Framework outcomes were met, and the key reasons pertained to the design of the Trust Fund, political will and commitment by the Ukrainian partner, as well as to the adverse effect the context of the COVID-19 pandemic and Russia's invasion and war had on the Trust Fund. There is no indication that FUTF would have until to-date contributed to its Results Framework's impact/development objective, apart from a very insignificant degree.

Efficiency

The evaluators note that in the Trust Fund's implementation strategy, the Coordination and Management Consultant's value added was significant, particularly in taking on responsibilities initially intended for SAEF, while in addition performing all other duties as planned. Hampering efficiency, FUTF's Results Framework was not optimal and monitoring both individual projects' and the Trust Fund's results against it did not bring out all results, neither issues to address and to prompt a revision of the Fund's implementation strategy.

Impact and sustainability

FUTF's direct, concrete, tangible impact on energy efficiency and green transition, and generation of environmental and climate benefits was, at the aggregate level, very limited; in the case of some individual projects, positive effects mostly in energy efficiency but yet more limitedly also in green transition were observed. In its human rights-based approach, FUTF managed to achieve the "do no harm" level. Moving beyond that would have required a noticeable contribution to the Trust Fund's impact/development objective.

FUTF's key value added to Finland is the raising of Finnish companies' interest in Ukraine and facilitating their understanding of and access to the market.

Typical outputs of the FUTF projects are high-quality studies and even in the current context of war, some of them remain valid and some could rather easily be updated. They will only add value and render FUTF results sustainable if investment/implementation projects are developed and implemented in the very near future and for some cases, NEFCO is currently working to progress investment/implementation.

Conclusions

Based on the findings, the evaluators conclude that:

C1. FUTF's thematic focus on energy efficiency, renewable energy, and alternative types of energy sources in power and heat generation and in district heating networks remains relevant and especially Ukraine's needs for sustainable diversified energy infrastructure have significantly increased because of Russia's war.

C2. Because of the professionalism of NEFCO and the CM Consultant as well as most Ukrainian beneficiaries and participating Finnish companies, FUTF was successful in meeting its output-level targets and produced high-quality studies and pilots.

C3. Because of the difficult, changing, high-risk Ukrainian context as well as issues pertaining to its design, assigning responsibilities to partners, and the Ukrainian key partner's ability and commitment to perform their role in the changing institutional context, FUTF was neither successful in meeting its outcome-level targets in policy and investment, nor contributing to its intended development impact.

C4. FUTF's direct contribution to Ukraine's energy efficiency and green transition, and generation of environmental and climate benefits, was very limited and this is because of its focus was at outputs (studies and pilots) and not on supporting securing investment/implementation projects to follow-up the studies and pilots.

C5. There is potential for sustainability of the FUTF results in case the studies and pilots produced by the Trust Fund be followed up by investment/implementation projects, and the policy environment moves to a more supportive direction.

C6. FUTF's role in raising Finnish companies' interest in and understanding of Ukraine's market was beneficial to Finland and Ukraine as it may support the implementation of Finland's national plan for the reconstruction of Ukraine, but the Finnish PSI's (including FUTF) still do not cover for all needs by the companies so that the companies could really scale up the development effects.

Lessons Learned

Based on the findings, conclusions and the peer review, the evaluators draw the following lessons learned:

LL1. FUTF was not successful in address emerging priority needs presented to it in the context of Russia's invasion and war, and it did not result into any significant direct, concrete, tangible impact on energy efficiency and green transition. Yet, it proved to be focused, resilient and effective in producing relevant and high-quality studies and pilots. Hence, FUTF-type of an instrument should not be ruled out as an instrument that could play a role in Finland's support to Ukraine's reconstruction but in case the MFA considers to make use of any such instrument, the recommendations provided in this evaluation should apply to the its design, scope and implementation strategy.

LL2. Both its design, financial resources assigned to it and issues pertaining to its partnership (performance of the Ukrainian partner) rendered FUTF a "studies and (limited) pilots"-programme. Such programmes cannot provide extensive development impact, i.e. they are not necessarily the best possible value-for-money. This also reduces their relevance, causes disappointments in beneficiaries, and eventually does not provide the optimum goodwill towards the donor.

As per the Agreement on security cooperation and long-term support between the Republic of Finland and Ukraine, Finland will continue cooperation with Ukraine on energy security and will assist Ukraine to reconstruct the energy sector in accordance with the principles of green transition, modern technologies and energy efficiency. Be this through making use of any instrument like FUTF or other instruments, Finland should place focus on supporting the beneficiaries to move from a study or a pilot to developing and implementing an investment/implementation project. In case Finland cannot put forward financial resources towards any large-scale investment/implementation projects, its interventions should include strong resources for supporting the beneficiaries to secure funding/financing from other sources and implement the project.

LL3. FUTF's impact and sustainability can still be enhanced. This can – and will – take place through investment/implementation projects build on the FUTF studies and pilots. While NEFCO's already doing their part, MFA could still assign resources through its PSI's towards facilitating the FUFT beneficiaries to secure investments and implement projects. This would also allow the MFA to stay in touch with the Finnish companies that took part in the FUTF and provide them with further support and guidance for continuing and scaling up their business in Ukraine and for Ukraine's reconstruction.

LL4. Both FUTF and Denmark EIFO's experiences propose that in Ukraine, targetable projects are often in the communities. Yet, municipalities' room for manoeuvring is more limited than that of the state actors. Hence, as does EIFO, Finland should link private sector initiatives with development assistance aimed to provide the municipalities with capacity development support. Similarly, links to any policy, strategy and monitoring support project should be established, and in these, MOTIVA, with a MOU signed with SAEE could be a useful partner.

LL5. FUTF, EIFO and SIDA's experiences all point to the need to have "boots on the ground", i.e. a strong team in Ukraine because of the need for anti-corruption, anti-money laundering, and tackling red-tape and any issues with contractors as well as to do on-site monitoring. Such team can consist of staff and consultants attached to the implementing agency, but they should be sufficiently senior to take decisions, trouble-shoot and solve problems, as well as to promote projects with government authorities and investors alike.

Recommendations

The following key recommendations supporting acting on the lessons learned and relating to the conclusions are provided:

- R1. Design and implement investment/implementation projects based on the FUTF TA and demonstrative projects' studies and pilots.
- R2. Consider designing and implementing a project on support to clean energy policies, strategies and/or monitoring, and for municipal-level capacity development, and keep it separate from, while yet linked to, any project/fund addressing "hands-on" TA and demonstrative projects and their implementation projects. Secure a strong Ukrainian governmental project partner for any such policy support project.
- R3. Continue supporting Ukraine in energy efficiency, renewable energy generation and distribution, decarbonization and green transition, and address needs arising because of Russia's war.
- R4. Design any future support to Ukraine's energy efficiency and green transition to include building the investment cases and providing strong support to the Ukrainian partners and beneficiaries in securing investment/implementation projects and in their implementation.
- R5. For any "hands-on" TA and demonstrative projects and their implementation projects, continue working with NEFCO and provide resources to involve a high-quality strong support consultant, such as the FUTF CM Consultant was.
- R6. For Results-Based Management, in the difficult, changing, high-risk Ukrainian context, remain sufficiently flexible and resilient, but invest in project design, risk-management and interaction and taking of corrective actions between partners, as well as in having sufficient number and seniority of implementing agency's staff on the ground.
- R7. In designing any intervention with a Results Framework, spell out the implementation strategy (Theory of Change) with clarity and place specific attention into aligning the intended outputs and outcomes and desired impact, and remain realistic in setting the objectives.
- R8. In any intervention aimed at involving Finnish content, a component providing tailored one-on-one guidance to Finnish companies; targeting FUTF-companies and both established companies, start-ups and Ukrainian companies; as well as fostering greater collaboration between the PSIs (and any other instruments) and the companies would add value to the PSI's, companies and development impact effected by the companies.

Table on the next page presents the evaluation's numbered Key Findings, Conclusions and Recommendations.

Key Findings, Conclusions and Recommendations

FINDINGS	CONCLUSIONS	RECOMMENDATIONS
Relevance		
F1. FUTF's thematic focus remained highly relevant but the context of Russia's full-scale invasion and war brought about new challenges which the Trust Fund, under the MFA's leadership, did not fully consider.	C1. FUTF's thematic focus on energy efficiency, renewable energy, and alternative types of energy sources in power and heat generation and in district heating networks remains relevant and especially Ukraine's needs for sustainable diversified energy infrastructure have significantly increased because of Russia' war. (F1, F2, F3)	R3. Continue supporting Ukraine in energy efficiency, renewable energy generation and distribution, decarbonization and green transition, and address needs arising because of Russia's war. (C1)
F2. The Trust Fund's operational viability was not robust enough to address emerging priority needs presented to it, and this limited its relevance in the context of Russia's invasion and war.		
F3. The Trust Fund's operational viability faced some limitations pertaining to its design and management of expectations and this hampered its perceived relevance.		
Coherence		
F4. In FUTF's implementation strategy, except for the period from 2023, SAEE's value added was limited both as a partner in the overall Trust Fund and in managing and benefitting from its projects.	Also C2, C3 link to findings on coherence.	R5. For any "hands-on" TA and demonstrative projects and their implementation projects, continue working with NEFCO and provide resources to involve a high-quality strong support consultant, such as the FUTF CM Consultant was. (C2, C3, C6)
F5. In the Trust Fund's implementation strategy, NEFCO's value added was significant, particularly in terms of service delivery, professionalism in fund management, and follow-up to progress towards investments/implementation projects.	C6. FUTF's role in raising Finnish companies' interest in and understanding of Ukraine's market was beneficial to Finland and Ukraine as it may support the implementation of Finland's national plan for the reconstruction of Ukraine, but the Finnish PSI's (including FUTF) still do not cover for all needs by the companies so that the companies could really scale up the development effects. (F6, F16)	
F6. Compared to other PSIs at the MFA's disposal, FUTF's strengths include its geographic and sectoral focus. The FUTF's weakness is that its scope is rather limited to technical assistance and demonstration projects, with implementation leaning heavily towards early-stage project support in form of pre-feasibility, feasibility and other studies, and this does not allow it to bridge the gap in the PSI continuum for funding or any guidance and support.		
		R8. In any intervention aimed at involving Finnish content, a component providing tailored one-on-one guidance to Finnish companies, targeting FUTF-companies and both established companies, start-ups and Ukrainian companies; as well as fostering greater collaboration between the PSIs (and any other instruments) and the companies would add value to the PSI's, companies and development impact effected by the companies. (C6)

Effectiveness		
F7. FUTF's overall operational viability suffered blows related to its difficult, changing context but the Trust Fund managed risks and remained resilient.	Also C2 links to findings on effectiveness.	R2. Consider designing and implementing a project on support to clean energy policies, strategies and/or monitoring, and for municipal-level capacity development, and keep it separate from yet link it to any project/fund addressing "hands-on" TA and demonstrative projects and their implementation projects. Secure a strong Ukrainian governmental project partner for any such policy support project. (C3, C4)
F8. Not disbursing the total EUR 6 million available for the Trust Fund does not only relate to the difficult, changing context but on one hand, is also an indication of NEFCO's robust due diligence and risk management, and on the other hand, indicates FUTF's inability to adjust to challenging reality.	C3. Because of the difficult, changing, high-risk Ukrainian context as well as issues pertaining to its design, assigning responsibilities to partners, and the Ukrainian key partner's ability and commitment to perform their role in the changing institutional context, FUTF was neither successful in meeting its outcome-level targets in policy and investment, nor contributing to its intended development impact. (F3, F4, F9, F10, F11, F13)	
F9. FUTF succeeded to attract project ideas and produce outputs that <i>could</i> have supported the achievement of the planned and revised outcomes of the Trust Fund.		
F10. Neither initially planned nor revised FUTF Results Framework outcomes were met and the key reasons pertained to the design of the Trust Fund, political will and commitment by the Ukrainian partner, as well as to the adverse effect the COVID-19 pandemic and Russia's invasion and war had on the Trust Fund.		
F11. There is no indication that FUTF would have until to-date contributed to its Results Framework's impact/development objective, apart from a very insignificant degree.		
Efficiency		
F12. In the Trust Fund's implementation strategy, the Coordination and Management Consultant's value added was significant, particularly in taking on responsibilities intended for SAEF.	Also C3 links to findings on efficiency.	R6. For Results-Based Management, in the difficult, changing, high-risk Ukrainian context, remain sufficiently flexible and resilient, but invest in project design, risk-management and interaction between partners, as well as in having sufficient number and seniority of implementing agency's staff on the ground. (C2, C3)
F13. FUTF's Results Framework was not optimal and monitoring both individual projects' and the Trust Fund's results against it did not bring out all results, neither issues to address and revise the Fund's implementation strategy.	C2. Because of the professionalism of NEFCO and the CM Consultant as well as most Ukrainian beneficiaries and participating Finnish companies, FUTF was successful in meeting its output-level targets and produced high-quality studies and pilots. (F5, F7, F8, F9, F12)	R7. In designing any intervention with a Results Framework, spell out the implementation strategy (Theory of Change) with clarity and place specific attention into aligning the intended outputs and outcomes and desired impact, and remain realistic in setting the objectives.

		(C2, C3)
Impact and Sustainability		
F14. FUTF's direct, concrete, tangible impact on energy efficiency and green transition, and generation of environmental and climate benefits was, at the aggregate level, very limited; in the case of some individual projects, positive effects mostly in energy efficiency but also in green transition were observed.	C4. FUTF's direct contribution to Ukraine's energy efficiency and green transition, and generation of environmental and climate benefits, was very limited and this is because of its focus was at outputs (studies and pilots) and not on supporting securing investment/implementation projects to follow-up the studies and pilots. (F9, F10, F11, F14, F15, F17)	R1. Design and implement investment/implementation projects based on the FUTF TA and demonstrative projects' studies and pilots. (C4, C5)
F15. FUTF managed to achieve the "do no harm" level in its human rights-based approach. Moving beyond that would have required a noticeable contribution to the Trust Fund's impact/development objective.		R4. Design any future support to Ukraine's energy efficiency and green transition to include building the investment cases and providing strong support to the Ukrainian partners and beneficiaries in securing investment/implementation projects and their implementation. (C3, C4)
F16. Raising Finnish companies' interest in Ukraine and facilitating their understanding of and access to the market is FUTF's key value added to Finland.		
F17. Typical outputs of the FUTF projects are high-quality studies and even in the current context of war, some of them remain valid and some could rather easily be updated. They will only add value and render FUTF results sustainable if investment/implementation projects are developed and implemented in the very near future and for some cases, NEFCO is currently working to progress investment/implementation.		C5. There is potential for sustainability of the FUTF results in case the studies and pilots produced by the Trust Fund be followed up by investment/implementation projects, and the policy environment moves to a more supportive direction. (F9, F17)

1. Introduction

1.1 Rationale, purpose and objectives

The purpose of the final project evaluation was to assess the overall relevance, efficiency, effectiveness, impact, coherence, and sustainability of the Finland Ukraine Trust Fund (FUTF) and activities financed by it. The evaluation assessed the operational viability of the Trust Fund, taking into account the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022 and the effect of restrictions during the pandemic COVID-19.

The evaluation is expected to enable NEFCO and the MFA to make informed decisions about the possible future use and further development of the Trust Fund as an instrument.

The evaluation analysed the overall performance of NEFCO's FUTF management activities, performance of State Agency on Energy Efficiency and Energy Saving's (SAEE) collaboration with the FUTF, and the technical assistance provided by the Coordination and Management Consultant (CMC) engaged by NEFCO. Representatives of all relevant stakeholders were consulted during the evaluation assignment.

The priority issues for the evaluation included:

- Assessment of the operational viability of the Trust Fund, at the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022.
- Assessment of the added value of FUTF compared to other private sector funding instruments at the MFA's disposal.
- Analysis of the implementation strategy and added value of collaboration with SAEE.
- Identifying lessons learned for Finland's support to reconstruction in Ukraine.

The evaluation was tasked to identify and document lessons learned and give recommendations that NEFCO, MFA and other stakeholders may use to improve design and implementation of other related projects and programs.

1.2 Scope of the Evaluation

The scope of the evaluation was to carry out an analysis and assessment of the relevance, coherence, effectiveness, efficiency, sustainability, and impact of the Trust Fund during its years of operation 2018–2023. All evaluation criteria and evaluation questions are presented in the evaluation matrix (Annex 1), evaluation ToR (Annex 2), and referred to in discussing the evaluation findings (Chapter 4).

The evaluation focused on the implementation of the Trust Fund. It analysed the planning and implementation phases of the Trust Fund as well as actions taken to ensure sustainability of results after the completion of activities. It considered actions by NEFCO, the CM consultant, SAEE and key stakeholders in Ukraine and in Finland.

The evaluation was tasked to assess the operating model of the Trust Fund: collaboration with NEFCO, SAEE and the Coordination and Management Consultant as well as the involvement of the Finnish companies.

The evaluation was asked to analyse the added value of the Trust Fund as an instrument compared to other funding instruments in the sector. Comparative data on the approaches of other Finnish private sector funding instruments in supporting energy efficiency in development countries was welcomed. The rationale here was to

find comparative data to strengthen the vision on how future interventions in Ukraine and in comparable sectors can be conceptualised.

The evaluation assessed the adaptation of the Trust Fund to contextual changes following the Russia's illegal invasion that started in February 2022, as well as its relevance and viability in the current situation. The Trust Fund was to be analysed in the context of relevant development strategies of Ukraine, including in addressing the short-term acute needs and longer-term reconstruction efforts.

Further, particular attention was to be paid to gender and social equality, human rights including equal participation of marginalized groups and environmental sustainability, including climate benefits. The evaluation would also provide information on how the outcomes of the Trust Fund for the beneficiaries are sustained, as well as how the projects contributed to the longer-term operations of the Finnish companies involved in development country markets.

1.3 Users of the evaluation

The evaluation is expected to enable NEFCO and the MFA to make informed decisions about the possible future use and further development of the Trust Fund as an instrument. It also provides information, analysis and lessons learned more widely to the MFA and its Team Finland partners focusing on the reconstruction of Ukraine, as well as informs the Ukrainian Project partner (SAEE) and grant applicants in Finland and their partners in Ukraine on results of the FUTF.

1.4 Report Structure

After this introductory chapter 1, the evaluation approach and methodology are briefly presented in the chapter 2 and the context and evaluation in chapter 3. Evaluation findings are discussed in chapter 4 and conclusions are presented in the chapter 5. Finally, chapter 6 discussed lessons learned and recommendations. After the standard annexes of evaluation matrix (annex 1), ToR (annex 2), documents consulted (annex 3) and stakeholders interviewed (annex 4), findings of the peer review and case-by-case post-FUTF status and outlook of the Trust Fund's completed projects are discussed in annexes 5 and 6.

2 Approach and methodology

2.1 Evaluation approach and analysis methods

This evaluation is based on the following approach pillars:

Theory-Based Evaluation: FUTF's implementation was based on an implicit Theory of Change (TOC). The Trust Fund's implicit TOC, discovered assessing its Results Chain, is that:

If the Consultation on policy design, and Consultation on technology and projects feasibility, as well as New technology introduced, and Partnerships with private sector and/or financiers promoted, together with the Training and transfer of knowhow, and provision of Finnish content supported by the FUTF **leads into** Clean energy policies ratified, and National funding instrument for Renewable Energy; **then** all this eventually positively impacts investor confidence in Ukraine's energy sector.

The FUTF Results Framework spells out a limited number of assumptions relevant for the implicit TOC to hold and at the level of the impact, the assumption rightly is "Reforms in several sectors needed". At the level outlines, the assumptions are "Availability of credit lines and reforms" (for policy ratification) and "Political stability" (for the national funding instrument). At the level of outputs, the assumptions cover collaboration, technology, stability and investor confidence.

Where relevant and feasible, the findings-chapter of this evaluation report discusses this implicit FUTF TOC, i.e. FUTF's strategy – how did it intend to reach its objectives and what assumptions and risks were involved in it – in presenting the evaluation findings on the operational viability, valued added and implementation strategy of the Trust Fund.

Inclusion of political economy-related aspects: In order to take into account the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022, and to identify lessons learned for Finland's support to reconstruction in Ukraine, this evaluation draws upon available elements of political economy analysis to provide sufficient context and background to Finland's future support to Ukraine's energy efficiency, renewable energy, and alternative types of energy sources, as well as some lessons learned to the wider Finnish participation in the reconstruction effort.

Participatory and iterative process and ensuring ownership and participation of all relevant stakeholders: sufficient participation of the key Ukrainian and Finish stakeholder groups was secured throughout the evaluation process while at the same time care was taken to not to burden stakeholders unnecessarily.

Building on the knowledge that is already available: The evaluation builds on the results of the FUTF Mid-Term Evaluation.

Application of mixed methods: An **operational analysis** was required to understand the viability of the FUTF operation and to identify its strengths and weaknesses. A **contribution analysis** was required to analyse and assess to what extent and how FUTF has contributed to its outcome and impact objectives, as well through the Finnish human rights-based approach and **crosscutting objectives**, notably gender equality. A **comparative perspective** in the evaluation was required to explore how does the Trust Fund compare to other private sector funding instruments in the sector and to peer countries and institutions in areas of blended financing, partnering with private sector and innovation.

Forward-looking perspective and utility focus: This evaluation is required to feed into thinking about the continuation of Finnish Support to Ukraine's energy efficiency, renewable energy, and alternative types of energy sources, as well as to the wider Finnish participation in the reconstruction effort. A two-pronged approach was taken to both assess the case-by-case post-FUTF status and outlook of the Trust Fund's completed projects, and to analyse FUTF's utility at the Trust Fund level and generate lessons learned and recommendations for Finland's future support to Ukraine.

2.2 Data collection methods and data sources

The following specific methods and tools for data collection were used during the research phase of this evaluation:

- **Reconstruction of Theory of Change** to analyse the intervention logic of the FUTF, and to identify some key assumptions in this TOC.
- **Desk study and review of documents and digital information sources, including:**
 - FUTF project document, amendments, annual and completion reports, as well as other Trust Fund-level documents;
 - Documents related to grant applications, and FUTF-funded projects.
- **Key Informant Interviews (KIIs):** The KIIs were the most important sources of information in this evaluation process. Due to the strategic and policy-level nature of the evaluation, these interviews were conducted as semi-structured open-ended interviews. KII's were conducted with:
 - MFA and Embassy, NEFCO, SAEI and CM Consultant;
 - FUTF beneficiaries in Ukraine;
 - Finnish Private Sector Instruments; and
 - Representatives with selected peer country organizations.
- **Debriefing and validation meetings:** As considered useful and agreed with the MFA.

3 Evaluation context

3.1 Evaluation context and background

The Finnish Ministry for Foreign Affairs (MFA) and the State Agency on Energy Efficiency and Energy Saving of Ukraine (“SAEE”) signed a Memorandum of Understanding (MoU) on 24 January 2017. The MOU covers the fields of Energy Efficiency, Renewable Energy and Alternative Types of Energy Sources. MFA and SAEE were interested to strengthen the cooperation between Finland and Ukraine in the fields of energy efficiency, renewable energy, waste-to-energy and smart energy systems through power and heat generation, biofuels, district heating networks and smart energy systems.

MFA established a Trust Fund (TF) for the management and disbursement of funds, made available by the MFA for the purpose of financing projects for the provision of Finnish funding in the agreed fields of cooperation. According to the Trust Fund Agreement between MFA and the Nordic Environment Finance Corporation (NEFCO), NEFCO was to be responsible for the management and administration of the TF.

SAEE is a central executive authority governed and coordinated by the Cabinet of Ministers of Ukraine through the Ministry for Regional Development, Housing, Construction and Municipal Services of Ukraine. SAEE is responsible for the implementation of the state policy in the fields of energy efficiency, renewable energy sources and alternative types of fuel. At the time of the project development (2017) SAEE had the following strategic goals:

- To reach 11% of Renewables in final energy consumption in accordance with the National Renewable Energy Action Plan-2020;
- To reach -9 % of energy saving comparing to the average final energy consumption in 2005-2009 in accordance with the National Energy Efficiency Action Plan-2020.

Ukraine was at the time of the project development – and it still is – per capita, one of the most energy intensive countries in the world. Thus, Ukraine has a great potential for energy efficiency improvement even though the energy intensity of Ukraine’s GDP has been decreasing constantly over the past years.

Since February 2022, Russia’s invasion and targeted attacks on energy infrastructure have caused extensive damage across the country. By mid-2023, more than 100 missiles are estimated to have hit large energy facilities. In the electricity sector, the generating capacity has been reduced by 61 percent, due to damages from Russian missiles or drone attacks, and occupation of large generating facilities like Zaporizhzhia Nuclear Power Plant or destruction/explosion of Kakhovka Hydro Power Plant. In 2022, the available capacity of Ukrainian power plants dropped from 36.0 GW to 13.9 GW. The damages to the energy infrastructure and the loss of access to the assets located in the territories under temporary control of Russian forces have led to over 12 million people suffering from energy supply disruptions.

Some of the major issues for the human rights in Ukraine in the energy sector include threats to energy security and subsequent inability to ensure a stable energy supply and decent living conditions. The high share of coal and natural gas in the production of heat and power leads to adverse impacts on the environment and climate.

In the context of Ukraine, increasing the share of renewables and improving energy efficiency will inevitably contribute to a more stable, environmentally friendly and diverse energy supply and to increasing energy security. The positive impacts of such intervention would spread beyond the immediate benefits and go as far as to facilitate economic and social development of the country.

3.2 Policy framework

Ukraine had prior to the project development developed an agenda for the energy sector, which puts strong focus on energy efficiency (EE), including energy efficiency in District Heating. The main policy document, Energy Strategy by 2035, adopted in 2006, follows in principle the objectives of the EU policies, notably the Europe 2020 strategy. Ukraine became a full member of the EU Energy Community as of 1 February 2011 and is obliged to implement a number of European directives and regulations, which would harmonize Ukrainian energy legislation with the European legal framework. To achieve the objectives of the Strategy, Ukraine requires substantial investments to modernize its infrastructure, increase energy efficiency and improve the quality of public services to promote the country's economic growth.

Improvements to the energy system will help Ukraine in part to promote sustainable development and take actions to mitigate climate change, which in turn will contribute to achieving the goals of the Paris Climate Agreement. This work is also linked to aligning Ukrainian legislation with the European Green Deal.

At the design of the FUTF, Finland's Development Policy Priority Area 4 covered improved food security, and availability of water and energy, and more sustainable use of natural resources, and the Trust Fund was aligned with the PPA4, particularly with its Outcome 2 "All people have affordable and equitable access to affordable and clean, sustainably produced renewable energy" with the indicator "Number of people with improved and equitable access to affordable and clean, sustainably produced renewable energy". The TF's objectives on energy efficiency, both in production, distribution, and consumption, as well as in increasing the share of renewable energy, correspond to the SDG goals 7.2 and 7.3.

The Trust Fund indirectly supported poverty reduction. In 2016, the Ukrainian government decided to raise the price of gas used by households to market levels. The increases were compensated with social benefits, which were provided to a large portion of the population. The funds saved through energy efficiency could be used in the state budget for other development purposes.

FUTF was considered human rights sensitive, as NEFCO is committed to supporting environmental and social sustainability, as well as good practices and standards in the fields of human rights, labour legislation, and occupational safety. In addition to combating climate change, the cross-cutting themes were to include, where possible, attention to gender equality issues. In the initial phase of the Trust Fund's operation, a human rights study was prepared.

Following the invasion, Finland's support to Ukraine was significantly increased and adapted to responding to acute needs and strengthening resilience of the society in the midst of the war. Finland allocated additional support – through NEFCO's Green Recovery Programme and European Bank for Reconstruction and Development (EBRD) E5P Fund in Ukraine – to address acute energy needs in schools, early education centres and hospitals and to develop the country's energy efficiency in the longer term. In 2022, Ukraine became Finland's largest development cooperation partner and recipient of humanitarian aid.

3.3 Description of the Evaluaund

The Trust Fund was to promote cooperation and identify opportunities for projects, both consultancy services and investments, in the fields of energy efficiency, renewable energy and alternative types of energy sources in power and heat generation and in district heating networks.

The activities of the Trust Fund were to focus on the following segments:

1. Renewable Energy and Waste-to-Energy
 - Integration of Renewable and Waste-to-Energy sources into power systems while ensuring national system stability
 - Use of these energy sources in electricity production as well as heating and cooling sectors
 - Increasing the share of electricity produced from renewable and waste-to-energy sources
 - Efficient logistical arrangements for bioenergy, utilization of waste fuels
 - Creation of new national funding instrument for attraction of investments in renewable sector

2. Power and heat generation
 - smart energy and power systems, utilizing locally available clean energy sources
3. District heating networks
 - Energy Efficiency in buildings, industry
4. IT solutions and distribution networks
5. Development of partnerships in the context of multilateral development programs and projects of International Finance Institutions.

Funding for Technical Assistance (TA) could be provided by the TF to different kind of projects including software services, legislation support and creation of funding instruments, know-how, renewables, waste incineration etc. Funding could also be granted for expert services to support SAEE, based on their proposals, called and handled as projects, and delivered either by long-term in-house experts and consultants or short-term external consultants.

Grant support was to be extended to demonstrative projects, if; (i) the projects are transformative, innovative and introducing new technologies at the local market; (ii) the partner commits itself to the project with either monetary or in-kind contribution; (iii) the project would probably not be implemented without support from this grant facility.

The projects eligible for funding of TA and consultancy projects had to:

- benefit not only locally but nationally
- be transformative, demonstrative and innovative
- increase investor confidence in energy sector
- support ratification of clean energy policies
- provide new opportunities for policy support in the fields of cooperation under this fund
- enable and unlock FDI investments
- support national funding instrument

The projects eligible for funding of demonstrative projects had to:

- benefit not only locally but nationally
- be innovative
- build on well-known and proven technology
- be cost efficient
- be affordable and not having negative impacts on vulnerable groups of consumers
- increase energy efficiency on system, sub-system or component levels
- be environmentally sustainable
- be financially sustainable after grant support
- be examples of best practices and best available technologies (BAT)
- be replicable

The TF had a budget of EUR 6 million and funds could be used exclusively to fund activities that meet the ODA criteria set up by the OECD DAC. Each project had to have a Finnish interest in a form of consulting, supplies or investment as defined by Finnvera and the consultants selected were to be mainly firms registered in Finland. The TFs funds were at the project development planned to be disbursed by the end of 2021. The Trust Fund was able to utilize EUR 3,800,000.

Funding for demonstrative projects could be provided as grant funding to the Ukrainian enterprises with preference to SMEs for both public and private projects. Typically project owners own contribution was required, however technical assistance, such as e.g. consulting and software, could be supported with grant up to 100% of the cost. The funds were to be released to NEFCO against NEFCO's requests as agreed in the Trust Fund Agreement. Blending opportunities of the grant with NEFCO's other financing tools (Investment Fund loans, Facilities for Cleaner Production and Energy Saving Credits) were to be made available.

The key Project Management Bodies (referred to in this evaluation report as "partners") of the TF were NEFCO, State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE), MFA, and Coordination and Management Consultant. The Evaluation and Monitoring Committee (EMC) of FUTF, consisting of SAEE and NEFCO as members and MFA as an observer, assessed proposals and recommended projects to NEFCO Investment Committee (NIK) for approval.

3.4 FUTF Mid-Term Evaluation (2020)

A Mid-Term Evaluation (MTE) of the FUTF was carried out in 2020. According to the MTE, FUTF was well aligned with the Ukrainian energy sector policies and objectives. It contributed to increase the share of renewables in the Ukrainian energy mix and introduced new solutions that could contribute to the national renewable energy and energy efficiency related objectives also at a larger scale.

The MTE noted that among renewable energy options, biomass was the most under-developed sector in Ukraine while it is among the core expertise of the Finnish energy industry. The MTE saw a role for FUTF and/or the future Green Investment Fund in promoting guidelines and systems for ensuring sustainability of bioenergy before the sector grows rapidly.

According to the MTE conclusions, numerous donors, International Financial Institutions (IFIs), government agencies and private investors participated in energy sector development in Ukraine. The MTE noted that FUTF is small but can have a leveraging role in attracting larger investments to innovative energy sector solutions, leading to clear added value of the Trust Fund.

Promotion of Finnish content in FUTF projects was considered a good way to link development cooperation to private sector development in Ukraine and internationalize Finnish companies. The MTE concluded that the scope for taking innovation further, e.g. increasing the role of the Ukrainian private sector, could be enhanced.

The key MTE recommendations included to temporarily cease applications for FUTF, increasing emphasis on implementation of the approved projects, dissemination and communication, engaging industrial associations and NGOs in Ukraine, considering linkages and synergies between FUTF and other private sector instruments as well as considering additional financing to the FUTF.

4 Findings

In this section, the report details the evaluation findings for each criterion set forth by the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) and applied in this evaluation. These are relevance, coherence, effectiveness, efficiency, impact, and sustainability. For every criterion assessed, findings are aligned with the corresponding evaluation questions and numbered key findings provided.

4.1 Relevance

Evaluation question answered in this section:

1. To what extent has the Trust Fund been consistent with the needs and priorities of Ukraine and the beneficiaries of projects financed by the Trust Fund, with focus on the period after the beginning of Russia's illegal invasion in 2022?

(The second relevance-related question below is addressed in discussing Lessons Learned and Recommendations:

2. Is the Trust Fund considered a relevant instrument for responding to the acute needs in Ukraine and for supporting the future reconstruction?)

Key findings:

F1. FUTF's thematic focus remained highly relevant but the context of Russia's full-scale invasion and war brought about new needs which the Trust Fund, under the MFA's leadership, did not fully consider.

F2. The Trust Fund's operational viability was not robust enough to address emerging priority needs presented to it, and this limited its relevance in the context of Russia's invasion and war.

F3. The Trust Fund's operational viability faced some limitations pertaining to its design and management of expectations and this hampered its perceived relevance.

While the FUTF MTE noted that the Trust Fund was well aligned with the Ukrainian energy sector policies and objectives before Russia's illegal invasion in February 2022, this final evaluation mostly focused on the on-going era starting from the illegal invasion and the ensued needs in and reconstruction of Ukraine.

FUTF's thematic focus remained highly relevant but the context of Russia's war invasion and brought about new needs which the Trust Fund, under the MFA's leadership, did not fully consider. Ukraine's needs in energy efficiency, renewable energy, and alternative types of energy sources in power and heat generation and in district heating networks have remained in place also after February 2022. At the same time, with Russia targeting energy

infrastructure, Ukraine's needs for sustainable energy infrastructure have significantly increased and facilities need to be urgently repaired and rebuilt.

The Trust Fund's operational viability was not robust enough to address emerging priority needs presented to it, and this limited its relevance in the context of Russia's invasion and war. MFA was approached by the Ukrainian counterparties with request of urgent support in reconstruction and modernization of destroyed infrastructure because of the Russia's war in Ukraine. Accordingly, in December 2022, a contribution of EUR 1.3 million and in September 2023, a contribution of EUR 900,000 were reallocated by the MFA away from FUTF to address Ukraine's acute needs in the areas of energy efficiency, renewable energy and heat generation and in district heating networks using other channels of delivery than FUTF.

While one humanitarian assistance project for FUTF to specifically respond to the imminent urgent needs arising from Russia's invasion and war was identified at the initiative of the FUTF Coordination and Management Consultant, processing it for implementation got discontinued. The project labelled as "Ukraine district heating emergency aid" was about provision of humanitarian assistance for Ukrainian district heating sector. SAEE and district heating associations made an urgent request to provide material and tools to support the work of emergency crews of district heating companies in cities and settlements located in the zone of hostilities. A list of urgent needs was provided including inter alia polyethylene films for closing glass windows, doors, roofs, and wall cracks that appeared during shelling to prevent impact by rain, freezing, cold, and wind of technological premises and technical buildings. The project was approved by the EMC (14th meeting, April 2022) with two conditions: 1) the beneficiary needs to be clarified – it needs to be either SAEE or an association, and 2) the due order of supply chain should be proposed. Eventually, due to lack of adjustment options to implementation of flash projects under extreme challenging conditions and the legal restrictions for SAEE or a public body to accept the assistance that would classify as a donation at the war time; SAEE and the Fund manager could not agree on a realistic implementation process forward. The "Ukraine district heating emergency aid" project was not implemented.

The Trust Fund's operational viability faced some limitations pertaining to its design and management of expectations and this hampered its perceived relevance. While the Trust Fund's design mostly positively affected its relevance, a set of issues impacted it adversely. FUTF design's positive contribution to its relevance pertained to its thematic focus and its effective implementation mechanism, which resulted into partially achieving its objectives at the output-level (see discussion on effectiveness). In terms of the design's limitations to the Trust Fund's relevance, FUTF's design did not spell out how the Trust Fund's outputs and outcomes, if met would, in concrete terms, contribute to the desired impact of improved investor confidence in Ukraine's energy sector. How would the potential investors actually benefit from the results yielded with the implementation of technical assistance and demonstrative projects? How would this translate into increased annual investments in Ukraine's energy sector? The fact that the initially intended legislation support and creation of funding instruments could not, for valid reasons, materialize as a part of FUTF's support, contributed to the unclear connection between FUTF's outputs, outcomes and intended impact too.

Since the TA and demonstrative projects' outputs were mostly blueprints related to a possible investment projects and included pre-feasibility and feasibility studies (10 projects), other analyses or studies (four projects), support to project testing, designing, modelling or measuring (three projects), and ToRs and technical recommendations (2 projects), with only three projects' outputs mostly consisting of training and knowledge transfer and another three projects' outputs being geared towards software or hardware (and two projects providing capacity building to SAEE), in spite of all efforts of managing expectations by the Trust Fund partners, the Ukrainian project partners and beneficiaries still did expect actual investment projects to follow. This expectation in many cases not yet met reduces the *perceived* relevance of the Trust Fund. While there are plans for investment projects to follow and while both the COVID-19 pandemic and Russia's war in Ukraine have adversely impacted development of such investment projects, the Trust Fund's design did not place sufficient attention to building the actual investment cases, especially those that could be scaled up and replicated and that would have given clear benefits of potential technology transfer. For instance, there was no clear road-map conceptualizing the pathway from a feasibility study to the investment project, nor were the steps to be taken from the study to securing the investment (from other sources than the FUTF) outlined or the follow-up and support to the beneficiaries on this placed on any FUTF partner's responsibility. In spite of this, at the end of FUTF operational lifetime, some investment projects were promoted for implementation and are now in process (see discussion on impact and sustainability), but large majority of the interviewed Ukrainian project-level

stakeholders expressed considerable frustration over FUTF's support ending with a high-quality study but no implementation.

According to the project completion report, most of the projects financed by the Trust Fund were relevant in terms of technology, ideas, and approaches for Ukraine. Yet, an aspect of the Trust Fund's design limiting its relevance was that of the requirement for innovativeness, or rather, the gap between Finland and Ukraine in technological advance and the gaps between the Finnish and Ukrainian partners and beneficiaries in defining what was considered innovative in the field of energy efficiency, renewable energy, and alternative types of energy sources. Based on the evidence, these differences may have in some (limited) cases played a detrimental role in the context of project approval, procuring Finnish content and implementing the projects. In those cases, differences in technological advance and defining innovativeness may have hampered approving and implementing projects relevant to the FUTF objectives and the Ukrainian needs.

For some projects the most detrimental effect for implementation (cancelled implementation) was that the Finnish technology providers that were selected, were scared off by Russia's war and could not deliver their services; and NEFCO could not replace those providers due to lack of time remaining and no such procedure in place.

4.2 Coherence

Evaluation questions answered in this section:

3. Was there value added in the collaboration with the SAEF and what was it?
4. What was the value added of the collaboration with NEFCO?
5. How does the Trust Fund compare to other private sector funding instruments in the sector (e.g. but not limited to Finnpartnership, Finnfund, instruments by Business Finland) and what value added does it bring?

Key findings:

F4. In FUTF's implementation strategy, except for the period from 2023, SAEF's value added was limited both as a partner in the overall Trust Fund and in managing and benefitting from its projects.

F5. In the Trust Fund's implementation strategy, NEFCO's value added was significant, particularly in terms of service delivery, professionalism in fund management, and follow-up to progress towards investments/implementation projects.

F6. Compared to other PSIs at the MFA's disposal, FUTF's strengths include its geographic and sectoral focus. The FUTF's weakness is that its scope is rather limited to technical assistance and demonstration projects, with implementation leaning heavily towards early-stage project support in form of pre-feasibility, feasibility and other studies, and this does not allow it to bridge the gap in the PSI continuum for funding or any guidance and support.

In FUTF's implementation strategy, except for the period from 2023, SAEF's value added was limited both as a partner in the overall Trust Fund and in managing and benefitting from its projects. The State Agency on Energy Efficiency and Energy Saving (SAEF) was assigned the TF's main coordinator in Ukraine. SAEF was initially tasked, in cooperation with the CM Consultant, to (1) Identify project opportunities in the Trust Fund's agreed fields of cooperation; (2) Identify new opportunities of policy support and institutional strengthening, to be financed by the Trust Fund; (3) Review and assess Indications of Interest of projects, submitted by potential beneficiaries/partners. Propose suitable grant or mixed grant and credit funding to facilitate implementation; (4) Prepare project proposal submissions and presentations to the EMC; and (5) Present project proposals to EM Committee, together with the CM Consultant.

De facto, the CM Consultant took a leading role in identifying project opportunities; reviewing and assessing Indications of Interest of projects and proposing suitable grant or mixed grant and credit funding to facilitate implementation; preparing project proposal submissions and presentations to the EMC; and presenting project proposals to EMC. In terms of identifying new opportunities of policy support, no policy support initiatives materialized and the FUTF Results Framework was amended in 2019 to do away with that objective. SAEF took

part in some of the activities defined for it but eventually led and largely managed by the CM Consultant, but they also had a double role. They both were a partner and a beneficiary, tasked with implementation responsibility, to certain SAEE capacity development and wider national-level initiatives, such as the Green Investment Fund. While much of SAEE's partner responsibilities moved to the CM Consultant, not all the projects they implemented bore intended results either. Most notably, the Green Investment Fund assignment was completed with recommendations disseminated but the fund is not under development.

COVID-19 pandemic and Russia's war in Ukraine impacted all partners and beneficiaries of the Trust Fund and while these factors have impacted SAEE's role – for instance, a project about energy efficiency trainings in Ukrainian regions could not be implemented due to Russia's war in the country – they are not factors specific to SAEE only and while their impact on any Ukrainian state agency is greater than on an international actor in the country, they cannot fully explain the observed shortcomings in the agency's performance. SAEE's move from under one Ministry to another, as well as the agency's changing leadership and rotation of managers impacted their performance within the Trust Fund over time and even if the new leadership towards the end part of the FUTF's life-cycle was committed and took initiative; this just came too late. In SAEE's view, FUTF design and partners did not consider it to be an equal partner and created conditions for leaving the Ukrainian side only the role of an observer. During the FUTF lifespan, the need for equal participation in the decision-making process was emphasized by SAEE in official correspondence. At the same time, some partners imply mistrust over SAEE's motives and conduct. While it is beyond the scope and mandate of this evaluation to assess the accuracy of any such allegations, clearly, partners having doubts over each other rather decreased than increased the value-added of the partnership. Partners' views on SAEE's added value vary but the Ukrainian beneficiaries interviewed for this evaluation are nearly unanimous: apart from one beneficiary, all others (nine in total) that answered an open-ended interview question on SAEE's value added, said that the agency had been absent from their interactions and business with the FUTF. In any case it has to be noted that both NEFCO being used to *not* having such government entity as an (intended) implementation partner, and the MFA having had approved the FUTF project plan without perhaps sufficient attention paid to the respective roles of and dynamics between the partners, as well as both NEFCO and MFA not necessarily fully having had understood SAEE's mandate and role with the Ukrainian administration, likely have detrimentally impacted the degree of SAEE's interest and commitment to the Trust Fund. Also, with all revived powers, commitment, and wiliness to support remaining project implementation that has come from SAEE in 2023, after the latest change in the leadership, in SAEE's view the FUTF management was unable to reflect properly on actual situation in Ukraine and utilize the momentum of political and managerial support from SAEE.

In the Trust Fund's implementation strategy, NEFCO's value added was significant, particularly in terms of service delivery, professionalism in fund management, and follow-up to progress towards investments/implementation projects. Here, we address NEFCO's value added in those three aspects relevant to FUTF where the evidence of NEFCO's strong performance was most significant. These are the service delivery, professionalism in fund management, and follow-up to progress towards investments/implementation projects.

Service delivery: In NEFCO's case, the Ukrainian beneficiaries that answered an open-ended interview question on it (10 in total), are fully unanimous: NEFCO's added value in FUTF was significant. Beneficiary interviewees refer to a number of domains where NEFCO's partnering with them has been excellent, both from the perspective of its professional quality and the organization's commitment. These include the domains of standards, legal aspects and paperwork, financial calculations, site inspections, technical specifications and addressing technical issues, pushing the project forward, IT support, project monitoring, facilitating contacts with Finnish companies, and others, including advice and guidance on various areas of interest. Following quotes from the beneficiary interviews illustrate:

"We were in a very close contact with NEFCO throughout the entire project. They guided us through the documentation, translations. They did everything so professionally, particularly in terms of legal aspects. They clarified every single step. I can say they were our hands and eyes." [Ukrainian beneficiary]

"NEFCO sent their technicians and other experts to the spots. They inspected facilities, prepared calculations – they pushed the process forward." [Ukrainian beneficiary]

"They closely guided us through all stages throughout the entire duration of the project. I could consult with them via mail or online whenever I required. We had online conferences almost daily. Finnish specialists continue to reinforce us until now. Some time ago, I had a case when the installed software did not respond on

my new laptop. I contacted an IT-administrator in Finland and they swiftly discovered that the software was linked to a specific IP-address. They linked the programme to my new computer and I could use it again. My score to them: 10/10.” [Ukrainian beneficiary]

“NEFCO had been fully engaged: they guided throughout the entire process. Their engineering consultants visited the construction, they monitored technical issues. In my view, the entire process was arranged expertly and correctly. For me it was a very serious experience.” [Ukrainian beneficiary]

“Their consultants assisted us when applying and later throughout the project. They guided us throughout the feasibility study and financial calculations, as in accordance with the EU standards. They advised how to achieve the best effect possible in energy savings. Otherwise, it would be very difficult for us. We understand, that NEFCO had a mentoring role, to a great extent. Their consultants performed it in the best way possible. We can indicate that NEFCO selected their consultants responsibly.” [Ukrainian beneficiary]

It has to be noted though, as can be understood from the illustrative quotes above, that the Ukrainian beneficiaries hardly make a distinction between NEFCO and the CM Consultant. The latter are in FUTF considered “NEFCO’s consultants” and a big part of the credit given to NEFCO is in actual terms credit aimed to be given to the CM Consultant.

Professionalism in fund management: NEFCO’s professionalism in the Trust Fund management was apparent in particular because of the short delays and absence of excessive bureaucracy – compared to many other IFI’s and development partners – in the fund management actions, and because of the robust risk management.

In terms of the comparatively short delays and absence of excessive bureaucracy in the fund management actions, most convincing evidence comes from the Ukrainian beneficiaries. All 10 Ukrainian beneficiaries that answered an open-ended interview question on how does FUTF compare to other funding instruments in the sector, pointed out shorter delays with FUTF than with other IFIs and development partners that they had worked with. Many also noted that the bureaucracy was lighter dealing with FUTF than other providers of grant or loan financing. Following quotes from the beneficiary interviews illustrate:

“I can compare with the World Bank. it has been harder to work with them: longer timelines, more procedural requirements.” [Ukrainian beneficiary]

“If compared with the World Bank or USAID, the Finnish fund was the only one who could perform decently within observable timelines. Other, larger, donors, were so bureaucratic, so ‘clumsy’, with tons of papers, so slow, this resulting in very few projects being completed. With the World Bank, every single paper circulated for months. While the papers were being processed, the necessity might have vanished, or the solutions got outdated, etc. Instead, NEFCO, not even having big amounts, they do everything swiftly, in a proper technical and administrative ways. They understand the local market.” [Ukrainian beneficiary]

“The cooperation with NEFCO was on the contrast with the EBRD. If with the first we could by certain time observe the effects of the project, with the latter we have been discussing issues till now. In general, whenever we had Ukrainian ministries as connecting links, the processes took longer. With German GIZ, it involved more bureaucracy.” [Ukrainian beneficiary]

NEFCO’s risk management is discussed in the chapter 4.3 on effectiveness.

Follow-up to progress towards investments/implementation projects: In spite of insufficient attention paid to securing investments/implementation projects in the FUTF design, and majority of the interviewed Ukrainian project-level stakeholders expressing frustration over ending with a high-quality study but no implementation support (at least seemingly and from their perspective at the end of the study-phase and also when interviewed for this evaluation) (see chapter 4.1 on relevance), NEFCO has recently started to make use of an increasing number of the FUTF projects’ outputs (see discussion on impact). This is commendable in particular because it happens in the context of Russia’s war in Ukraine.

Compared to other PSIs at the MFA’s disposal, FUTF’s strengths include its geographic and sectoral focus. The FUTF’s weakness is that its scope is rather limited to technical assistance and demonstration projects, with implementation leaning heavily towards early-stage project support in form of pre-feasibility, feasibility, and

other studies, and this does not allow it to bridge the gap in the PSI continuum for funding or any guidance and support. Private sector instruments (PSI) at the MFA's disposal, that can be made use of in Ukraine, are Finnfund, Public Sector Investment Facility (PIF), and Finnpartnership (FP). Role of the MFA's and Business Finland's joint Developing Markets Platform (DevPlat) in the case of Ukraine is, according to the MFA, mostly in the Pillar 2 and 3, i.e. in mobilizing Finnish companies to take part in the UN procurements and IFI contracts and financing in support of Ukraine's reconstruction. In addition, the MFA can guide companies to Business Finland, where the Explorer financing services are recommended for projects in Ukraine, and to other financing and information services provided by Team Finland partners.

In this evaluation, we have compared the three PSIs and FUTF at a general level and not going into the project-level. While comparing Finnfund, PIF, Finnpartnership and FUTF is, to a large degree, like comparing apples and oranges, FUTF is in this group the only PSI that is focused at one country – Ukraine – and one, albeit wide, sector – energy. This clear country- and sectoral focus proposes advantages in provision of expertise by the Trust Fund partners both in terms of the context and substance, and for the Ukrainian beneficiaries and Finnish companies alike. Neither Finnpartnership nor Finnfund and PIF have similarly focused and limited scope, albeit their capacity and conditions to support projects in Ukraine has been increased since the start of Russia's invasion and war in the country.

Considering FUTF, Finnpartnership, Finnfund and PIF together, there is no clear continuum of the instruments so that appropriate support and financing would be available for each stage of a project implementation. Especially the gap between FUTF and FP on one side, and Finnfund and PIF on the other is large. FUTF and FP provide support to projects that are often at the early stages of business or innovation development, and there is no certainty of commercial viability. Finnfund and PIF finance investments that are already fairly established, with reasonable reliability of commercial viability and thus repayment, with return, of invested capital.

Finnfund has no specific funds at its disposal for project development or technical assistance. It thus has rather limited ability to support early-stage project development. The same applies to PIF, which in practice requires the financed products/services already to be reliable, tested and provided by commercially established companies. There is a gap also in the volume and size of the available finance through these instruments, and the size of projects the PSIs focus on. Finnfund and PIF provide the largest financial inputs. Between their investments and projects financed by FUTF and Finnpartnership there is a major gap. Ideally, the early-stage financing provided by FUTF and FP would be connected, through a financing pathway, to Finnfund and PIF so that a degree of the FUTF and FP projects would eventually be bankable for investment by Finnfund or PIF.

The PSIs have to some extent differing policy goals. Though all instruments have been designed or at least approved, and are funded by the MFA, the goals and operational logic of the instruments are not the same across them. Differing policy goals make it difficult for the PSI to function as a continuum of financing tools. The most common shared policy goals of the instruments are the ones related to development policy on the one hand and the "Finnish interest" on the other; there are more differences in other goal setting.

Moreover, albeit improvements have occurred over the recent years, cooperation and collaboration between the PSIs is, overall and generally, not yet as seamless, efficient and effective as it should be. In the case of Ukraine's reconstruction, policies and strategies have been developed that can be expected to support the PSIs cooperation and collaboration but the implementation of such cooperation and collaboration itself requires leadership, organization and resources.

4.3 Effectiveness

Evaluation questions answered in this section:

6. To what extent the project outcomes and objectives were met and why and why not?
7. To what extent the risk management plan served its purpose, and were the mitigation measures used and updated during the implementation of the Trust Fund activities?

Key findings:

F7. FUTF's overall operational viability suffered blows related to its difficult, changing context but the Trust Fund managed risks and remained resilient.

F8. Not disbursing the total EUR 6 million available for the Trust Fund does not only relate to the difficult, changing context but on one hand, is also an indication of NEFCO's robust due diligence and risk management, and on the other hand indicates FUTF's inability to adjust to challenging reality.

F9. FUTF succeeded to attract project ideas and produce outputs that *could have* supported the achievement of the planned and revised outcomes of the Trust Fund.

F10. Neither initially planned nor revised FUTF Results Framework outcomes were met and the key reasons pertained to the design of the Trust Fund, political will and commitment by the Ukrainian partner, as well as to the adverse effect the COVID-19 pandemic and Russia's invasion and war had on the Trust Fund.

F11. There is no indication that FUTF would have until to-date contributed to its Results Framework's impact/development objective, apart from a very insignificant degree.

FUTF's overall operational viability suffered blows related to its difficult, changing context but the Trust Fund managed risks and remained resilient. The first operational years of FUTF, which started its operation in 2018 and the last projects were completed in September 2023, were carried out for the most part according to the plans, but years 2020-2021 were impacted by the COVID-19 pandemic and in 2022-2023, Russia's invasion and war in Ukraine for some time fully stopped the Trust Fund activities and thereafter, delayed and slowed down its activities causing further delays and cancellation of projects. As per the FUTF completion report, Russia's war in Ukraine affected especially implementation of demonstration and training projects that in the end had to be terminated, also due to inability by the Finnish technology providers to perform their duties and the Fund Manager to mitigate that situation. Dissemination seminars and events had to be held online. Despite the war, many feasibility studies were implemented by Finnish consultants with their local subcontractors.

As outlined in FUTF Completion Report, the Trust Fund Agreement's chapter on Risk Management states that the Trust Fund takes place in high-risk environment, and indeed some of the risks identified and listed in the Risk Matrix materialized during the Trust Fund's operation. According to the FUTF Completion Report, one identified risk "Failure in finding and screening suitable projects for the Trust Fund", materialised partly and as remedy action, the Call for Proposals-procurement method was used in May 2021. Another identified risk was "Failure to implement the chosen projects", and, according to the FUTF Completion Report, it materialized for several projects, especially due to the COVID-19 pandemic, Russia's invasion and war in Ukraine and either inactive beneficiaries or beneficiaries that did not pass NEFCO's second stage review (this mainly due to integrity problems). The FUTF Completion Report claims that the risk "Pro-Russian groups gain power in Ukraine and new government enforces fossil fuels instead of renewables" materialized with Russia's invasion and war in Ukraine, however, this is a false statement because neither have Pro-Russian groups gained power in Ukraine, nor the government enforced fossil fuels instead of renewables, and these risks de facto did not materialize. Instead, Russia's invasion and war in Ukraine took place and delayed and slowed down the Trust Fund activities and led to the cancellation of two major demonstration projects. Finally, the investor confidence did not increase, and as discussed below, FUTF was not really able to contribute to its intended development objective.

Not disbursing the total EUR 6 million available for the Trust Fund does not only relate to the difficult, changing context but on one hand, is also an indication of NEFCO's robust due diligence and risk management and on the other hand indicates FUTF's inability to adjust to challenging reality. From the EUR 6 million available for the Trust Fund, in total, EUR 3.759 million was disbursed. EUR 2.526 million was disbursed to the 26 completed projects and the rest top other approved cost. NEFCO considers FUTF's major non-performance to be that the Trust Fund was not able to utilize the full EUR 6 million; SAE did, towards the end of the FUTF life-cycle, express initiative in repurposing the remaining funds with the FUTF, but because of the rules and regulations of Finland's ODA funding, those funds could not be repurposed in the proposed way at that point of time. The evaluators, however, consider this partially inevitable because of the difficult, changing context, and partially as applaudable indication of NEFCO's robust due diligence and risk management. Yet, views stating that this indicates FUTF's inability to adjust to challenging reality are also presented and can be considered valid.

In addition to the Evaluation and Monitoring Committee (EMC), and in accordance with the Trust Fund Agreement, the activities and projects funded by FUTF were approved by NEFCO's Investment Committee; and additionally, MFA approved them on a no objection basis. NEFCO did integrity checks to proposed beneficiaries after EMC approval and to companies that had been awarded a contract before signing any agreements. For demonstration projects the Ukrainian beneficiaries were responsible for the procurement of plant and related services, but to a great amount supported by the CM Consultant to ensure that NEFCO procurement rules and practices (for example in evaluation of tenders) were applied. NEFCO drafted and signed Grant Agreements with the beneficiaries, reviewed, commented, and gave its no-objection to the tender package before the tenders were

published, and evaluation reports and draft contracts signed. Alas, the projects have gone through a thorough evaluation in different stages. Some projects did not pass all the phases, for various reasons, and were discontinued.

By and large, the *outputs* of the projects supported the goals set for the Trust Fund, and the output targets were met, including in the outputs added at 2019 revision of the FUTF Results Framework. These were: “training and transfer of knowhow” and “Finnish content”. ***FUTF succeeded to attract project ideas and produce outputs that could have supported the achievement of the planned and revised outcomes of the Trust Fund.*** During the FUTF lifespan, the Evaluation and Monitoring Committee (EMC) approved 51 projects of which 26 were completed. The completed project portfolio includes, as categorized by NEFCO, three demonstration projects, 19 technical assistance projects, two twinning and two training/capacity building projects for SAEE. Categorized by the evaluators, by the type of the project output, this portfolio equals for (see also chapter 4.1 on relevance) 10 pre-feasibility and feasibility study projects; four projects with other analyses or studies as outputs; three projects that provided support to project testing, designing, modelling or measuring; three projects with outputs mostly consisting of training and knowledge transfer; three projects with outputs being geared towards software or hardware; two projects providing ToRs and technical recommendations; and two projects providing capacity building to SAEE. Thematically, the completed projects represent multiple different alternative energy sources such as waste, biomass and geothermal heat. In addition, projects on smart energy systems, software solutions e.g. for hydraulic modelling, demand response and measuring landfill gas were completed.

Neither initially planned nor revised FUTF Results Framework outcomes were met and the key reasons pertained to the design of the Trust Fund, political will and commitment by the Ukrainian partner, as well as to the adverse effect the COVID-19 pandemic and Russia’s invasion and war had on the Trust Fund. By 2019 it became clear that the intended outcome “FDI investment unlocked” was rather a national than Trust Fund -level objective and the FUTF Results Framework was revised with this initial outcome removed. At the time, target for the output “consultation on policy design” was reduced from five per annum to 3-5 during the FUTF lifetime but the outcome “clean energy policies ratified” with the target 1-3 per annum was retained. At the close of the Trust Fund, no clean energy policy ratifications, nor any projects related to it, were supported by FUTF. The key reasons for the lack of results in this domain were the long timespan related to regulation and consultations required, and that the project ideas set forth were from beneficiaries that are mandated to request for concrete, tangible projects, not to policy support. Support to projects in policy would have required requests made by SAEE or another actor of the Ukrainian government, and this did not happen, as policy reforms were pursued by SAEE and other state authorities of Ukraine without requests to support by the FUTF. After the RF’s revision the second of the two outcomes, “national funding instrument for renewable energy” had as its target “Green Investment Fund (GIF) ratified by end of 2019” and as its indicator “fund developed and operational”. While the GIF blueprint was completed with recommendations, its relevance is postdated given the challenges Ukraine is going through. Thus, the fund is not under development and the third/second and final FUTF outcome not met (see also discussion in chapter 4.2 on coherence).

There is no indication that FUTF would have until to-date contributed to its Results Framework’s impact/development objective, apart from a very insignificant degree. At aggregate level, FUTF has not in any notable way contributed to its Results Framework’s impact/development objective of “increased investor confidence in energy sector” and this is both because the issues in its design (see discussion in chapter 4.1 on relevance), i.e. the intended pathway from outputs to outcomes and to impact is not clear, and because the Fund has failed to meet its outcomes (as discussed above). Also, the indicator of “annual investments in RE, EE, W2E and Smart energy systems” with the target “total installed capacity 10,900 MW by 2020 (640 MW/a of electricity based on SAEE calculations): 2,300 MW Solar – 2,280 MW Wind – 950 MW Bioenergy – 5,330 MW Hydro – 20 MW Other” is such that any direct contribution making a difference, of an energy fund of the funding limited to EUR 6 million, would likely not have been possible; and with no clean energy policies ratified as a result of full or partial support by FUTF, no national funding instrument for renewable energy developed and operational, and so far, no information on any FDI investment unlocked as a result of FUTF, there has not been indirect contribution to the development objective by FUTF either. (See also discussion on impact.) Here, it has to be noted that the Table 2. titled “the Results Framework results” in the FUTF Completion Report provides misleading information as it provides a result¹ against the FUTF impact/development objective indicator target, and does neither indicate

¹ “By the end of 2022, the total installed capacity was 14,675 MW with only small Hydro PP included, consisting of 7,780 MW Solar 1,754 MW Wind 289 MW Bioenergy 117 MW Small Hydro.”

that the result provided is national-level data provided by SAEF, nor explain that the Trust Fund did not really contribute to the result. This is another indication of the partially poor design of the FUTF.

4.4 Efficiency

Evaluation questions answered in this section:

8. Was there value added in the TA provided by the Coordination and Management Consultant and what was it?
9. Were the results framework and monitoring processes adequate and why and why not?

Key findings:

F12. In the Trust Fund's implementation strategy, the Coordination and Management Consultant's value added was significant, particularly in taking on responsibilities intended for SAEF, while in addition performing all other duties as planned.

F13. FUTF's Results Framework was not optimal and monitoring both individual projects' and the Trust Fund's results against it did not bring out all results, neither issues to address and revise the Fund's implementation strategy.

In the Trust Fund's implementation strategy, the Coordination and Management Consultant's value added was significant, particularly in taking on responsibilities intended for SAEF, while in addition performing all other duties as planned. As per the project design, NEFCO recruited a Coordination and Management Consultant (CM Consultant) for the support of SAEF and for the preparation and appraisal of the project proposals and preparation of the decisions by the EMC. This function was financed by the TF and SAEF was to provide office premises for the Consultant. The main deviation from the initial FUTF project plan, which lasted for the Trust Fund's whole operational time, was that the CM Consultant took care of tasks that were supposed to be taken care by SAEF. According to the Agreement, SAEF was supposed to search and propose projects for implementation, identify project opportunities, review and assess project ideas, prepare project proposal submissions and presentations to the EMC and present project proposals to the EMC. The CM Consultant took care of these tasks, not only supported as outlined in the agreement, because otherwise there would not have been any projects to be discussed at EMC meetings. (See also chapter 4.2 on coherence.) With approximately 300 enquiries to the TF, facilitating the process through the key Project Management Bodies of the TF and implementation, the achieved result of 26 completed projects proposes a ratio of completed projects against enquiries of rather heavy workload on the preparation, appraisal and approval of the projects, and indeed much of this workload was on the shoulders of the CM Consultant, who succeeded rather really well in their work.

In addition, as planned at the project design stage, the CM Consultant provided TA for the Trust Fund. The provision of TA involved technical expertise to help design and implement projects. Similarly, as per the project design, the CM Consultant referred project proposals approved by the EMC to NEFCO Investment committee for further evaluation and approval. The CM Consultant also facilitated conduct of the EMC meetings; undertook a range of information activities and supportive measures; provided an Annual Report of the activities of the Trust Fund; and prepared and presented at the end of each Project a final report addressing relevant information about its implementation.

As noted in chapter 4.2 on coherence, the Ukrainian beneficiaries hardly make a distinction between NEFCO and the CM Consultant. The latter are in FUTF considered "NEFCO's consultants" and most of the Ukrainian beneficiaries that answered an open-ended interview question on NEFCO's added value, actually had the faces of the CM Consultants in mind, when they applauded NEFCO. Answering later in the interview to an open-ended question on the value-added of the TA provided by the CM Consultant, the Ukrainian beneficiaries may, though, have at times thought of the CM Consultant and at times the (Finnish) project implementing partner representatives, mixing these two. Nevertheless, the reviews were equally positive. Illustrative examples:

"The consultants have strongly reinforced us in regard to the EU standards, procedures and technical issues. They have done everything like we required: all technical documents are just excellent. They prepared documents for several functional options: i.e. there was an option for waste burning, or shredding. In total, we received four different solutions for a biogas facility. Importantly, they have prepared good business plans. We are grateful for that." [Ukrainian beneficiary]

“NEFCO performed both administrative and technical monitoring. I remember two Finnish guys. They had been working with us and with the school very close. They suggested progressive solutions: an absorbing heating pump working from a battery accumulating solar heat for cooling. The consultant had truly done more than everything to progress the project.” [Ukrainian beneficiary]

“The consultants collected data, devised a feasibility study and guided us through the application. It was easy to communicate with them.” [Ukrainian beneficiary]

Hampering FUTF’s performance against all evaluation criteria, **FUTF’s Results Framework was not optimal and monitoring both individual projects’ and the Trust Fund’s results against it did not bring out all results, neither issues to address and revise the Fund’s implementation strategy.** Discussed at length in the chapter 4.1 on relevance and in 4.3 on effectiveness (for FUTF outcomes and impact), FUTF’s design suffered from issues in setting its objectives and establishing linkages between the hierarchy of the objectives. Moreover, while the RF indicators are valid for assessing the Trust Fund’s performance in achieving its results, they are not sufficient. Clear indicators on scaling up, following up (e.g. on feasibility studies) and moving on (from demonstration projects) are missing.

This issue with the RF has likely impacted the implementation, results and monitoring of the FUTF and geared them towards a focus on the output-level, and on the technical, rather than policy, results. The fact that no FUTF Theory of Change (ToC) was defined at the Trust Fund’s design phase may have amplified this trend: the FUTF implementation strategy did not spell out any tangible aim or means to scale up, follow up and move on. FUTF’s implementation strategy did though, as outlined in the FUTF implicit ToC, foresaw that consultation on policy design, and promotion of partnerships with private sector and financiers would be conducted, and this would lead into clean energy policies ratified, and a national funding instrument for RE to be established. Had these results been achieved, the positive impact on investor confidence in Ukraine’s energy sector could have followed.

4.5 Impact and Sustainability

Because the two criteria in this final evaluation are intertwined, evaluation questions answered in this section include both those set to evaluate FUTF’s impact and sustainability:

10. How much did the Trust Fund contribute to the overall improvement of energy efficiency in Ukraine?
11. How well have the projects funded by the Trust Fund succeeded to make progress towards achieving the overall objective(s) of the Trust Fund including the integration of human rights-based approach (do no harm level)? How was the human rights report utilized during the operation of the fund and what was its impact to the activities?
12. Did the projects funded by the Trust Fund contribute to Ukraine’s green transition and generate environmental and climate benefits?
13. To what extent is it likely that the achievements of the Trust Fund will continue after withdrawal of external support?
14. How did the projects contribute to the longer-term operations of the Finnish companies involved? Have the companies continued to operate in Ukraine or in other development country markets?
15. Have the projects led to intended scalability? Have pilot projects led to further use of the solutions? Why? What were the possible bottlenecks?

Key findings:

F14. FUTF’s direct, concrete, tangible impact on energy efficiency and green transition, and generation of environmental and climate benefits was, at the aggregate level, very limited; in the case of some individual projects, positive effects mostly in energy efficiency but also in green transition were observed.

F15. FUTF managed to achieve the “do no harm” level in its human rights-based approach. Moving beyond that would have required a noticeable contribution to the Trust Fund’s impact/development objective.

F16. Raising Finnish companies’ interest in Ukraine and facilitating their understanding of and access to the market is FUTF’s key value added to Finland.

F17. Typical outputs of the FUTF projects are high-quality studies and even in the current context of war, some of them remain valid and some could rather easily be updated. They will only add value and render FUTF results sustainable if investment/implementation projects are developed and implemented in the very near future and for some cases, NEFCO is currently working to progress investment/implementation.

FUTF's direct, concrete, tangible impact on energy efficiency and green transition, and generation of environmental and climate benefits was, at the aggregate level, very limited; in the case of some individual projects, positive effects mostly in energy efficiency but also in green transition were observed. Reasons for the limited impact in these domains pertain to the FUTF's focus on outputs as well as the issues within the partnership, and the very difficult, changing context², which at the time of Russia's war also varies between cities and regions of Ukraine and changes in the moments in time. When asked to the FUTF partners, they typically name the war as the key reason for the limited impact at the aggregate level. While the war indeed is the key reason, it has to be noted that because of the FUTF's design and implementation strategy, the Trust Fund's direct impact on energy efficiency and green transition, and generation of environmental and climate benefits, would likely have been rather limited in normal circumstances too.

From the interviews of the Ukrainian beneficiaries, the following testimonials of positive impact on energy efficiency and green transition at the project-level were received:

"The project was implemented on well-prepared grounds. Prior to the heating works, we had insulated the building and replaced the roof. This ensured efficient operation of the heating distribution unit. This became a good example of efficiency in operation. We saved certain assets and redistributed them to other construction objects. What was vital, we started replicating the technology application in other heating projects. The project funded by the TF truly triggered our development." [Ukrainian beneficiary]

"The Finnish programme incorporates heating losses measures. Correspondingly, the programme indicated losses across the network: the new pipelines indicated normal flow, and the outdated pipes were highlighted in red, indicating that the section needed rehabilitation/replacement. Hence, we can directly monitor the conditions of the network. During the heating season we conduct hydraulic measuring. Unfortunately, we do not have that good market of pipes anymore. The pipe suppliers are fewer. Still, we find ways to rehabilitate the network, improving its efficiency." [Ukrainian beneficiary]

"Energy efficiency indicators were a part of the feasibility studies for all objects intended for rehabilitation. The city council revised and endorsed them beforehand in accordance with the Ukrainian legislation. Another example is that, if previously the consumption was constantly 800 m³/hr, now we can decrease it to 400m³/hr. An only issue arose when we had frequent blackouts last winter. The equipment shut down every time the electricity was off. We had to respond to the problem installing bypassing sections that did not depend on the electricity that much." [Ukrainian beneficiary]

"Utilising solar heat for air conditioning was an absolutely innovative idea for us that let directly save energy on heating. Years later, I have never come across this technology in other places in Ukraine." [Ukrainian beneficiary]

"Usually, such pumps are being used for co-generation: hot water and heating. But for this we had to drill an overwhelming number of wells to extract water. Hence, we stick to hot water supply only. The savings became obvious when the hot water supply costed as no more than the cold-water supply plus electricity. We also had to calculate the expected decrease in CO₂ emissions. Otherwise, I cannot discuss regarding the entire Ukraine, but our tutors were obviously happy that their utility bills decreased. They can also teach their students how thermal energy functions in practice." [Ukrainian beneficiary]

FUTF managed to achieve the "do no harm" level in its human rights-based approach. Moving beyond that would have required a noticeable contribution to the Trust Fund's impact/development objective. The link between environmental and socio-economic sustainability is recognized by the Sustainable Development Goals (SDGs). The right to sustainable development, decent living conditions, safe and healthy employment cannot be realized without access to sustainable and stable energy supply. According to the Trust Fund Agreement between MFA and NEFCO, prior to financing any projects from the Trust Fund, NEFCO undertook an analysis of the human right effects of the Trust Fund activities.

As also described in the FUTF Completion Report, a FUTF Human Rights report was conducted in 2018 and its aim was to summarize the overall human rights situation in Ukraine and focus on the energy sector. The report also

² FUTF's focus on outputs; issues with the Ukrainian partner and the difficult, changing context are discussed in various earlier parts of this report and won't be repeated here.

analysed how the Trust Fund activities could impact the human rights situation in Ukraine through project implementation and how to ensure that positive impacts are maximized, and negative impacts prevented or mitigated.

Even in the pre-war situation, major issues for the human rights in Ukraine in the energy sector included threats to energy security and subsequent inability to ensure a stable energy supply and decent living conditions, high share of coal and natural gas in the production of heat and power endangering environmental sustainability and negatively impacting the carbon footprint. While the Trust Fund addressed many of these matters and tried to improve the situation with the implemented projects, yielding direct, concrete, tangible positive impact on human rights, at the aggregate level, would have had required contributing towards the FUTF impact/development objective and as discussed in the chapter 4.3 on effectiveness, this did not happen. The implemented TA projects, which resulted into various studies, still have a potential to make a positive impact on human rights, if the studies will be followed up by investment/implementation projects. As it is, they can with the current results at the output-level – studies – be regarded as meeting the “do no harm” objective, although a Trust Fund partner did propose that incomplete projects, though this would be definitely unintended, could constitute a breach of the “do no harm” principle.

According to NEFCO, the Trust Fund’s demonstrative projects positively impact human rights by supporting improvements in infrastructure, educational environment and living standards and ensuring environmental sustainability and energy security giving all consumers, including vulnerable groups, access to affordable, reliable and modern energy services. Again, the impact on these domains was limited in strength as only three demonstration projects were implemented.

Reducing corruption was one impact area brought up by the FUTF Human Rights report. FUTF’s measures to curb corruption included e.g. that the projects’ procurement processes were either carried out or closely monitored by the CM Consultant, implementation and invoicing were monitored by the CM Consultant before asking for payment from NEFCO, and NEFCO conducted integrity checks on beneficiaries and winning tenderers before signing of contracts. One result of these measures was that several applications or approved projects were cancelled due to negative findings in the integrity check.

Raising Finnish companies’ interest in Ukraine and facilitating their understanding of and access to the market is FUTF’s key value added to Finland. While the evaluators do not have exact information on the number of Finnish companies that have continued/are planning to continue doing business in Ukraine, FUTF partners – notably the CM Consultant that had most direct interaction with the Finnish companies – say that relatively many are likely to do so.

Stated in the Reconstruction of Ukraine, Finland’s national plan, part one (MFA 2023), Ukraine is not a market that Finnish companies have been particularly familiar with or one that they know very well. While at the same time, according to the national plan, Finland has a great deal to offer, for example in the transition to clean technologies and energy production, energy supply, and other sectors, initiatives similar to FUTF are important, because they promote and incentive Finnish companies to explore the market and provide them with guidance and support in doing so. It is important to not to let go of the companies that took part in the FUTF projects but rather continue targeting them for future participation too.

Many of the interviewed Ukrainian beneficiaries would welcome continued collaboration with Finnish companies:

“At the moment, we consult Finnish experts occasionally, rather at the level of personal connections. Instead, if we could have agreed the installation, we were ready to receive Finnish equipment and Finnish contractors. This was particularly, feasible considering issues with funding allocated to the Ukrainian entities. If Finnish companies finalised the project, this could eliminate the mentioned issues. Moreover, we understand that now the funding is targeting communal entities while we are a private company. There, they do not have order. Instead, we are a long working company of good business image. We are updated on the current trends in efficient energy consumption. Besides, we realise that energy projects require long term investments to reach the point when those can be returned.” [Ukrainian beneficiary]

"We have been working with Finnish companies for over 10 years so far. We already understand their requirements. They know us. These are the reasons why we continue apply for their funding and want to work with Finnish companies." [Ukrainian beneficiary]

"Since it was a requirement to involve Finnish companies, I simply googled for potential partners. I contacted a few companies. Only a single company replied. They had calculated the required capacity of the pumps. And a local contractor from Kyiv installed them. When we had fully completed the project, we were happy to invite the Finnish partners so that they could have seen how well everything functioned. Unfortunately, the war started by that time and no one visited us." [Ukrainian beneficiary]

Typical outputs of the FUTF projects are high-quality studies and even in the current context of war, some of them remain valid and some could rather easily be updated. They will only add value and render FUTF results sustainable if investment/implementation projects are developed and implemented in the very near future and for some cases, NEFCO is currently working to progress investment/implementation. Sustainability of the achievements of the Trust Fund, including through scalability and pilot projects leading to further use of the solutions, is a major issue in concluding on the FUTF's overall added value.

As already discussed in the earlier parts of this report, many of the interviewed Ukrainian beneficiaries consider "stopping at the study" without implementation is major shortcoming. Illustrative examples of their views:

"We can say that was 'a minus' that the project had been well elaborated in the documents but never really implemented till now. That could be such a good example of a complete project cycle. But it just was terminated." [Ukrainian beneficiary]

"In Ukraine, we have unfortunately so many good feasibility studies that never led to accomplished facilities." [Ukrainian beneficiary]

"The discussed project did not have its further continuation. However, I suggest, that, if our specialists in engineering, heating, water supply and treatment, ecologists, etc could be engaged into other energy saving programmes, this could create a multiplied educational and practical value added." [Ukrainian beneficiary]

"We could not install the biogas facility on the TF funding since the money was enough only for the documentation." [Ukrainian beneficiary]

"Green energy technologies are among the priorities nowadays. A new Law on wastes has been recently adopted, opening better perspectives for innovative technologies. Unfortunately, what we have now is only a good feasibility study which is only waiting the implementation. To continue this project, we are ready to consider different options: partnerships, in-kind supplies, granting, loans with decent %. We are eager to survive and become more efficient. The Fund could do more. It could fund the actual installation and demonstrate a good functioning example of an efficient technology in operation. I am aware that EU have great energy funds easily available when requested. The TF could, as an option, attract that money and finalise our project. Then it would become a true contribution into the improved energy efficiency in Ukraine. Even in war, Ukrainian companies are prepared to implement ecological projects. We badly need extra funding or in-kind reinforcement to finalise projects. We trust our Finnish partners. As of now, we have already prepared land lots that suffered under the occupation for the installation works." [Ukrainian beneficiary]

Yet, a small number of the interviewed Ukrainian beneficiaries indicated that they were actively working, without any further support towards it, to identify investment/implementation for their FUTF-financed studies/initiatives:

"Having checked how the heating control unit functions, we have applied for a loan under the Energy Efficiency for Public Facilities programme. We intend rehabilitate heating in other three buildings in the Hromada. For this, we have already incorporated heating control units in the feasibility studies." [Ukrainian beneficiary]

"Having started with NEFCO in 2016, we continued heating rehabilitation arrangements with the World Bank. With NEFCO, we initially connected a block of 105 flats. Later, 25 more were also rehabilitated with NEFCO and yet 40 more - at the expense of the World Bank." [Ukrainian beneficiary]

In terms of the investment/implementation projects being developed, NEFCO's main vehicle to use for eventual implementation is the NEFCO Green Recovery Programme for Ukraine. The multi-donor programme had attracted EUR 290 million in trust funds from the European Union and the Nordic governments by the end of 2023, and 40 recovery projects are currently ongoing. Finland has made available to the Green Recovery Programme EUR 5 million, which includes reallocation of FUTF funds for EUR 2.2 million.

As per NEFCO's Annual Report 2023, the Green Recovery Programme offers grant funding from various governmental contributors/donors. The objective of the programme is to partner with Ukrainian municipalities to address the direct and indirect consequences of the war and help communities build back greener and better. Currently, the programme covers short-term repair and restoration of critical infrastructure and public service buildings, rebuilding of utilities and facilities serving internally displaced persons (IDPs), and capacity building for Local Green Recovery Plans. The ultimate goal is to strengthen resilience, promote sustainable development and help further integration of Ukraine and Europe. The Green Recovery Programme does not include a condition for Finnish content.

According to NEFCO, at least the following FUTF projects are currently being considered for a follow-up by the Green Recovery Programme (or possibly by other sources of funding):

Imatran Lämpö DH III Twinning program: Vinnitsateploenergo / Imatran Lämpö Oy (with FUTF funding of EUR 65,500). In this FUTF project, knowledge transfer on maintenance functions and procedures for solid fuel purchase and testing of KPA Unicon Oy's cloud-based Digitalisation Demo/software was carried out. This project gave both twinning companies new ideas on how to improve O&M functions especially, considering major changes in energy markets in Ukraine and Finland, due to Russia's war in Ukraine. → NEFCO has thereafter signed a grant contract with the district heating company on activities related to this SAEE-supported FUTF project and Vinnitsateploenergo has also started to work with other development partners on its heat supply schemes.

VTT - Nearly Zero Energy Buildings (NZEB): Ministry of regions / VTT (with FUTF funding of EUR 203,500). In this FUTF project, technical recommendations for cost efficient NZEB for new residential and public buildings in Ukraine have been developed to accelerate the NZEB development. Two building types were modelled and simulated: residential apartment building and school building. → NEFCO is using these technical recommendations in a number of project proposals.

Deep Scan Tech – Measuring Landfill Gas sources: Melitopol Landfill / Deep Scan Tech Oy (with FUTF funding of EUR 109,800). In this FUTF project, measuring the potential of landfill biogas production in Ukraine for clean energy and environment was carried out. The project provided detailed and actionable information about biogas potential in Melitopol landfills in Ukraine based on 3D tomographic images of material volumes inside the landfills. → While this project is in the warzone, NEFCO *may* follow up in terms making use of the concept in another location. However, the legal framework in Ukraine is not supportive of making landfill biogas production profitable for the domestic market and the production is more interesting to companies exporting to Europe.

Condens Heat Recovery - Delivery of Flue Gas Condenser: Lutskteplo State Utility Company. In spite of SAEE's support to it, this proposed project was discontinued and not implemented by FUTF for the reasons of a weak Finnish supplier chosen via Call for Proposals procurement method; no realistic implementation plan and impacts of Russia's war in Ukraine. → NEFCO's Investment Committee has recently decided to re-instate the project and add some further energy efficiency measures into it.

5 Conclusions

Based on the evaluation findings, FUTF's strengths and weaknesses in its operational viability and adding value by meeting its objectives and targets are summarized in Figure 1.

Figure 1. FUTF's strengths and weaknesses

FUTF Strengths and Weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> • Thematic relevance • NEFCO's professionalism and service orientation • CM Consultant • Raising Finnish companies' interest and understanding of Ukraine • Resilience in managing for (output-level) results • Output targets met • High-quality studies and pilots 	<ul style="list-style-type: none"> • Issues with design and setting of objectives • SAAE's limited capacity, commitment and role • Limited/no follow-up to studies and pilots • Not meeting outcome targets • No visible impact on development objective • No visible aggregate impact on energy efficiency and green transition

The evaluators conclude that:

C1. FUTF's thematic focus on energy efficiency, renewable energy, and alternative types of energy sources in power and heat generation and in district heating networks remains relevant and especially Ukraine's needs for sustainable diversified energy infrastructure have significantly increased because of Russia' war.

This Conclusion is based on the following findings: F1, F2, F3

C2. Because of the professionalism of NEFCO and the CM Consultant as well as most Ukrainian beneficiaries and participating Finnish companies, FUTF was successful in meeting its output-level targets and produced high-quality studies and pilots.

This Conclusion is based on the following findings: F5, F7, F8, F9, F12

C3. Because of the difficult, changing, high-risk Ukrainian context as well as issues pertaining to its design, assigning responsibilities to partners, and the Ukrainian key partner's ability and commitment to perform their role in the changing institutional context, FUTF was neither successful in meeting its outcome-level targets in policy and investment, nor contributing to its intended development impact.

This Conclusion is based on the following findings: F3, F4, F9, F10, F11, F13

C4. FUTF's direct contribution to Ukraine's energy efficiency and green transition, and generation of environmental and climate benefits, was very limited and this is because of its focus was at outputs (studies and pilots) and not on supporting securing investment/implementation projects to follow-up the studies and pilots.

This Conclusion is based on the following findings: F9, F10, F11, F14, F15, F17

C5. There is potential for sustainability of the FUTF results in case the studies and pilots produced by the Trust Fund be followed up by investment/implementation projects, and the policy environment moves to a more supportive direction.

This Conclusion is based on the following findings: F9, F17

C6. FUTF's role in raising Finnish companies' interest in and understanding of Ukraine's market was beneficial to Finland and Ukraine as it may support the implementation of Finland's national plan for the reconstruction of Ukraine, but the Finnish PSI's (including FUTF) still do not cover for all needs by the companies so that the companies could really scale up the development effects.

This Conclusion is based on the following findings: F6, F16

6 Lessons Learned and Recommendations

Based on the findings, the summary of FUTF's strengths and weaknesses in its operational viability and ability to add value, and the conclusions, in developing key Lessons Learned (LL), the evaluators have considered in particular the question "Is the Trust Fund considered a relevant instrument for responding to the acute needs in Ukraine and for supporting the future reconstruction" (presented in this evaluation's ToR as an evaluation question on relevance) and the evaluation objective to "Identify lessons learned for Finland's support to reconstruction in Ukraine". Further, the Lessons Learned and Recommendations derive from the peer review presented in the Annex 5 and covering for overall findings in the areas of blended financing, partnering with private sector and innovation in the context of KOICA, Israel Innovation Authority, Denmark, Norway, Sweden, USAID, Germany, and Canada, and the findings specific to Ukraine from the interviews with Denmark/EIFO (Copenhagen) and Sweden/SIDA (Kiev).

For the case-by-case post-FUTF status and outlook of the Trust Fund's completed projects, see annex 6.

The key Lessons Learned (LL) are:

LL1. *FUTF was not successful in address emerging priority needs presented to it in the context of Russia's invasion and war, and it did not result into any significant direct, concrete, tangible impact on energy efficiency and green transition. Yet, it proved to be focused, resilient and effective in producing relevant and high-quality studies and pilots. Hence, relevance of FUTF instrument for responding to the acute needs in Ukraine and for supporting the future reconstruction is assessed to be partially satisfactory. **FUTF-type of an instrument should not be ruled out as an instrument that could play a role in Finland's support to Ukraine's reconstruction but in case the MFA considers to make use of any such instrument, the recommendations provided in this evaluation should apply to the design, scope and implementation strategy of such instrument.***

LL2. *Both its design, financial resources assigned to it and issues pertaining to its partnership (performance of the Ukrainian partner) rendered FUTF a "studies and (limited) pilots"-programme. Such programmes cannot provide extensive development impact, i.e. they are not necessarily the best possible value-for-money. This also reduces their relevance, causes disappointments in beneficiaries, and eventually does not provide the optimum goodwill towards the donor.*

As per the Agreement on security cooperation and long-term support between the Republic of Finland and Ukraine/ Paragraph 59, Finland will continue cooperation with Ukraine on energy security and will assist Ukraine to reconstruct the energy sector in accordance with the principles of green transition, modern technologies and energy efficiency.

Be this through making use of any instrument like FUTF or other instruments, Finland should place focus on supporting the beneficiaries to move from a study or a pilot to developing and implementing an investment/implementation project. In case Finland cannot put forward financial resources towards any large-scale investment/implementation projects, its interventions should include strong resources for supporting the beneficiaries to secure funding/financing from other sources and implement the project.

LL3. FUTF's impact and sustainability can still be enhanced. This can – and will – take place through investment/implementation projects build on the FUTF studies and pilots. While NEFCO's already doing their part, MFA could still assign resources through its PSI's towards facilitating the FUFT beneficiaries to secure investments and implement projects. This would also allow the MFA to stay in touch with the Finnish companies that took part in the FUTF and provide them with further support and guidance for continuing and scaling up their business in Ukraine and for Ukraine's reconstruction.

LL4. Both FUTF and Denmark EIFO's experiences propose that in Ukraine, targetable projects are often in the communities. Yet, municipalities' room for manoeuvring is more limited than that of the state actors. Hence, as does EIFO, *Finland should link private sector initiatives with development assistance aimed to provide the municipalities with capacity development support. Similarly, links to any policy, strategy and monitoring support project should be established, and in these, MOTIVA, with a MOU signed with SAE (but waiting for SAE's indication of what support they would request) could be a useful partner.*

LL5. FUTF, EIFO and SIDA's experiences all point to the need to have “boots on the ground”, i.e. a strong team in Ukraine because of the need for anti-corruption, anti-money laundering, and tackling red-tape and any issues with contractors as well as to do on-site monitoring. Such team can consist of staff and consultants attached to the implementing agency, but they should be sufficiently senior to take decisions, trouble-shoot and solve problems, as well as to promote projects with government authorities and investors alike.

The following key recommendations supporting acting on the lessons learned and relating to the conclusions are provided:

R1. Design and implement investment/implementation projects based on the FUTF TA and demonstrative projects' studies and pilots.

This recommendation is based on conclusions C4, C5 and aimed at NEFCO and MFA.

Here, MFA is proposed to work with its PSIs (notably Finnfund and PIF/the upcoming Ukraine Investment Facility) as well as with Business Finland and other Team Finland partners and its DFI/IFI partners to try and identify investments to follow-up on the FUTF-leads. While NEFCO is already following up on multiple FUTF-leads, they are encouraged to intensify this and to coordinate and collaborate with other MFA's partners (notably Finnfund, PF, other DFI/IFIs) to identify optimal solutions for investment and implementation.

See Annex 5 for a brief overview of the completed FUTF-projects and leads for follow-up.

R2. Consider designing and implementing a project on support to clean energy policies, strategies and/or monitoring, and for municipal-level capacity development, and keep it separate from yet link it to any project/fund addressing “hands-on” TA and demonstrative projects and their implementation projects. Secure a strong Ukrainian governmental project partner for any such policy support project.

This recommendation is based on conclusions C3, C4 and aimed at MFA.

In FUTF, the initially planned policy-workstream did not materialize and while much of this is because of the difficult, changing overall context of the COVID-19 pandemic and Russia's war, some of reasons discussed in this evaluation report indicate that irrespective of the greater context, it might have been challenging for the policy- and “hands on”-workstreams to co-exist and jointly bear fruit in other circumstances too. The MFA could, thus, consider designing and implementing a policy/strategy/monitoring and capacity development support-project separate from any “hands-on” TA and pilot-project facility and from any support towards investment/implementation projects. The separate policy support-project should establish connections/linked to any “hands-on” TA and pilot-project as well as investment-projects, but it might benefit from being separately implemented.

Such policy-support project should rather be implemented through another modality than a PSI and for instance, bilateral (government-to-government) or Institutional Cooperation Instrument could be considered for the purpose. MOTIVA, with a MOU signed with SAEI could be a useful partner.

R3. Continue supporting Ukraine in energy efficiency, renewable energy generation and distribution, decarbonization and green transition, and address needs arising because of Russia's war.

This recommendation is based on conclusion C1 and aimed at NEFCO and MFA.

Improved energy efficiency and green transition remain valid objectives for Ukraine, and overall needs, also related to fulfilling human rights, in the energy-sector have grown because of Russia's war.

As noted in the Lessons Learned, Finland has committed to cooperate with Ukraine on energy security and will assist Ukraine to reconstruct the energy sector in accordance with the principles of green transition, modern technologies and energy efficiency. In practical terms for the MFA, this support will be provided in collaboration with NEFCO, and MFA's PSIs (notably Finnfund and PIF/the upcoming Ukraine Investment Facility, possibly also Finnpartnership) as well as with Business Finland and other Team Finland partners and its DFI/IFI and International Organization (IO) partners.

R4. Design any future support to Ukraine's energy efficiency and green transition to include building the investment cases and providing strong support to the Ukrainian partners and beneficiaries in securing investment/implementation projects and in their implementation.

This recommendation is based on conclusions C3, C4 and aimed at MFA and if relevant and feasible, to NEFCO.

As in the case of nearly all the recommendations, here too, MFA's role in adhering to the recommendation would be to **influence and impact** its partners, including its PSIs, BF and other TF partners, and DFI/IFI/IO-partners to focus on support to actual implementation, instead of only limiting it to TA and demonstrative projects resulting into feasibility and other studies.

R5. For any "hands-on" TA and demonstrative projects and their implementation projects, continue working with NEFCO and provide resources to involve a high-quality strong support consultant, such as the FUTF CM Consultant was.

This recommendation is based on conclusions C2, C3, C6 and aimed at MFA.

See R4 for MFA's role and note that it is well understood that the MFA will not work on "hands-on" TA and demonstrative projects in Ukraine with NEFCO only. However, based on the findings of this evaluation, for such projects, NEFCO is a highly capable and recommendable partner and the CM Consultant's added value in FUTF was indisputable. For the latter, it seems that the combination of their sector- and Ukrainian-context expertise was ideal, and aiming at such balance is recommended in the future interventions too.

R6. For Results-Based Management, in the difficult, changing, high-risk Ukrainian context, remain sufficiently flexible and resilient, but invest in project design, risk-management and interaction and taking of corrective actions between partners, as well as in having sufficient number and seniority of implementing agency's staff on the ground.

This recommendation is based on conclusions C2, C3 and aimed at NEFCO and MFA.

See R4 for MFA's role; yet, in steering and financing its PSI's and partnering with its DFI/IFI and IO partners, the donor's role is particularly strong in indicating the need and scope for flexibility and resilience, while at the same time demanding for robust Results Based Management in the form of expert project design, risk-management and interaction between partners + monitoring + jointly making use of the monitoring data towards learning, making any required corrective actions in the project strategy, and achieving results.

R7. In designing any intervention with a Results Framework, spell out the implementation strategy (Theory of Change) with clarity and place specific attention into aligning the intended outputs and outcomes and desired impact, and remain realistic in setting the objectives.

This recommendation is based on conclusions C2, C3 and aimed at NEFCO and MFA. See R5 for MFA's role.

R8. In any intervention aimed at involving Finnish content, a component providing tailored one-on-one guidance to Finnish companies; targeting FUTF-companies and both established companies, start-ups and Ukrainian

companies; as well as fostering greater collaboration between the PSIs (and any other instruments) and the companies would add value to the PSI's, companies and development impact effected by the companies.

This recommendation is based on conclusion C6 and aimed at MFA.

Here, the MFA and Finland's Embassy in Kiev play a key role in working with Business Finland and other Team Finland partners towards providing Finnish companies planning to go to or already being operational in Ukraine with guidance and support. While much of this is already being done in the context of the implementation of Finland's national plan for the reconstruction of Ukraine, a modality/instrument to help to bridge the gap between the different PSIs' financing and support may not yet be in place/visible to the companies. Ukraine is a high-risk, difficult context and Finnish companies face challenges in both taking the decision to enter the market, and in succeeding there. Towards this end, any "bridging the gap"-modality/instrument could take the form of a programme that could provide tailored one-on-one guidance to the companies, in a form of an incubator, an accelerator or like. Development of such a modality would not have to be undertaken by the MFA but it could be assigned to one of its PSIs or a partner.

Denmark's EIFO states that it has been important to hand-pick Danish companies which had something to do with Ukraine already before to be part of the Danish government loan and guarantee scheme for Ukraine. EIFO also mobilizes both established companies, start-ups and Ukrainian companies as a part of the scheme's strategy. Similarly, the MFA and its partners should target companies with prior experience, including from FUTF, as well as to mobilize and pair not only established companies but also start-ups and Ukrainian companies.

Interviewing MFA and some of the PSIs for this evaluation and in other context, it has become clear that while Finland is investing and willing to invest significant resources (from different domains, including ODA) to Ukraine's reconstruction, identifying viable projects and, since Finnish context is expected, identifying keen and interested Finnish companies that would meet conditions set for the various forms of financing, is challenging. MFA could take the lead or assign one of its PSI's or other partners to take the lead in forming an (informal or formal) Ukraine working group to pool and share ideas, leads and insights, so as to get projects identified, designed and implemented. Such group could consist of the relevant government and business support organization entities only, or it could also involve companies. Perhaps even some of the FUTF feasibility studies could find an investor as a result of such collaboration; up until an interview for this evaluation, a key PSI was not aware of the FUTF and yet they too are making efforts to identify projects and implementers to contribute to Ukraine's reconstruction. An example of an informal working group that many participants found rather useful at the time, is the working group on Vietnam which met, under the MFA's auspices, regularly at the time of the early days of the transition of Finland's relationship with Vietnam from aid-based to trade and other forms of cooperation-based.

7 Annexes

7.1 Evaluation Matrix

Criteria	Evaluation Question	Indicator	Means of Verification	Data source	Limitations
Relevance	To what extent has the Trust Fund been consistent with the needs and priorities of Ukraine and the beneficiaries of projects financed by the Trust Fund, with focus on the period after the beginning of Russia's illegal invasion in 2022?	Key stakeholders' assessment Evaluators' assessment against the context since 02/2022	Key stakeholders FUTF reports and minutes of meetings Context analysis	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant) Document review	All consequences of Russia's illegal war since 02/2022 and at the current and near future time may not be identifiable.
	Is the Trust Fund considered a relevant instrument for responding to the acute needs in Ukraine and for supporting the future reconstruction?	Key stakeholders' assessment	Key stakeholders FUTF reports and minutes of meetings Context analysis	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant) Document review	
Coherence	Was there value added in the collaboration with the SAEE and what was it?	Results framework indicators Key stakeholders' assessment	Key stakeholders FUTF reports and minutes of meetings Context analysis	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grant applicants) Document review	
	What was the value added of the collaboration with NEFCO?	Results framework indicators Key stakeholders' assessment	Key stakeholders FUTF reports and minutes of meetings	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grant applicants) Document review	
	How does the Trust Fund compare to other private sector funding instruments in the sector (e.g. but not limited to Finnpartnership, Finnfund, instruments by Business	Key FUTF and comparable PSI stakeholders' assessment Key development partners' assessment	Key FUTF stakeholders and PSI stakeholders Key development partners in energy in Ukraine	KIIs (input from all FUTF interviews and FP, FF & BF interviews) Document review	No full evaluation of other Finnish PSIs nor any other development partner's instruments will be conducted and this

	Finland) and what value added does it bring?	of their main instruments in the energy-sector in Ukraine Evaluators' comparative assessment	FUTF reports and minutes of meetings		may result into some limitations in the comparative analysis.
Effective-ness	To what extent the project outcomes and objectives were met and why and why not?	Results framework indicators Key stakeholders' assessment	Key stakeholders FUTF reports and minutes of meetings Project completion reports	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grantees) Document review	
	To what extent the risk management plan served its purpose, and were the mitigation measures used and updated during the implementation of the Trust Fund activities?	Risks and their mitigation measures identified in the risks matrix Key stakeholders' assessment Adaptive management measures undertaken	Key stakeholders FUTF reports and minutes of meetings Project completion reports	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grant applicants) Document review	
Efficiency	Was there value added in the TA provided by the Coordination and Management Consultant and what was it?	Results framework indicators Key stakeholders' assessment Adaptive management measures	Key stakeholders FUTF reports and minutes of meetings	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grant applicants) Document review	
	Were the results framework and monitoring processes adequate and why and why not?	Results framework indicators have SMART characteristics Use of the M&E in the FUTF implementation Adaptive management measures	Key stakeholders FUTF reports and minutes of meetings	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grant applicants) Document review	

Impact	How much did the Trust Fund contribute to the overall improvement of energy efficiency in Ukraine?	National and local level indicators Results framework indicators Key stakeholders' assessment	Statistical data Key stakeholders FUTF reports and minutes of meetings	Statistics review KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant) Document review	Availability of national statistical data may be limited; FUTF volume was limited and its impact may not show in national statistics; Russia's illegal war may have reversed development in the energy sector
	How well have the projects funded by the Trust Fund succeeded to make progress towards achieving the overall objective(s) of the Trust Fund including the integration of human rights-based approach (do no harm level)? How was the human rights report utilized during the operation of the fund and what was its impact to the activities?	Results framework indicators Key stakeholders' assessment	Key stakeholders FUTF reports and minutes of meetings	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant) Document review	
	Did the projects funded by the Trust Fund contribute to Ukraine's green transition and generate environmental and climate benefits?	National and local level indicators Results framework indicators Key stakeholders' assessment	Statistical data Key stakeholders FUTF reports and minutes of meetings	Statistics review KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant) Document review	
Sustainability	To what extent is it likely that the achievements of the Trust Fund will continue after withdrawal of external support?	Risks and their mitigation measures identified in the risks matrix Key stakeholders' assessment Adaptive management measures Evaluators' assessment against the current context	Key stakeholders FUTF reports and minutes of meetings Project completion reports	KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grantees) Document review	

	<p>How did the projects contribute to the longer-term operations of the Finnish companies involved? Have the companies continued to operate in Ukraine or in other development country markets?</p>	<p>Finnish companies' assessment</p>	<p>Key stakeholders FUTF reports and minutes of meetings Project completion reports</p>	<p>KIIs (MFA & Embassy, Nefco, Finnish company grantees) Document review</p>	<p>There may be limitations in companies willingness to disclose information.</p>
	<p>Have the projects led to intended scalability? Have pilot projects led to further use of the solutions? Why? What were the possible bottlenecks?</p>	<p>Key stakeholders' assessment</p>	<p>Key stakeholders FUTF reports and minutes of meetings Project completion reports</p>	<p>KIIs (MFA & Embassy, Nefco, SAEE, CM Consultant, grantees) Document review</p>	<p>There may be limitations in companies willingness to disclose information.</p>

7.2 Terms of reference

Ministry for Foreign Affairs of Finland
Development Evaluation Unit (EVA-11)

17.10.2023

Evaluation Manual 2018
Terms of Reference for an Evaluation (*draft*)

Date: 17.10.2023

Intervention Code: 86501358

Prepared by: Elli Keränen, Sirpa Rajasärkkä

Finland Ukraine Trust Fund at NEFCO

Terms of Reference for final project evaluation

1. Background to the evaluation

1.1. Programme context (policy, country, regional, global, thematic context)

Ukraine is the second largest country in area in Europe (after Russia), and it has a population of about 43³ million. It is classified as a Lower Middle-Income Country by OECD DAC and is therefore a recipient of international overseas development aid (ODA). Ukraine is committed to extensive reform programmes that are necessary for its convergence with the European Union. Ukraine was granted EU candidate status in June 2022. Despite Russia's illegal invasion that started in February 2022, the Ukrainian government and authorities have been able to continue their work.

Ukraine is, per capita, one of the most energy intensive countries in the world, outpaced only by Middle East oil producing states. A strong dependency on oil, coal and gas imports combined with inefficient energy production, transportation and supply sectors means that reducing energy demand is a great priority for the country. Thus, Ukraine has a great potential for energy efficiency improvements even though the energy intensity of Ukraine's GDP has been constantly decreasing.

Improvements to the energy system will help Ukraine in part to promote sustainable development and take actions to mitigate climate change, which in turn will contribute to achieving the goals of the Paris Climate Agreement. This work is also linked to aligning Ukrainian legislation with the European Green Deal.

The main policy document, Energy Strategy by 2035, follows in principle the objectives of the European Union policies, and its key goal is to integrate Ukraine into European energy markets. To achieve the objectives of the Strategy, Ukraine requires substantial investments to modernize its infrastructure, increase energy efficiency and improve the quality of public services to promote the country's economic growth.

³ <https://www.macrotrends.net/countries/UKR/ukraine/population>

Since February 2022, Russia's targeted attacks on energy infrastructure have caused extensive damage across the country. By mid-2023, more than 100 missiles are estimated to have hit large energy facilities. In the electricity sector, the generating capacity has been reduced by 61 percent, due to damages from Russian missiles or drone attacks. In 2022, the available capacity of Ukrainian power plants dropped from 36.0 GW to 13.9 GW⁴. The damages to the energy infrastructure and the loss of access to the assets located in the territories under temporary control of Russian forces have led to over 12 million people suffering from energy supply disruptions.

Following the invasion, Finland's support to Ukraine was significantly increased and adapted to responding to acute needs and strengthening resilience of the society in the midst of the war. Finland allocated additional support – through NEFCO's Green Recovery Programme and European Bank for Reconstruction and Development (EBRD) E5P Fund in Ukraine – to address acute energy needs in schools, early education centres and hospitals and to develop the country's energy efficiency in the longer term. In 2022, Ukraine became Finland's largest development cooperation partner and recipient of humanitarian aid.

Some of the major issues for the human rights in Ukraine in the energy sector include threats to energy security and subsequent inability to ensure a stable energy supply and decent living conditions. The high share of coal and natural gas in the production of heat and power leads to adverse impacts on the environment and climate.

In the context of Ukraine, increasing the share of renewables and improving energy efficiency will inevitably contribute to a more stable, environmentally friendly and diverse energy supply and to increasing energy security. The positive impacts of such intervention would spread beyond the immediate benefits and go as far as to facilitate economic and social development of the country.

1.2. Description of the programme to be evaluated

The Finland Ukraine Trust Fund was established in 2017 following the signing of a Memorandum of Understanding (MoU) between the Ministry for Foreign Affairs of Finland (MFA) and the State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE) on cooperation in the fields of Energy Efficiency, Renewable Energy and Alternative Types of Energy Sources. The MFA and SAEE aimed to strengthen the cooperation between Finland and Ukraine and decided to promote the development of cooperation with emphasis on energy efficiency, renewable energy, waste-to-energy and smart energy systems. Cooperation comprises power and heat generation, biofuels, district heating networks and smart energy systems.

The MFA decided to establish the Finland Ukraine Trust Fund that can finance capacity building, institutional strengthening, technical assistance and demonstration projects in the fields of cooperation agreed in the MoU. The Trust Fund is managed and administered by the Nordic Environment Finance Corporation (NEFCO). The Trust Fund has collaborated in Ukraine with SAEE, whose role was to search and propose projects for implementation. It was decided that NEFCO shall recruit a Coordination and Management Consultant (CM Consultant) for the support of SAEE and for the preparation and appraisal of the project proposals and preparation of the decisions by the EMC (Evaluation and Monitoring Committee).

The Trust Fund's objective is to provide financing to activities that meet the ODA criteria in support of energy efficiency, renewable energy, and alternative types of energy sources projects in Ukraine. A unique feature of the Trust Fund is that the supported projects include both public and private ones involving Finnish companies.

The Human Rights Report prepared in the beginning of the project outlined the activities of the Trust Fund to have potential to make a positive impact on human rights by suggesting improvements to the environmental

⁴ https://ukraine.un.org/sites/default/files/2023-04/UNDP_Ukraine_Energy_ExecutiveSummary_eng.pdf

legislative and regulatory base, building the capacity on the institutional level, increasing the share of renewables and improving energy efficiency of the existing infrastructure. When designing and implementing a project through the Trust Fund, special care has been taken to protect the right to equality and non-discrimination as provided by the policies and guidelines of NEFCO.

Key actors in the management of the Trust Fund are NEFCO, State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE), MFA, and Coordination and Management Consultant (Elomatic Oy). The Evaluation and Monitoring Committee (EMC) of FUTF, consisting of SAEE and NEFCO as members and MFA as an observer, assesses proposals and recommends projects to NEFCO Investment Committee (N-İK) for approval.

The total agreed budget for the Trust Fund was EUR 6,000,000. However, in the end the Trust Fund was able to utilize EUR 3,800,000.

1.3. Results of previous evaluations

A Mid-Term Evaluation (MTE) was carried out in 2020 as an independent and external exercise. The MTE assessed the relevance, efficiency, effectiveness, impact and sustainability of the Trust Fund and activities financed by it. The overall performance of actors involved in Trust Fund management activities were also assessed. The MTE also identified lessons relevant both to FUTF and to improved design and implementation of other related projects and programmes.

According to the MTE, FUTF was well aligned with the Ukrainian energy sector policies and objectives. It contributes to increase the share of renewables in the Ukrainian energy mix and introduced new solutions that could contribute to the national renewable energy and energy efficiency related objectives also at a larger scale.

The MTE noted that among renewable energy options, biomass was the most under-developed sector in Ukraine while it is among the core expertise of the Finnish energy industry. The MTE saw a role for FUTF and/or the future Green Investment Fund in promoting guidelines and systems for ensuring sustainability of bioenergy before the sector grows rapidly.

According to the MTE conclusions, numerous donors, International Financial Institutions (IFIs), government agencies and private investors participated in energy sector development in Ukraine. FUTF is small but can have a leveraging role in attracting larger investments to innovative energy sector solutions, leading to clear added value of the Trust Fund.

Promotion of Finnish content in FUTF projects was considered a good way to link development cooperation to private sector development in Ukraine and internationalize Finnish companies. The MTE concluded that the scope for taking innovation further, e.g. increasing the role of the Ukrainian private sector, could be enhanced.

The key MTE recommendations included to temporarily cease applications for FUTF, increasing emphasis on implementation of the approved projects, dissemination and communication, engaging industrial associations and NGOs in Ukraine, considering linkages and synergies between FUTF and other private sector instruments as well as considering additional financing to the FUTF.

2. Rationale, purpose and objectives of the evaluation

The purpose of the final project evaluation is to assess the overall relevance, efficiency, effectiveness, impact, coherence, and sustainability of the Trust Fund and activities financed by it. It will assess the operational viability

of the Trust Fund, taking into account the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022 and the effect of restrictions during the pandemic Covid-19.

The evaluation is expected to enable NEFCO and the MFA to make informed decisions about the possible future use and further development of the Trust Fund as an instrument.

The evaluation is expected to analyse the overall performance of NEFCO's FUTF management activities, performance of State Agency on Energy Efficiency and Energy Saving's (SAEE) collaboration with the FUTF, and the technical assistance provided by the Coordination and Management Consultant (CMC) engaged by NEFCO. The approach of the evaluation shall ensure that all relevant stakeholders are consulted during the Assignment.

The priority issues for the evaluation include;

- Assessment of the operational viability of the Trust Fund, at the contextual changes in Ukraine after the beginning of Russia's illegal invasion in 2022.
- Assessment of the added value of FUTF compared to other private sector funding instruments at the MFA's disposal.
- Analyse the implementation strategy and added value of collaboration with SAEE.
- Identify lessons learned for Finland's support to reconstruction in Ukraine.

The evaluation shall identify and document lessons learned and give recommendations that NEFCO, MFA and other stakeholders may use to improve design and implementation of other related projects and programs.

3. Scope of the evaluation

The scope of the evaluation is to carry out an analysis and assessment of the relevance, coherence, effectiveness, efficiency, sustainability and impact of the Trust Fund during its years of operation 2018-2023.

The evaluation should focus on the implementation of the Trust Fund. It should analyse the planning and implementation phases of the Trust Fund as well as actions taken to ensure sustainability of results after the completion of activities. It should consider actions by NEFCO, the CM consultant, SAEE and key stakeholders in Ukraine and in Finland.

The evaluation should assess the operating model of the Trust Fund: collaboration with NEFCO, SAEE and the Coordination and Management Consultant as well as the involvement of the Finnish companies.

The evaluation should analyse the added value of the Trust Fund as an instrument compared to other funding instruments in the sector. Comparative data on the approaches of other Finnish private sector funding instruments in supporting energy efficiency in development countries is welcome. The rationale here is to find comparative data to strengthen the vision on how future interventions in Ukraine and in comparable sectors can be conceptualised through this evaluation.

The evaluation should assess the adaptation of the Trust Fund to contextual changes following the Russia's illegal invasion that started in February 2022, as well as its relevance and viability in the current situation. The Trust Fund should be analyzed in the context of relevant development strategies of Ukraine, including in addressing the short-term acute needs and longer-term reconstruction efforts.

Further, particular attention should be paid to gender and social equality, human rights including equal participation of marginalized groups and environmental sustainability, including climate benefits. The evaluation should also provide information on how the outcomes of the Trust Fund for the beneficiaries are sustained, as well as how the projects contributed to the longer-term operations of the Finnish companies involved in development country markets.

4. Issues to be addressed and evaluation questions

The main issues should be studied against the evaluation criteria below. The evaluation team may also take up other issues. The final evaluation questions will be discussed in the kick off meeting.

Relevance

- To what extent has the Trust Fund been consistent with the needs and priorities of Ukraine and the beneficiaries of projects financed by the Trust Fund, with focus on the period after the beginning of Russia's illegal invasion in 2022?
- Is the Trust Fund considered a relevant instrument for responding to the acute needs in Ukraine and for supporting the future reconstruction?

Coherence

- Was there value added in the collaboration with the SAEE and what was it?
- What was the value added of the collaboration with NEFCO?
- How does the Trust Fund compare to other private sector funding instruments in the sector (e.g. but not limited to Finnpartnership, Finnfund, instruments by Business Finland) and what value added does it bring?

Effectiveness

- To what extent the project outcomes and objectives were met and why and why not?
-
- To what extent the risk management plan served its purpose, and were the mitigation measures used and updated during the implementation of the Trust Fund activities?

Efficiency

- Was there value added in the TA provided by the Coordination and Management Consultant and what was it?
- Were the results framework and monitoring processes adequate and why and why not?

Impact

- How much did the Trust Fund contribute to the overall improvement of energy efficiency in Ukraine?
- How well have the projects funded by the Trust Fund succeeded to make progress towards achieving the overall objective(s) of the Trust Fund including the integration of human rights-based approach (do no harm level)? How was the human rights report utilized during the operation of the fund and what was its impact to the activities?
- Did the projects funded by the Trust Fund contribute to Ukraine's green transition and generate environmental and climate benefits?

Sustainability

- To what extent is it likely that the achievements of the Trust Fund will continue after withdrawal of external support?
- How did the projects contribute to the longer-term operations of the Finnish companies involved? Have the companies continued to operate in Ukraine or in other development country markets?
- Have the projects led to intended scalability? Have pilot projects led to further use of the solutions? Why? What were the possible bottlenecks?

5. Methodology

The evaluation shall be conducted as an independent and external exercise. The evaluation shall consult representatives of all relevant stakeholders during the evaluation. The intent is to provide a participatory and transparent learning process for all stakeholders. The team is expected to use multiple methods, both quantitative and qualitative, to ensure best outcome of the evaluation. Sampling method at project level comparing different project types can be used.

The evaluation shall elaborate the key evaluation issues, questions and subsequent evaluation methodologies in the Evaluation Matrix that is part of the Inception report. The matrix shall be used both in data collection and data analysis to ensure a consistent approach to answering the evaluation questions.

The assignment includes an inception phase, implementation phase and final analysis and reporting phase. The team is also expected to assess the adequacy of the used results framework and indicators to evaluate results. Results should be validated using multiple sources.

Russia's war of aggression limits opportunities to travel and physical mobility in Ukraine. Field visits and physical meetings can be replaced by online meetings, telephone conversations and interviews. The methodology for the implementation phase and possible field work should be further detailed and adjusted during the inception phase.

The evaluation should be conducted in close cooperation with the MFA. At a minimum, the evaluation team is expected to hold (i) a kick-off meeting to discuss selection of evaluation methodology and detailed work plan; (ii) a meeting prior to the implementation phase that presents the Inception Report and outline detailed plans for the implementation phase and possible field visit; (iii) a meeting following the implementation phase that presents preliminary findings; and (iv) presentation of the final report and recommendations to the MFA.

The main evaluation methods and information sources shall consist of document review and analysis (both FUTF-related and external documents), and key informant interviews, both in Finland and in Ukraine. The interviewees shall consist of the staff of Ministry for Foreign Affairs in Finland, Embassy of Finland in Ukraine, staff of NEFCO, SAAE, Coordination and Management Consultant team, representatives of organizations/companies involved with projects funded from the FUTF in Ukraine and in Finland, and representatives of other donor organizations and IFIs.

6. The evaluation process and time schedule

The evaluation should start by November 2023. The evaluator shall propose the work plan and schedule for evaluation. The evaluation is divided into three phases:

1. Inception phase
 - Kick off meeting
 - Desk review
 - Submission of the Draft Inception Report
 - Final Inception Report
2. Implementation phase
 - Possible field work
3. Reporting phase
 - Debriefing on the implementation phase findings
 - Draft Final Report submission
 - Meeting on draft Final Report
 - Submission of Final Report

The timetable is tentative.

The outputs of the assignment are as follows:

- An Inception Report will be produced within four weeks of the start of the assignment, and before the starting of the implementation phase and possible field visit.
- A first draft of the Final Report will be produced within three weeks of the end of the implementation phase. The MFA and key stakeholders identified by the MFA will have two weeks in which to comment the draft Final Report.
- The Final Report will be submitted within two weeks after receiving comments on the first draft by the MFA and other stakeholders. The Final Report will be commented and the final clearance will be provided by the MFA.

7. Reporting

The evaluation team is requested to submit the following deliverables:

- Inception report (draft and final inception reports)
- Presentation on the implementation phase findings
- Draft final report
- Final report
- Presentation on the evaluation findings and recommendations

The final report should present clear findings and conclusions, as well as recommendations and any lessons learned following logically from the findings and conclusions. The Final Report should include an executive summary, providing responses to the evaluation questions as well as a table presenting the findings, conclusions and recommendations. All reports will be submitted to the MFA in English in electronic format.

Each deliverable is subjected to specific approval. The evaluation team is able to move to the next phase only after receiving a written statement of acceptance by the MFA. The reporting schedule is included in the contract.

8. Quality assurance

The tenderer is requested to propose and implement a quality assurance system for the evaluation. The proposal must specify the quality assurance process, methodology, tools and resources (QA personnel and resource allocations).

9. Expertise required

The evaluation team shall ensure solid experience and knowledge in the following fields:

- Programme evaluations and planning in energy sector.
- Results Based Management (RBM), and its application in programme design, monitoring and evaluation (M&E);
- Relevant sectoral experience incl. energy sector, including experience from Eastern Europe and Ukraine in particular;
- Other experience and knowledge relevant to the evaluation;
- Experience in integrating cross cutting objectives in project planning, implementation, monitoring and evaluation: promotion of human rights and gender equality, non-discrimination, climate resilience, low emission development and protection of the environment with an emphasis on safeguarding biodiversity and
- Quality assurance in accordance to the quality assurance approach proposed in the tender.

The Consultant shall be responsible for organizing the site visits, trips and interviews as required for the Assignment. MFA will provide assistance to the Consultant as appropriate.

10. Mandate

The evaluation team is entitled and expected to discuss matters relevant to this evaluation with pertinent persons and organizations. However, it is not authorized to make any commitments on behalf of the Government of Finland.

The evaluation team is responsible for organizing the meetings and field visit related to the evaluation. The MFA will issue an introductory letter to facilitate contacting and arranging meetings particularly at the official level.

Annexes:

Annex 1: MFA evaluation manual <https://eoppiva.zapter.io/evaluationmanual2018>

Annex 2: Outline of the Evaluation Report

https://um.fi/documents/384998/0/Template_Outline_Evaluation_report_181122.docx/567a6c5f-3284-8f37-6bc7-9122fc4c3d93

Annex 3: Evaluation report quality checklist (OECD/DAC and EU standards)

https://um.fi/documents/384998/0/Checklist_Quality_Evaluation_Report_2018.docx/dbc2768f-bb8c-5b49-f242-7b0f5733dc0a

Annex 4: List of documentation

(All templates related to evaluation: <https://um.fi/development-cooperation-evaluation-manual>)

7.3 List of interviewees

Antti Vänskä, Unit for Eastern Europe and Central Asia
Matti Väänänen, Unit for Eastern Europe and Central Asia
Sirpa Rajasärkkä, Unit for Eastern Europe and Central Asia
Satu Elo, Embassy in Kyiv
Oskar Kass, Unit for Development Finance and Private Sector Cooperation
Minni Hyrkkänen, former staff of Unit for Eastern Europe and Central Asia
Jouko Eskelinen, former staff of Unit for Eastern Europe and Central Asia
Henri Horn, former MFA Senior Adviser, Development Policy, energy questions
Anna Zamazeeva, SAEE
Mariia Malaiia, SAEE
Helena Lähteenmäki, NEFCO (2 interviews)
Vivi Avikainen, NEFCO (2 interviews)
Alexey Kapustinskiy, NEFCO
Jarkko Olkinuora, CM Consultant (3 interviews)
Natalia Potomkina, CM Consultant
Patrick Bredbacka, Finnfund
Lea Gunther, Motiva
Julie Sonne, EIFO
Vladyslav Filatov, SIDA
Viktoria Reznichenko, RADA Private Co, Bucha
Iryna Dzionyk, Town Council of Volochysk
Anton Maximovych, Vyshneve, Mariupol
Mykhailo Gorban, Ternopil Heating Systems
Sergiy Mykhailovych, Kamyanets-Podilskiy
Olexandr Skorokhod, Kherson School, Antonivka
Rostysdlav Zamlynskyi, Military (Regional) Administration of Lviv
Olexandr Skakun, Kamyanske
Volodymyr Pasichko, Poltava communal heat and water supply company Poltavateploenergo
Tamara Igush, Poltava communal heat and water supply company Poltavateploenergo
Pavlo Samoilo, National University of Water and Energy in Rivne
Vitaliy Zaichenko, Ukrenergo (interview replaced by exchange of emails)

7.4 List of key documents consulted

“Agreement on security cooperation and long-term support between the Republic of Finland and Ukraine”, Office of the President of the Republic of Finland, 2024

“Reconstruction of Ukraine: Finland’s national plan, part one”, Ministry for Foreign Affairs 2023:25

“Finland Ukraine Trust Fund at Nefco: Final Report”, Nefco 2023

All FUTF Project Completion Reports

All FUTF Annual Reports

All FUTF EMC Meeting Minutes

FUTF Project document & NA lausunto & Laaturyhmäesitys

All FUTF amendments’ documents

FUTF Human Rights Report, FCC, 2018

Mid-Term Evaluation of Finland Ukraine Trust Fund at NEFCO, Kristiina Mikkola Paula Tommila Vadym Lytvyn, 2020

Websites of MFA, NEFCO and SAE

7.5 Peer review

Aim

For the peer review, the evaluators aimed at identifying limited number of peer countries or programmes, that could provide lessons for Finland's support to reconstruction in Ukraine (one of the objectives of the evaluation). Specifically, the peer review sought to provide input to responding the TOR's second relevance-related question, which in this evaluation report was addressed in discussing Lessons Learned and Recommendations: "Is the Trust Fund considered a relevant instrument for responding to the acute needs in Ukraine and for supporting the future reconstruction?"

Method

Step 1. The evaluators drew from review work conducted by Sari Laaksonen Consulting Oy in 2022-2023 in which internet search and interviews were undertaken.

The internet search focussed on the following donor countries and institutions that are in areas of blended financing, partnering with private sector and innovation globally considered interesting: Korea International Cooperation Agency- KOICA, Israel Innovation Authority, Denmark and Norway, USAID, SIDA, GIZ, and Canada.

The review looked for programmes meeting the following characteristics/criteria:

Donor programmes/policies containing "mixed funding" or "blended funding" with an ODA component

Preferably containing business funding (e.g., innovation funding or export funding)

Has characteristics of / specifies development objectives (in addition to commercial/market objectives)

Has an element of innovations

Is implemented in an ODA recipient country

Key Internet Search words included (but were not limited to): country/donor name* innovation funding and ODA * business funding and ODA* export credits, innovation, ODA * ODA, business innovation * blended financing/funding* market-based financing, ODA * business funding, development aid/assistance *ODA for private sector * Mixed funding for business* innovation business funding* blended financing and innovations* innovation with blended financing* etc.

For the initial review in 2022-2023, Sari Laaksonen Consulting Oy then contacted and interviewed selected shortlisted donors/organisations, focusing on the Nordics: SIDA, Danida, Norad.

Step 2. The evaluators in spring 2024, based on discussions with the Unit for Eastern Europe and Central Asia (evaluation commissioner) and the Unit for Development Finance and Private Sector Cooperation as well as the above discussed earlier review work, further interviewed representatives of Denmark and SIDA for their Ukraine-specific experiences in blended financing, partnering with private sector and innovation.

Findings of the peer review

Table 1 summarizes both the overall findings covering KOICA, Israel Innovation Authority, Denmark, Norway, Sweden, USAID, Germany, and Canada, and the findings specific to Ukraine for Denmark and Sweden/SIDA.

Table 1. Summary of reviewed donor countries and institutions

Country/institution	Brief description of overall findings	Findings on Ukraine	Links to additional sources
1. Korea	<p>Korea's relatively new ODA system is built on a mix of grant and loan-based mechanisms (ODA and non-oda).</p> <ol style="list-style-type: none"> 1. KOICA grants [gov budget] 2. EDCF (highly concessional) loans [gov budget] 3. EDPF (less concessional) loans [export import bank of Korea] since 2019 4. ECA (commercial /export credit) loans [export import bank of Korea] <p>At the development policy level, the private sector is highly emphasised. Korea's PPP has multiple entry points where KOICA cooperates with the private sector.</p> <p>EDPF as a relatively new financing tool is by nature blended funding.</p>	N/A	<ul style="list-style-type: none"> • Summary of OECD report on Koica focus on PPP • Development Alliance Korea • EDPF as blended financing
2. Israel Innovation Authority	<p>Israel innovation authority's international wing provides services for matching for Israeli enterprises focusing on Europe, Asia Pacific, Americas and Africa.</p> <p>Israel is an example recipient of European Innovation council's blended funding in 2019. Israel also has examples of philanthropies with blended funding and impact investment focus.</p> <p>The strategy nor the webpage do not mention development impacts. While the regions targeted (excluding Europe) would be applicable for ODA funding, there is no indication of aims beyond economic ties.</p>	N/A	<ul style="list-style-type: none"> • Israel Innovation Authority

<p>3. Denmark</p>	<p>Denmark’s system offers many entry points for a discussion linking ODA, private sector, export promotion and innovations.</p> <p>Danida Business Development (DMDP) and Green Business Partnerships (DGBP) are the main examples. Key observations and findings:</p> <ul style="list-style-type: none"> • DMDP and DGBP programmes were pure ODA by their funding base, with a challenge fund modality. Implemented together by a commercial and non-commercial partner. A non-commercial partner is the administrator of ODA funding. 4-5 year projects with a significant planning stage. ODA funding is provided to so-called non-commercial dimensions of operation. • DMDP and DGBP have commercial interest visible in the project logic and in the monitoring framework. Commercial interest can be seen as a sustainability factor and, thus, an important aspect of making the development impact possible (even if the “other funding” requirement is only 25%) • The balance between the commercial and development impact is important in the programme logic, even if it’s not always straightforward to elaborate this link and additionality with ODA. In any case, a holistic approach with “joint effect” of business and ODA additionality would be applied in describing the results logic. • Familiar challenges of culture in business and aid concerning impact reporting were discussed. In the case of Danida, the role and the support from the non-commercial partner was seen as important. Also, the importance of results thinking from the planning stage is important. 	<p>Export & Investment Fund of Denmark (EIFO), in an interview, says that in Ukraine, on an urgent basis, they “do things differently”. Launched in March 2023, the Danish government loan and guarantee scheme for Ukraine, managed by EIFO, has a capacity of a total of DKK 1 billion to finance the reconstruction of critical infrastructure, e.g. the supply of water, heat and electricity, as well as of Danish exports of agricultural equipment, among other things. The scheme aims to reduce the financial risk for Danish companies engaging in Ukraine.</p> <p>The loan and guarantee scheme has an aid component paired with a loss-recovery component. It’s managed with an “export credit agency rulebook” and it is not OECD-DAC ODA-classified. The scheme makes loss (rather by design) and finances both public and private sector Ukrainian buyers. Guarantees are covered for the full project, even if the Danish content is only 50%. The scheme aims at all sizes of projects and will cover 10-11 projects in total. There are some relatively large-scale projects and by April 2024, the scheme had disbursed towards four large projects, out of which two are larger public water-sector projects.</p> <p>EIFO Lessons Learned:</p> <ul style="list-style-type: none"> • Need to have “boots on the ground”, i.e. a strong team in Ukraine because of the need for anti-corruption, anti-money laundering, and red-tape as 	<ul style="list-style-type: none"> • Danida innovation and business explorer • Danida Market Development Partnership • ProDoc for green business partnership programme • Danida Market Development Partnership (DMDP) results framework • Financing for Development • OECD on Danish Aid • IFU – investment fund for developing countries • https://www.eifo.dk/en/
-------------------	--	--	---

	<ul style="list-style-type: none"> DMDP and DGBP have a thorough MEL system that demonstrates general good practices in Development Aid, like tracking output and outcome throughout the implementation. Evaluations were in use, but no post-monitoring was planned per se. <p>DANIDA Innovation and business explorer is a booster type of fund for private sector actors operating in developing countries.</p> <p>Denmark's development finance instrument IFU has an SDG fund and Danida sustainable infrastructure fund 'Innovation fund Denmark' that focuses on the Danish innovation system.</p>	<p>well as to do on-site monitoring (is the business really there);</p> <ul style="list-style-type: none"> Targetable projects are often in the communities but municipalities' room for manoeuvring is more limited than that of the state actors → need to link with the aid-department to provide the municipalities with support; Need to create demand in Danish companies and the Minister has launched the Ukraine Investment Forum, and efforts are made to mobilize both established companies, start-ups and Ukrainian companies. EIFO has hand-picked companies which had something to do with Ukraine already before. 	
4. Norway	<p>Norfund is the main Norwegian development Finance institute. It highlights the aim to contribute to SDGs through private sector support.</p> <p>In the reviews concerning Blended financing through DFIs Norway is mentioned as an example. Also, Norad has a strong focus on private-sector development.</p> <p>Norway's innovation fund's grant scheme does not emphasise development impact or SDGs explicitly.</p> <p>There was a humanitarian innovation programme previously with the innovation fund, now UN support is under export support: https://www.innovasjon Norge.no/en/start-page/noreps/</p>	N/A	<ul style="list-style-type: none"> NORAD Norfund Innovation fund Example of Norway research council activities on blended financing for STI

<p>5. Sweden</p>	<p>SIDA's business cooperation site demonstrates that they are contributing to multiple mechanisms/funds that focus on innovation for development (by the private sector).</p> <p>Swedfund is a DFI and appears to also have Swedpartnership with a loan/grant mechanism available.</p> <p>Business Sweden and Swedbank have a LEAP programme that is an accelerator for SMEs that "wish to make a world a better place".</p>	<p>SIDA's support to Ukraine is mainly through the Trust Fund "Sweden-Ukraine District Heating Programme" managed by NEFCO. The aim of the Programme is to demonstrate development of modern and energy efficient district heating with a significant share of production based on renewable and waste heat sources, ultimately meeting the EU requirements for efficient district heating. The programme started in 2019. Six funded projects were in various implementation stages when Russia's full-scale invasion started in February 2022 and SIDA is rather satisfied with the Fund's ability to adapt to the new circumstances.</p> <p>SIDA currently has no PPP's in Ukraine and SIDA is not mandated to run programmes based on procuring. SIDA's Kiev-based staff in an interview is aware of MFA Sweden's PPP in Ukraine with Scania and that PPP is focusing at supporting women to acquire driving licences (for logistics / professional conduct of vehicles).</p> <p>SIDA's lessons learned from the NEFCO Trust Fund focus at the need for implementing agencies to have sufficient number of staff, including senior managers, based in Ukraine also at the time of the war. They propose that NEFCO should consider having more (senior) staff there, as any issues with contractors should be addressed face-to-face.</p>	<ul style="list-style-type: none"> • SIDA's private sector coop • Business Sweden • Vinnova • Swedfund • Swedfund-swedpartnership
------------------	---	---	--

6. USAID	<p>USAID has defined its approach to blended financing. It is strategically used ODA to mobilise additional private sector funding (making the investment more attractive).</p> <p>Public sources contain many USAID projects that demonstrate use of blended funding mechanism in different sectors (health, connectivity, plastic pollution).</p>		<ul style="list-style-type: none"> • DAI article • USAID Invest info sheet • Health example • Digital transformation example
7. Germany	<p>Germany (BMZ) has developed a PPP initiative that appears to be a grant-based programmes. (grants, advisor and technical co-op)</p> <p>BMZ also has individual innovation programmes (e.g NoPa in Brazil) that contain the element of innovation.</p> <p>KfW as development finance institute has a mix of tools for development finance, including grants based funds via facilities. The structure is relatively complex.</p>		<ul style="list-style-type: none"> • Summary of BMZ private sector cooperation • https://www.developpp.de/en • Innovation for sustainable development – new partnerships (NoPa) (completed)
8. Canada	<p>The sources on Canada's feminist international assistance policy highlights the innovative financing and innovation as an overarching priority.</p> <p>As an example 'Grand Challenge Canada' provides small grants to innovators to conduct research and develop promising innovative ideas, developing strategic partnerships, leveraging private sector funding and know-how, as well as business and marketing plans, to enable development.</p> <p>Another example programme is EWEC Innovation Marketplace initiative that is very health focussed,</p>	N/A	<ul style="list-style-type: none"> • Canadian approach to innovative financing for development • Note on CIDA partnership approach including private sector • innovative financing mechanisms

	with the type of seed funding that enable additional mobilisation of capital.		
--	---	--	--

7.6 FUTF projects status and outlook

The case-by-case post-FUTF status and outlook of the Trust Fund's completed projects is presented in the Table 1 below.

Key:

Follow-up underway and more can still be done;

No follow-up underway but potential;

No follow-up being expected by FUTF partners nor advised based on the evidence of the evaluation.

Table 1. Status and outlook after FUTF implementation of the completed projects

No	FUTF Project name	FUTF Beneficiary and Finnish partner	FUTF Disbursed, EUR	Project status after FUTF implementation as of May 2024 and Outlook
1	General (SAEE's stakeholder's travel costs to EMC meetings in Finland)	SAEE	16,465	-
2	Business Trips and Capacity Building for SAEE	SAEE	5,805	-
3	Energy Efficiency training	SAEE	0	-
4	Ukrainka District Heating	Ukrainka City Council / Pöyry Finland Oy	49,944	A pre-feasibility study on different options for alternative heat supply sources for the City of Ukrainka conducted by FUTF; no follow-up but implementation / investment could be feasible.
5	Ukraine Biomass Feasibility Study	SAEE / VTT	170,000	The FUTF study identified opportunities for utilization of biomass residues for renewable energy in Ukraine. It provided a critical review of the existing policy framework related to biomass projects, a gap analysis comparing the key elements of the policy framework with EU best practices and a long-term bio-mass-to-energy development roadmap. SAEE hasn't showed interest in advancing further.
6	Vychneve District Heating	Communcal Enterprise Vyshnivsktep- lonergo / Planora	100,000	Investments for a bioenergy boiler plant were already carried out, so additional investment were not necessary on the basis of the FUTF Feasibility Study. Can be monitored for any changes in the situation.
7	Kamyanske Energy Efficiency	Kamyanske City Council / Sweco	119,842	FUTF's Feasibility Study enabled further implementation of the project by EIB.
8	Rivne NUWEE Hot Water Supply with Geothermal Heat Pumps	Nat. University of Water and Env. Engineering (NUWEE) APB Topaz/ Gebwell Oy	140,696	This was a FUTF installation project with installed facilities in use.
9	Volochysk school IHS	Volochysk City Council / Esko-Latva/Gebwell Oy	75,500	Volochysk City Council has applied for a loan under the Energy Efficiency for Public Facilities programme. They intend rehabilitate heating in other three buildings in the Hromada, following the model applied in their FUTF-project.
10	Green Investment Fund of Ukraine (ToR for Business Plan)	SAEE / Herkko Lehdonvirta	20,864	Development of Terms of Reference for the Preparatory study for developing a Green Investment Fund of Ukraine.
11	Green Investment Fund of Ukraine (Business Plan)	SAEE / Climate Wedge Oy	286,965	A Preparatory study for developing a Green Investment Fund mechanism in Ukraine was done. From among the 17 initial investment opportunities, the ESCO Market Accelerator Fund was selected for implementation. ESCO as such could potentially be advanced in Ukraine.
12	Melitopol Landfill Gas	SAEE / Doranova Oy	75,000	Feasibility study for the development of a Landfill Gas (LFG) control and utilization project at the landfill of Melitopol city was developed by FUTF. While SAEE hasn't showed interest in advancing further, the project results have demonstrated a good possibility to collect LFG and ensure constant for 10 to 15 years of green electricity production.

				Based on gas availability and landfill conditions two scenarios were calculated, both feasible.
13	Ternopil DH Hydraulic Modelling	Public DH Utility Ternopilmisktep-lokomunenergo / AX-Process	119,469	This was a FUTF solution development and installation project with installed facilities in use.
14	Lviv Region Biogas Feasibility Study	Lviv Regional Administration / AFRY	85,500	FUTF Feasibility Study provided information on the potential volumes and characteristics of the organic waste generating from the region's wastewater treatment plants (WWTP) and the options to convert the WWTP sludge to energy. Potential for investments for further implementation exists.
15	Kamyanets-Podilskiy – Imatra District heating Twinning	Public Utility Miskteploenergiya / Imatran Lämpö Oy	32,501	Since the end of the FUTF-project, the Public Utility has rehabilitated heating arrangements of a block of 25 flats with NEFCO and 40 with the World Bank.
16	Pre-feasibility Study on energy saving solutions for Miskteploenergiya	Public Utility Miskteploenergiya / Imatran Lämpö Oy	35,000	The project was a continuation of the twinning project between Miskteplovedenerhiya and Imatran Lämpö Oy. The project resulted in analysis of possible technical EE improvements at the new combined heat and power plant of Miskteplovedenerhiya.
17	Ukrenergo Demand Respond	State Enterprise National Energy Company Ukren-ergo / VTT	113,350	The FUTF study concluded that Ukraine's electricity market is not developed enough to render demand respond viable.
18	Kherson School II / Upgrading of Antonivka School in Kherson	Antonivka School in Kherson / Elemenco Oy	57,000	The school is in the warzone.
19	Thermosystems Peak Reserve Power Plant	LLC Research and Production association Thermosystems / AFRY	120,000	Based on the FUTF Feasibility Study, at the current stage, the project is not bankable. Bankability can be achieved after changes in legislation are in place, a tender process for flexible generation is held and there is an agreement on the sales of electricity and ancillary services.
20	Rada Biogas Feasibility Study	Environmental Enterprise Rada / Ramboll Oy	130,000	FUTF Feasibility Study was developed for the construction of a biogas plant for biodegradable organic waste and a solid waste chipper for the generation of recycled biomass utilizing agricultural by-products and woody by-products from industries. Potential for investments for further implementation exists.
21	Volyn Diagnostic Laboratory Building	Volyn Regional Children's Territorial Medical Center / Granlund Oy	50,000	The design of the prefabricated Modern Diagnostic Lab for Volyn Regional Children Hospital was developed by FUTF. Due to Russia's war in Ukraine, further implementation of the project was cancelled. Potential for investments for further implementation exists.

22	Dolyna Geothermal Heat Feasibility Study	Dolyna City Council / Fenno Caledonian Oy	122,600	For this case, the investment proved not to be feasible, mainly because limited heat demand. There would, however, be potential for Geothermal Heat elsewhere in Ukraine as the country has thousands of natural geothermal springs which leak methane.
23	Imatran Lämpö DH III Twinning program	Vinnitsateploenergo / Imatran Lämpö Oy	65,500	NEFCO has at the end of FUTF signed a grant contract with the district heating company on activities related to this FUTF project and Vinnitsateploenergo has also started to work with other development partners on its heat supply schemes.
24	AFRY - Waste to Energy Feasibility Study	Poltavateploenergo / AFRY Finland	55,000	Feasibility study of the development of a Waste to Energy (WtE) plant in the City of Poltava was developed. The main outcome of the study was that implementation of such WtE plant was technically and economically feasible in Poltava.
25	Indufor – Biochar study and business model	The National University of Life and Environmental Sciences / Indufor Oy	166,040	Market review and a Conceptual Feasibility Study for one pilot project for Biochar Mill in Ukraine were developed.
26	VTT - Nearly Zero Energy Buildings (NZEB)	Ministry of regions / VTT	203,500	NEFCO is using technical recommendations for cost efficient NZEB for new residential and public buildings in Ukraine from this project in a number of proposals. Same technical recommendations could be used by other implementors / investors too.
27	Deep Scan Tech – Measuring Landfill Gas sources	Melitopol Landfill / Deep Scan Tech Oy	109,800	While this project itself is in the warzone, NEFCO may follow up in terms making use of the concept in another location. However, the legal framework in Ukraine is not supportive of making landfill biogas production profitable for the domestic market and the production is more interesting to companies exporting to Europe.