

# MID-TERM EVALUATION OF RVO'S CLIMATE AND ENERGY RESPONSE FACILITY

2021-2024

FINAL REPORT

**seo** • amsterdam economics

---

## **AUTHORS**

GERBRAND VAN BORK, CLAUDIO CORTE COI, EMMA MARTINEZ, NIENKE OOMES, ROBBERT RADEMAKERS,  
BART JAN VAN BEUZEKOM, XUE YING LI

## **COMMISSIONED BY**

NETHERLANDS ENTERPRISE AGENCY (RVO)

AMSTERDAM, DECEMBER 2024

# Summary

**Between May 2024 - December 2024, SEO Amsterdam Economics carried out the mid-term evaluation of the Climate and Energy Response Facility (CERF).** CERF is an initiative started in November 2021, aimed at supporting ODA and non-ODA partner countries in their climate and energy transition through climate diplomacy. As an intermediary, CERF supports and facilitates the dialogue between Dutch Embassies, stakeholders in CERF countries, and Dutch companies and knowledge institutes. CERF's first phase is foreseen to run until the end of 2025.

**The purpose of this mid-term evaluation is both accountability and learning.** On the accountability side, the evaluation takes stock of CERF activities and outcomes achieved between November 2021 and September 2024.<sup>1</sup> The main accountability question is whether the programme is on track to achieving its goals and whether the design of the programme is optimally geared towards these goals. Because the programme started in late 2021, with implementation of activities starting 2022, it is in most cases too early to observe long-term outcomes and impact. Therefore, this evaluation focuses on assessing CERF's short-term effectiveness and relevance of its activities, the programme design, and the programmatic approach; further, the evaluation investigates whether the right preconditions exist for long-term impact. On the learning side, the purpose of this mid-term evaluation is to draw lessons learned from CERF's experience so far, resulting in short-term and longer-term recommendations for the next few years.

**This mid-term evaluation is based on triangulation of different methods.** These methods included (1) a desk review of Light Intervention Strategies and other CERF documents; (2) a survey among 31 Dutch Embassy staff in 21 CERF countries; (3) interviews with CERF staff; (4) in-depth case studies in four purposefully selected countries (Algeria, Colombia, Indonesia and South Africa), based on which the evaluators performed a contribution analysis regarding outcomes and transformative impact; (5) a final round of 'speed date interviews' with CERF advisors, in-depth meetings with CERF management and IGG staff, and a validation workshop with CERF advisors.

## Key findings

**Dutch Embassies view CERF as an effective partner for advancing climate diplomacy in host countries, largely due to its flexibility, technical knowledge, and networks.** In our survey conducted among Dutch Embassy staff, respondents indicated that they view CERF as having high value added in bringing in Dutch knowledge and domestic as well as international networks, and that they see CERF advisors as effective partners in advancing climate diplomacy in host countries. They see CERF as effective in leveraging Dutch expertise and connecting Dutch companies with partner countries for knowledge transfer or to increase the mobilisation of innovative expertise or investments of the Dutch private sector. CERF is regarded as successful in raising awareness among Embassies and more moderately successful at partner countries' governments.

**CERF's programmatic approach is broadly coherent, and effective at creating linkages ("trinities").** The latter are opportunities for CERF to initiate and support other activities or programmes within RVO and the Dutch Ministry of Foreign Affairs, particularly the combi-tracks. To a lesser extent there was coordination with other programmes or funds outside RVO, such as Invest International and FMO funds. External coherence could be strengthened by engaging more with other Dutch-funded programmes, development finance institutions, and NGOs.

---

<sup>1</sup> Although the Terms of Reference (ToR) for this evaluation limited the evaluation period to June 2024, the evaluation team did analyse some CERF activities that took place in the second half of 2024.

**CERF's programme design is demand-driven and relevant for Dutch Embassies but could have more focus and depth regarding country and niche selection.** Dutch Embassy respondents particularly valued the flexible set-up of the programme, combined with the technical know-how and sector specialisation of CERF advisors. However, the selection of countries and niches does not yet sufficiently take into account all country-specific risks, including location; available facilities for renewables; existing political commitments related to wind, solar or green hydrogen; or existing lobbies for fossil fuel-based energy production. CERF could then more strongly substantiate the selection of country and niches, based on a deeper assessment of opportunities and risks.

**CERF has been effective in terms of achieving short-term outcomes in raising awareness and Dutch private sector prospects generation.** The overall effectiveness of CERF varies by country and niche, depending on country- and niche-specific factors as well as the capacity of CERF advisors and Dutch Embassies (including their technical know-how, networks, and diplomacy). CERF has been effective in terms of raising awareness on climate mitigation and sustainability topics, both within Dutch Embassies and within partner countries. CERF has also been effective in leveraging the Dutch expertise, by connecting Dutch companies with partner countries for knowledge transfer, or by mobilising innovative expertise and investments by the Dutch private sector. Examples of successes include the showcasing of expertise and technologies developed by Dutch SMEs in specific subsectors ("niches of niches"), such as thermal energy storage in Japan, deforestation monitoring in Colombia, and circular economy (waste to energy) in Nigeria. Showcasing such expertise not only helps raise awareness, but also creates potential investment and trade opportunities for Dutch companies.

**Signs of effectiveness in terms of achieving longer-term outcomes are weaker thus far.** This is particularly the case regarding the pathway on raising policy ambitions and the pathway on promoting climate measures and investments in partner countries. Achieving actual policy change in terms of changing laws or regulations will take time and is not expected within CERF's current phase. However, there are signs that less ambitious policy level outcomes (such as policy working groups) could be achieved within the current CERF phase. Furthermore, due to the timing of this mid-term evaluation, evaluators could not see outcomes related to project plans or investments by other funding programmes or investors, although these could be expected in the longrun.

**The potential to achieve transformative impact differs by country and will take substantial time.** It is unlikely that CERF will have substantial transformative impact in this first phase, due to the time required for significant policy changes to take effect, and due to the limited budget size and intermediating character of CERF. In some countries, such as Algeria and Colombia, there is potential for CERF to have a transformative impact, while in other countries, such as South Africa and Indonesia, this is more uncertain (due to existing barriers related to renewable energy starting points, vested interests, and bureaucracies). To increase CERF's chances of achieving successful long-term transformative impact, it is important for CERF to focus its activities not only on promoting new renewable energy sectors, but also on breaking down the old, fossil fuel based, energy sectors - which often remain strongly supported by vested interests.

**General guidelines on how to have a gender lens in activities were introduced only in June 2024.** While very few gender-focused activities took place so far, the recently developed CERF Gender Guide puts more emphasis on gender in CERF activities, and gender objectives started to become part of intake forms at the end of 2024. On the one hand, it should be recognised that CERF activities, especially in the short term, can be at most gender aware (as opposed to gender transformative). On the other hand, CERF could do more to explicitly promote gender mainstreaming in the longer run; develop more activities in selected countries with a gender gap; conduct more

gender analysis for specific mitigation niches and consider offering specific skills-based capacity building training to women, particularly in areas that are traditionally dominated by men.

## Key recommendations

Based on our findings, we developed the following recommendations, which we discussed and validated with CERF advisors in a validation and recommendation workshop.

- 1. Update CERF's monitoring and impact framework with more realistic medium-term targets and a broader focus on climate adaptation and sustainability.** Due to the evolution of CERF activities over time, it is time to update and broaden the Theory of Change to include adaptation, biodiversity, and other broader sustainability goals. This view was shared by multiple survey respondents and interview partners and was confirmed by our analysis of Circular Economy activities. CERF advisors and coordinators also agreed that the CERF monitoring framework could be updated with more realistic medium-term outcome indicators, thereby better matching with the character and size of CERF interventions (especially regarding policy change ambitions).
- 2. Stay flexible but adapt towards achieving immediate outcomes in the remaining CERF period.** Adapt based on monitoring outcomes: consider shifting resources towards countries with high opportunities, needs for specific Dutch expertise and technologies, local commitment, and strong CERF advisor - Embassy relationships. In these cases, chances of success are high for the achievement of immediate to medium-term outcomes (especially in pathways 1 and 3). CERF might contemplate an exit strategy for niches or countries where opportunities are less obvious and the added value of CERF with combi-tracks is less clear.
- 3. Build upon success stories to position the expertise and technologies of the Dutch private sector and knowledge institutes.** We advise to build on the success stories of showcasing specific Dutch expertise and technologies (for example, as in Japan, Nigeria, or Colombia). Some of these technologies might also be relevant for other countries with similar needs. The value add of CERF is highest for Dutch SMEs with innovative expertise and limited own resources for international exposure.
- 4. Focus on more achievable short-term outcomes at policy level.** Examples of achievable short-term outcomes are the establishment of platforms, working groups, or the appointment of partner government officials for certain niches such as wind, solar, circular economy, or aquifer thermal energy storage (ATES).
- 5. Improve investor and donor engagement for improving effectiveness regarding climate actions and attracting Dutch investments.** CERF could usefully develop an IFI and investor engagement strategy with a focus on the top development partners in climate finance that are most synergetic with CERF. Examples of such development partners active in climate action and project generation are Invest International, FMO, SNV, WWF, GIZ. It is advisable to appoint a CERF climate finance staff member for engagement with these investors and the link with Team Internationale Organisaties (within RVO).
- 6. Develop an internally coherent long-term strategy for country, niche, and investor engagement.** In the longer term, CERF could develop a more strategic approach towards country and niche selection aimed at maximising potential outcomes and impacts. This strategy could be based on an assessment of opportunities, risks, and Embassy capacities for both A and B countries. CERF could then focus on those countries and niches where opportunities are prevalent, where CERF has most added value, and where threats or bottlenecks are not significant (e.g. by re-assessing identified bottlenecks after a period of 2-3 years, and concentrating resources on countries and niches that have made progress in addressing these bottlenecks). Although this could imply a trade-off with the flexibility of the programme, it will also provide a more effective and efficient basis to assess the requests of the Embassies.

# Table of Contents

Summary		2
List of abbreviations		6
1	Introduction	7
	1.1	History and background of CERF 7
	1.2	Purpose of the evaluation 10
	1.3	Scope of the evaluation and evaluation questions 10
2	Methodology	12
	2.1	Desk review 13
	2.2	Survey 13
	2.3	Interviews 14
	2.4	Case studies and contribution analysis 14
	2.5	Workshops 15
3	Results	16
	3.1	Effectiveness of CERF 16
	3.2	Programmatic approach 22
	3.3	Programme design 24
	3.4	Transformative impact 29
4	Conclusions and recommendations	34
	4.1	Synthesis and conclusions 34
	4.2	Overall recommendations 36
Literature		40
Appendix A	List of interview partners	41
Appendix B	Case studies and contribution analysis	42
	Appendix B.1	Algeria 45
	Appendix B.2	Colombia 49
	Appendix B.3	Indonesia 53
	Appendix B.4	South Africa 56
Appendix C	Gender recommendations from the Gender Annex	59
	Appendix C.1	Specific recommendations for gender-responsive programme design 59
	Appendix C.2	Specific recommendations related to MEL 59

## List of abbreviations

BeMo	Beoordelings Memorandum (Policy Memorandum)
CA	Contribution Analysis
CE	Circular Economy
CERF	Climate and Energy Response Facility (RVO programme)
EKN	Embassy of the Kingdom of the Netherlands
EnDev	Energising Development (RVO programme)
GHG	Green House Gasses (CO <sub>2</sub> and other green-house emissions)
GH <sub>2</sub>	Green Hydrogen
KII	Key Informant Interview
LIS	Light Intervention Strategy
Lol	Letter of Intent
MEL	Monitoring, Evaluation and Learning
MFA	Ministry of Foreign Affairs (of the Netherlands)
ODA	Official Development Assistance
PADEO	Programmatiese Aanpak Duurzame Economische Ontwikkeling (RVO programme)
PoA	Port of Amsterdam
PoR	Port of Rotterdam
PSD	Private Sector Development (RVO programme)
PT	Process Tracing
RVO	Netherlands Enterprise Agency
ToC	Theory of Change
ToR	Terms of Reference



# 1 Introduction

The Climate and Energy Response Facility (CERF) is an initiative aimed at supporting partner countries in their climate and energy transition through climate diplomacy. The purpose of the mid-term evaluation is a combination of accountability and learning for the period between November 2021 and September 2024.<sup>2</sup>

**The Climate and Energy Response Facility (CERF) is a government-to-government facility implemented by the Netherlands Enterprise Agency (RVO) which supports partner countries with their climate and energy transitions.**<sup>3</sup> CERF aims to contribute to accelerating climate actions and increasing climate ambitions in partner countries, with a focus on climate mitigation. CERF focuses on multi-year strategies in a limited number of (sector) niches expected to have a high impact with significant opportunities for scaling up and where Dutch expertise can be of added value. CERF started in 2021 and its first phase is now foreseen to run until the end of 2025. CERF should be regarded as an enabling instrument aimed at supporting and facilitating the dialogue between Embassies, public and private sector stakeholders in CERF countries and Dutch companies and knowledge institutes. Further, CERF has increasingly played a knowledge centre role for Embassies and other stakeholders on issues relevant to climate diplomacy (See Box 1.1).

## 1.1 History and background of CERF

**CERF broadened the scope of the Energy Transition Facility (ETF).** CERF is a successor of the earlier Energy Transition Facility (ETF) programme, which primarily targeted energy transition in the energy sector in the MENA region. There was a clear need for climate diplomacy and exploring prospects in which a facility like CERF could play a bridge role between partners in target countries, the Embassies, other RVO instruments and Dutch companies and knowledge institutes. CERF has an expanded the scope compared to ETF, including a larger number and diversity of sectors (such as agriculture, transport, circular economy & waste). CERF countries were selected based on a scoring system that considered the country's level of greenhouse gas emissions, income classification, and opportunities for Dutch business and knowledge institutes. CERF is also a follow-up to the "RVO-2021 nul-opdracht climate diplomacy", which explored the extent of support RVO could offer in the implementation of the climate diplomacy strategies of 15 ODA and non-ODA countries.

**Partner countries include a list of 17 A-countries for long-term interventions and associated strategies ("Light intervention strategies") and 19 B-countries for short-term interventions and support.** The facility started in November 2021 with four A-countries. In January 2022, several A and B countries were added. With the start of the combi-track approach in the summer, the total reached 17 A-countries and 19 B-countries (see also CERF Year report 2022). Together with the Dutch Embassy networks, CERF aimed to select a maximum of two climate mitigation

---

<sup>2</sup> The ToR mentions June 2024 as end period of the evaluation, however, the evaluators chose to use September 2024 as end date, in accordance with the CERF MEL coordinators, to showcase more activities and maximise the learning component. Where relevant, the evaluators considered updates that took place in October and November.

<sup>3</sup> BeMo (MFA, 2021)

niches A-country, where to develop a “CERF-track”, consisting of a long-term ambition, associated intervention strategy (the so called “light intervention strategies”), and activities.<sup>4</sup>

### The countries covered are the following:

- **A-countries** are Algeria, Bangladesh, Colombia, Côte d'Ivoire, Egypt, Ghana, India, Indonesia, Kenya, Morocco, Nigeria, Senegal, South Africa, Vietnam (Official Development Assistance (ODA)); and Japan, South Korea, and Ukraine (non-ODA). The ODA A-countries are thus the 14 countries with which the Netherlands has both trade and development cooperation activities.<sup>5</sup>
- **B-countries** are Democratic Republic of Congo, Ethiopia, Jordan, Lebanon, Palestinian Territories, Tanzania, and Tunisia (ODA); and Australia, Brazil, Canada, China, Israel, Malaysia, Mexico, Saudi Arabia, Thailand, Türkiye, United Arab Emirates and United States of America (non-ODA).

#### Box 1.1 CERF plays an important role as knowledge centre for climate diplomacy.

##### CERF as a knowledge centre

The Climate and Energy Response Facility plays an important role as a knowledge centre for climate diplomacy, focusing on both climate mitigation and adaptation. Examples of activities include:

1. **Knowledge Development.** Development of technical briefs and notes on climate mitigation and adaptation approaches and themes, to support the work of Embassies and other Dutch government staff working internationally. Analysis of opportunities and risks for greening the horticulture sector based on the EU taxonomy. Gaining insights, experiences, and lessons about transition thinking and applying transition models in practice.
2. **Training and Advice.** Advisory role for the combi-tracks on sustainable practices (greening) and support with the development of green projects. Tailored training for combi-track coaches on opportunities and risks for greening in the horticulture sector.
3. **Increasing Awareness and Capacity Building.** Organising webinars for Embassies on specific climate-related themes (e.g., green hydrogen, circular economy, renewables, critical minerals). Hosting and organising specialised climate events, e.g. event for the Dutch business sector on opportunities related to COP29.
4. **Partnerships and Collaboration.** Engaging in external partnerships, such as multi-stakeholder working groups, platforms etc. to enhance CERF's reach and impact in climate diplomacy in specific topics such as green hydrogen, offshore wind, circular economy etc.

#### CERF has a maximum budget of about EUR 21 million. Part of this budget is split between A-countries and B-countries as follows<sup>6</sup>:

- **A-countries:** CERF planned an annual indicative budget of EUR 160,000 per ODA country and EUR 40,000 per non-ODA country, for a total of EUR 5.2 million for ODA countries and EUR 0.8 million for non-ODA countries.
- **B-countries:** EUR 200,000 for ODA countries and EUR 50,000 for non-ODA countries, per year.
- As of September 2024, CERF financed 32 projects in A and B ODA countries.<sup>7</sup>

#### The facility focuses on sectors where the Netherlands has an added value, such as offshore wind, solar, green hydrogen, circular economy/waste-to-energy, e-mobility.<sup>8</sup> 25 CERF-tracks were defined as of September 2024:

<sup>4</sup> It is not mandatory for each country to develop two tracks; rather, this serves as guidance.

<sup>5</sup> [Countries and regions | Development cooperation | Government.nl](#)

<sup>6</sup> BeMo (MFA, 2021), adjusted by CERF coordinator; the total budget of EUR 21 million includes all CERF management costs and staff time.

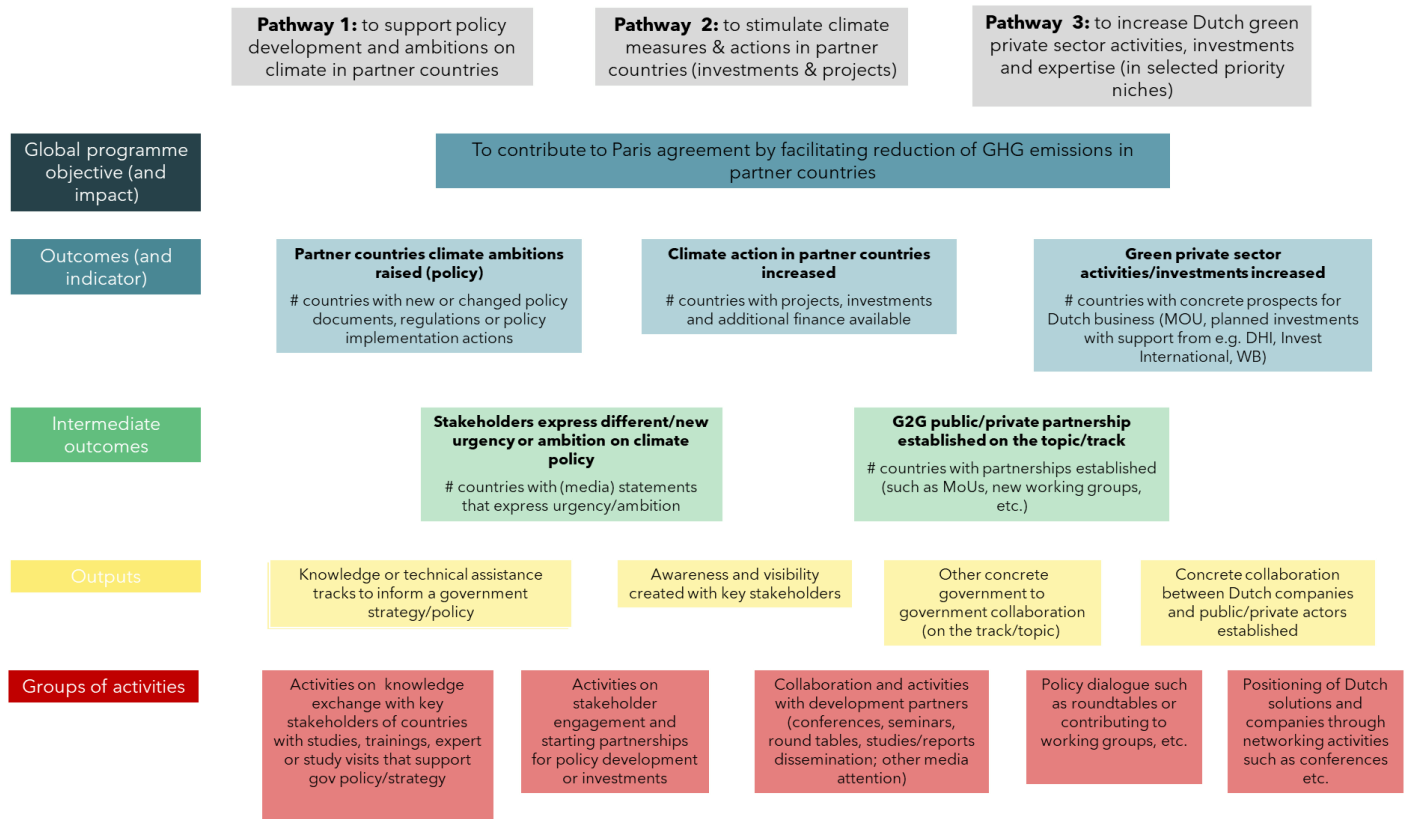
<sup>7</sup> [Climate and Energy Response Facility \(CERF\) | Project Database CMS](#)

<sup>8</sup> CERF ToR (RVO, 2024)



the highest focus is on green hydrogen (6 countries), followed by Circular Economy/ waste to energy (5 countries) and offshore wind and solar (both 3 countries).<sup>9</sup> Since 2023, the scope of CERF was expanded to support projects on climate adaptation, such as those related to integrated water management or climate smart agriculture, biodiversity, and greening within the combi-tracks.

Figure 1.1 Overall CERF Intervention Framework (with pathways)



Source: CERF results Intervention Framework, adapted by SEO Amsterdam Economics. Note: to make the causal links explicit, the CERF MEL team would still need to add arrows between activities, outputs, and outcomes. Nevertheless, the three pathways and corresponding activities and results are interconnected and influence one another.

**CERF’s intervention framework aims to facilitate GHG emission reductions through three major pathways of change (Figure 1.1).** CERF updated its intervention framework, starting from the version contained in the BEMO, with the help of the SEO evaluation team. The three pathways are the following:

- Pathway 1: Raising awareness and ambitions among Embassies and partner governments.
- Pathway 2: Promoting climate mitigation measures and actions.
- Pathway 3: Promoting Dutch private sector prospects and investments.

<sup>9</sup> The full list of tracks is later shown in Table 3.2, together with an indication of the results per track.

## 1.2 Purpose of the evaluation

**The purpose of this mid-term evaluation is to serve both as a tool for accountability and as an opportunity for learning.** The key focus of accountability is assessing whether the programme is on track to meet its goals and whether the design of the programme is optimally geared to achieving them. Due to the programme starting in 2021 and its activities being implemented in 2022, it is still too early to assess long-term outcomes and impact. This evaluation therefore focuses on short-term effectiveness (outputs and immediate outcomes), as well as the relevance of activities, programme design and programmatic approach, and investigates whether the right preconditions exist for long-term impact. Based on this assessment, we will draw lessons learned and offer recommendations to improve the programme during its current phase (and for a potential next phase).

**The aim of the evaluation is therefore two-fold:**

- **Assess whether CERF as an instrument is on track to achieve its goals. This will be done mostly in a qualitative way** (see Methodology in chapter 2). CERF monitoring instruments, as originally set up in the BEMO, are based on reflexive monitoring (see section 3.3.2), which focuses on qualitative results. This is line with policy and diplomacy-related objectives of the programme, which are difficult to quantify. While it is likely too early to observe any sustainable, systemic impact of CERF, it is possible to assess whether the design of the facility and activities are geared towards achieving short-term and more longer-term outcomes.<sup>10</sup>
- **Support CERF in gathering lessons learned and provide recommendations for improving the CERF instrument during the current phase.** The aim is to jointly develop actionable and concrete recommendations which could be directly implemented to adjust the programme governance and implementation of activities in the remaining period of the current phase of CERF (until end-2025).

## 1.3 Scope of the evaluation and evaluation questions

Table 1.1 Main evaluation questions for the CERF mid-term evaluation

Main evaluation question	Focus of the evaluation	Sources
<b>Q1) Efficacy:</b> To what extent does the CERF programme contribute to raising climate mitigation ambitions and accelerating climate mitigation actions in target countries?	Are the CERF activities, outputs and short-term outcomes achieved or likely to be achieved by the end of the current phase?	Desk research, case studies, survey, interviews
<b>Q2) Programmatic approach:</b> Does the programmatic approach benefit the efficacy, coherence and added value of activities and does this lead to a new way of working that facilitates systemic change?	Does the CERF programmatic approach enable the strategic implementation of interventions that are complementary and mutually reinforce each other to facilitate systemic change?	Desk research, case studies, survey, interviews
<b>Q3) Programme design:</b> How does the programme design (flexible set up, role division, niche, and country focus) affect the efficiency and efficacy in practice?	Programme design, processes, reflexive monitoring, and gender.	Desk research, case studies, survey, interviews

<sup>10</sup> The BeMo states that although the programme contributes to emission reductions, it is not quantitatively measurable.

<p><b>Q4) Transformative impact:</b> What are the expected long-term transformative effects of the interventions, based on what has been achieved thus far?</p>	<p>Are the right conditions in place to achieve these impacts in the longer run, given what was achieved so far?</p>	<p>Desk research, case studies, survey, interviews</p>
<p><b>Q5) Lessons learned, best practices and recommendations:</b> What should CERF continue, improve, or do differently for its remaining duration (until December 2025) to reach the planned objectives/outcomes?</p>	<p>Practical recommendations and actions to improve the relevance, effectiveness, and potential transformative impact of CERF (classified by urgency, cost, effort).</p>	<p>Desk research, case studies, survey, interviews, validation &amp; recommendation workshop.</p>

Source: SEO Amsterdam Economics, based on ToR questions.

**The evaluation focuses on answering research questions on effectiveness, programmatic approach, programme design, and transformative impact.** The cooperation between CERF and MFA, other RVO programmes (PSD Toolkit, Business Development Programmes, combi-tracks) and other complementary donor programmes is assessed. A summary of the five main evaluation questions is provided in Table 1.1. Due to the character of this mid-term evaluation and following its Terms of Reference (ToR), this evaluation does not assess the OECD DAC evaluation criteria of Efficiency (related to resources and efficiency of processes) and Sustainability (long term impacts).

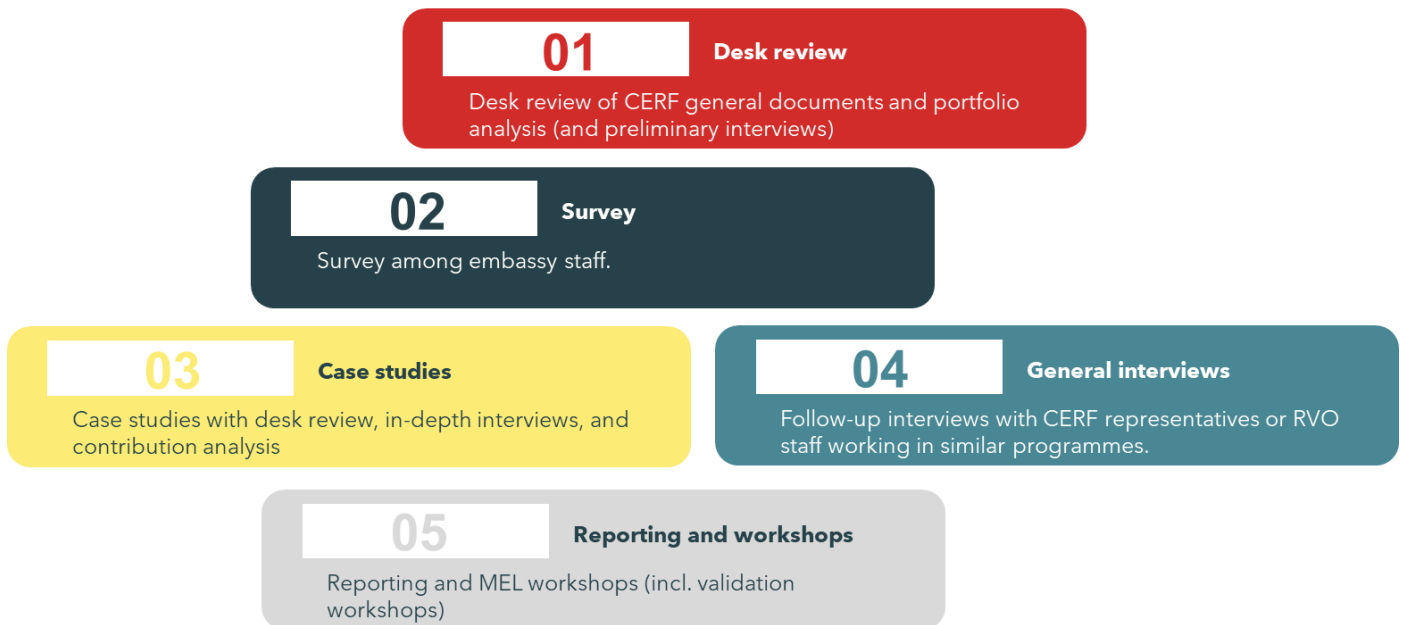
**In terms of geographical coverage, and period, the evaluation focused on the following:**

- **Countries:** the primary focus is on 17 A-countries for which CERF provides long-term interventions and multi-annual support, and to a lesser extent on the B-countries. As explained below, SEO conducted in-depth case studies for four countries: Colombia, Indonesia, Algeria, and South Africa.
- **Period:** the evaluation covers the period between the beginning of CERF in November 2021 and September 2024. As already mentioned, the ToR indicated June 2024 as end period of the evaluation. The evaluators chose September 2024 as end date, in accordance with the CERF MEL coordinators, to showcase more activities and maximise the learning component. Where relevant, the evaluators also considered updates that took place in October and November.

## 2 Methodology

The mid-term evaluation was based on desk review of programme documents, a survey to Embassies, interviews with CERF staff, two workshops and an in-depth analysis of four case study countries, using contribution analysis.

Figure 2.1 The methodology of the mid-term evaluation consists of five main steps.



Source: SEO Amsterdam Economics.

The general approach of this evaluation was based upon the following complementarity principles:

- **CERF's existing systems approach and Theory of Change (ToC) for climate transition**, based on the X-curve model of DRIFT. The transition towards low greenhouse emissions and a fossil free production and consumption pattern is at the core of the systems approach. Throughout the evaluation, the evaluators helped the CERF MEL team refine the intervention framework, Theory of Change, and related output and outcome indicators.
- **Triangulation methods and data (shown in Figure 2.1)**. We used a combination of desk research, a survey among Embassy staff, and interviews with CERF staff, RVO staff from other programmes and MFA. The desk research was based on the provided reflexive monitoring sheets, CERF intervention strategies and case country documents. Interviews were a central data collection tool in our evaluation. In addition, we applied rigorous qualitative methods including contribution analysis (which uses the case study interviews as data sources), that helped us shed light on the contribution of CERF to the observed and expected outcomes, relative to other external factors.
- **In-depth case studies for four countries: Algeria, Colombia, Indonesia, and South Africa**. These case studies were based on in-depth document review and interviews with Embassy staff and key stakeholders. During the inception phase, the four countries were selected together with the CERF team, based upon a set of clear selection criteria: geographical representativeness, niche (sectoral) diversification and learning purposes.

## 2.1 Desk review

**The evaluation team carried out a general desk review of CERF documents.** The desk review was aimed at reviewing CERF's objectives, activities undertaken, monitoring system, and the reporting of results. The team then validated findings from the desk review in bilateral meetings with CERF staff. The main documents reviewed in this evaluation are the following: BeMo, light intervention strategies for the countries, reflexive monitoring sheets, country reports, the CERF gender guide, and a detailed documentation for the four case studies (e.g. ToR for studies, presentations).

**Based on the documents reviewed, the evaluators developed intervention logics for the four case study countries and their niches, as well as factsheets for each A country.** The intervention logics for the case study countries provide a useful tool for CERF advisors to focus on their objectives, as well as to showcase (expected) results. Each intervention logic was then validated with the respective CERF advisor (see section 2.4). Factsheets are also a useful tool to showcase the activities and expected results of CERF in A-countries. Factsheets were reviewed by the relevant CERF advisors, to identify inconsistencies and add missing information. Based on these factsheets, the team then produced an overview of countries, niches, activities, and outcomes (see section 3.1.1).

## 2.2 Survey

**The evaluation team conducted a survey with Embassy representatives from A and B countries.** The main objective of this survey was to gather preliminary insights on collaboration between the Embassy and CERF advisors, potential difficulties encountered in laying out Light Intervention Strategies, and issues in finding and working on niches. The survey contained a mix of quantitative questions, in the form of agreement scale with statements, which allow for a quick snapshot of respondents' views, and open-end questions, where respondents could elaborate on other questions, essentially adding details and explanations to quantitative questions. The contact details of the Embassies were provided by CERF.

**The stakeholder survey was sent to 73 potential respondents from 36 countries and obtained a response rate of 44% (32 respondents).** These include 11 A- countries (Algeria, Bangladesh, Colombia, Egypt, Ghana, India, Indonesia, Japan, Kenya, Nigeria, and South Korea, Morocco) and 9 B-countries (Australia, Brazil, China, DRC, Jordan, Lebanon, Malaysia, Mexico, and the United States). 21 respondents were from A-countries, and 11 respondents from B-countries. In addition, 10 respondents began the survey but did not complete it.

**Further details on the methodology and procedures used in this survey are as follows:**

- The survey was programmed using Sawtooth Software.
- The survey was open for one month between 02/07/2024 and 02/08/2024.
- Weekly reminders were sent to respondents who had not filled out the survey, to increase the participation rate.
- Before sending the final version of the survey to the actual respondents, the evaluation team asked CERF MEL coordinators, as well as the representative of one Embassy, to test the survey, paying particular attention to the wording of the questions.
- Participation in the survey was voluntary and respondents had the option to skip questions they had little knowledge about through the answer option "Do not know", to increase reliability.

## 2.3 Interviews

The evaluation team carried out various interviews including with CERF managers, MEL coordinators, advisors, RVO staff from other programmes, MFA, and in-depth interviews at the case study level. The team conducted various initial interviews with CERF advisors to understand the background and functioning of CERF. In addition, bi-weekly meetings with CERF coordinators to update on the course of the evaluation and to validate preliminary results, and ad-hoc meetings on specific issues (e.g. on the Theory of Change, intervention logic and results framework with the CERF MEL team). The team also organised a session where they interviewed CERF advisors for non-case study countries, in which they validated findings on desk research for the factsheets. Regarding the case studies, interviews were carried out with CERF advisors, Embassies, partner country authorities, and, where relevant, combi-tracks/BD/PSD advisors and other companies/agencies involved (see also section 2.4). The full list of interviewees can be found in Appendix A.

## 2.4 Case studies and contribution analysis

Table 2.1 Case study selection was based on geographical distribution, volume of projects, sectors, and presence of EU twinning programme.

Country	Area	Volume of activities	Niche 1	Niche 2
Algeria	MENA	high	Hydrogen	Solar
Colombia	Latin America	high	Deforestation	Offshore wind
Indonesia	Asia	high	Solar	Offshore wind
South Africa	Southern Africa	high	Just Energy Transition (GH2)	Just Energy Transition (Grootvlei)

Source: SEO Amsterdam Economics.

The evaluation team selected four case studies for in-depth assessment, together with the CERF MEL advisors: **Algeria, Colombia, Indonesia, and South Africa**. The selection was based upon the following principles: on a) ensuring as much as possible representativeness of the list of countries and niches and b) maximising learning. Specifically, the indicators used are as follows (Table 2.1):

- **Geographical distribution:** the selection should ensure sufficient representation of regions.
- **Volume of activities:** all selected countries should have a substantial number of activities, to ensure that enough information can be gathered (learning).<sup>11</sup>
- **Sector (Niches):** at least four among the seven represented sectors.

The evaluators applied the following steps for the implementation of the four case studies:

1. **Desk review:** the evaluators assessed the CERF Light Intervention Strategies, reflexive monitoring sheets and reports about the relevant sector(s) in country and the activity reports of CERF.
2. **Development of intervention logics** (causal pathways), linking the relevant activities, and observed and expected outcomes in each of the four countries.

<sup>11</sup> The volume of activities is based on an estimation made by CERF programme coordinators.



3. **In depth-interviews with the CERF country advisors.** The interviews covered topics such as the activities, the developed intervention logic, a review of the completed reflexive monitoring sheets and potential indicators, and a discussion of potential achievements (both completed and expected).
4. **In-depth interviews with the Embassy counterparts** of the CERF advisors. Desk review, interviews with CERF advisors and survey results served as a basis for preparing and conducting these interviews.
5. **In-depth interviews with other stakeholders** in the four countries (activity partners such as local governments, involved companies, as well as RVO staff from other programmes). A list of all interview partners can be found in Appendix A.
6. **Contribution analysis:** this analysis aimed to assess the contribution of CERF activities to achieved and expected outcomes, in relation to other contributions and external factors. In some case study countries CERF has been implementing activities parallel and in synergy with activities of combi-tracks (e.g. in South Africa). In this respect, the evaluation team assessed the contribution of CERF only, although a full separation of contribution was not always possible due to interdependencies among activities. We used the data sources of steps 1-5 to formulate and test the hypotheses of contribution. We explain the used contribution analysis methodology in more detail in Appendix B.
7. **Validation interviews:** the evaluation team conducted follow-up interviews with each advisor to validate the intervention logic as well as the main contribution findings for each case study.

## 2.5 Workshops

The evaluation team conducted two workshops:

1. **A MEL workshop on intervention logics (Theories of Change, ToC) and monitoring.** This workshop resulted in a proposal to adjust the CERF intervention framework (as presented in section 1.1) at the overall programme level, and a simplified intervention logic approach at country and niche level for the CERF advisors.
2. **A validation and recommendation action workshop (held on 14 October 2024).** In this workshop, the evaluation team presented the preliminary findings of the mid-term evaluation, gathered feedback or additional information on the findings, and worked with the CERF team on formulating actions to improve CERF's effectiveness in achieving outcomes. During the workshop, the evaluation team guided the CERF advisors to formulate actions for improving CERF effectiveness in the period until the end of the current phase (end of 2025).

### 3 Results

**This chapter presents the main findings of the evaluation by evaluation question: effectiveness, programmatic approach, programme design and transformative impact.** Each section reports findings for each of the (sub) evaluation questions, triangulating findings from all the sources (desk review, survey, interviews, and examples from the case studies). Not all sub questions have the same level of depth. This means that some questions required more analysis and details than others, and as a result, answers for some sub questions are more elaborate than for others.

#### 3.1 Effectiveness of CERF

CERF has so far been effective in raising awareness on climate mitigation as well as in leveraging Dutch expertise and connecting Dutch companies with partner countries for knowledge transfer and investment opportunities. However, this has not yet resulted in raising investments or changes at the policy level.

Table 3.1 Evaluation questions for effectiveness

Evaluation question 1	To what extent does the CERF programme contribute to raising climate mitigation ambitions and accelerating climate mitigation actions in target countries?
1.a	Is the programme on the right track to achieve its objectives and results as formulated in the Theory of Change? Are the CERF interventions, outputs and potential outcomes as observed in the mid-term evaluation relevant for achieving impacts in the near future?
1.b	Which programme elements currently run well, and which are lagging behind in meeting expected objectives and outcomes? How can the elements lagging behind improve for the remainder of the programme? Were there specific activities or sectors/tracks in which the programme was more effective? What actions can be taken in sectors where the programme was less effective?

In this section, we first present an overview of activities and results in the CERF A-countries and corresponding sectors. Afterwards, we delve into the effectiveness of the three main pathways of change and analyse CERF's contribution to the observed and expected results in the four case study countries.

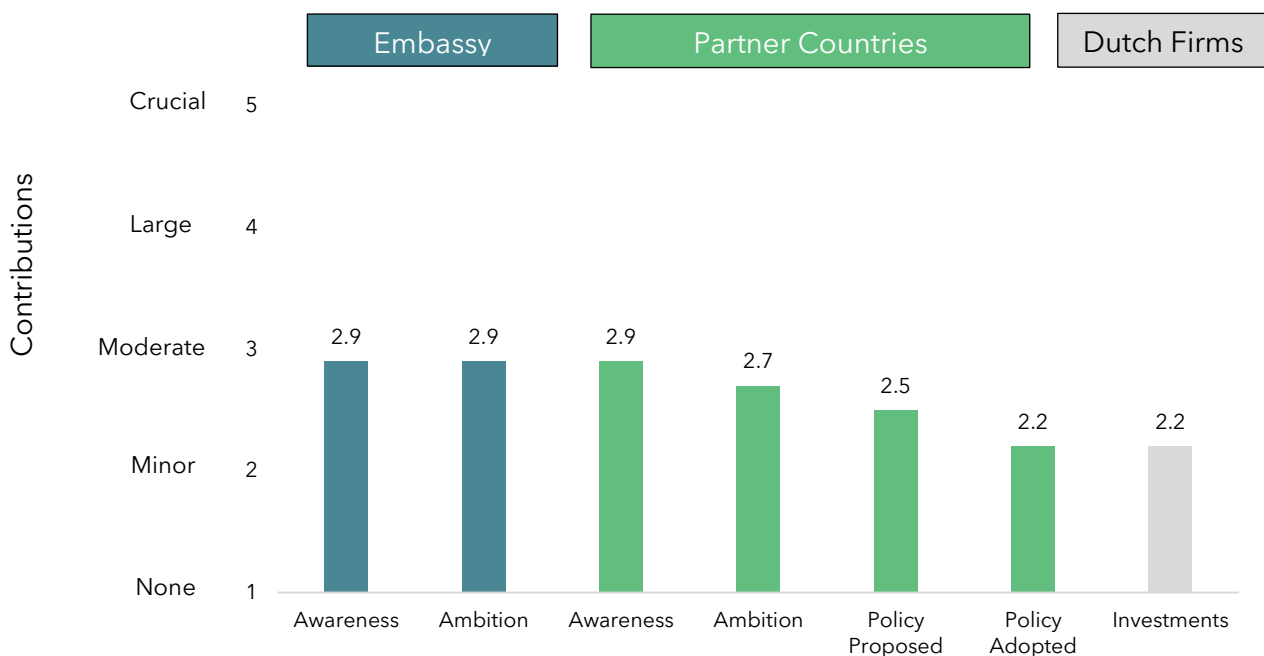
##### 3.1.1 Overall CERF effectiveness

**CERF has been mostly effective in raising awareness on climate mitigation and environmental issues, as well as in leveraging Dutch expertise and connecting Dutch companies with partner countries, especially in “niches of niches”.** As the Embassies survey results shows in Figure 3.1, CERF was effective in raising awareness both at Embassies and in partner countries’ governments and private sector. It also connected Dutch companies with partner countries for knowledge transfer or to increase investment opportunities, especially in subsectors where Dutch companies have specific expertise, (“niches of niches”) for knowledge on offshore wind permits systems, regulatory frameworks for circular economy or solutions for aquifer thermal energy storage. Embassies specifically highlighted the added value of CERF in bringing in technical knowledge, through CERF’s domestic as well as

international network. The in-depth analysis of case study countries (section 3.1.2), and the review of documents for the other non-case study countries confirmed this finding.

**However, longer-term outcomes still lag behind.** The evaluators could not observe concrete involvement of Dutch and international financiers, and as investments happened in very few countries (e.g. Nigeria and Japan), at the time of the evaluation. Regarding results at the policy level, changes in laws and regulations take time to materialise and are not expected within the current phase of CERF. Nevertheless, the evaluation team could observe signs of change based on documents such as Memoranda of Understanding (MoUs) and work groups on regulatory frameworks. We analyse the signs of CERF’s contribution to long-term outcomes more in detail in section 3.4.

Figure 3.1 Embassies assessment of actual contribution of CERF in different areas indicate that CERF was so far most effective in raising awareness of the Embassies and partner countries.



Source: SEO Amsterdam Economics, based on survey responses.

**CERF activities and results vary among countries and tracks (see Table 3.2).** In about half of the countries CERF developed two tracks and designed and implemented activities in these tracks. In terms of results (outputs and outcomes resulting from CERF activities), countries can be divided into:

- countries where CERF already achieved the first outcomes: Japan (ATES), and Nigeria (Circular Economy);
- countries where CERF achieved some outputs, and might achieve outcomes by the end of the current phase: this group includes the majority of countries, including the case study countries Algeria, Colombia, Indonesia, and South Africa;
- countries where CERF tracks only recently started, such as Ivory Coast, Ghana, Senegal and Vietnam.

More details for the countries where tracks are fully developed are reported in the Factsheets Annex.

Table 3.2 CERF tracks, and corresponding results vary among countries.

Country	Track	Outputs	Outcomes
Algeria	Green Hydrogen & Solar energy	Green	Yellow
Bangladesh	Circular Economy in the Textile Sector (linked to combi-track)*	Green	Yellow
Colombia	Deforestation	Green	Yellow
	Offshore Wind	Green	Yellow
Egypt	Green Hydrogen	Green	Yellow
	Circular Economy (waste to value)	Yellow	Red
Ghana	Agroforestry	Yellow	Red
India	Green Hydrogen	Green	Yellow
	Green Ports*	Red	Red
Indonesia	Offshore Wind and Solar Energy	Green	Yellow
	Sustainable Rare Metals Extraction	Yellow	Yellow
Ivory Coast	CE in Horticulture (Cacao sector)	Red	Red
Japan	Aquifer Thermal Energy Storage (ATES)	Green	Green
	Circular Economy	Green	Yellow
Kenya	Energy Access	Green	Yellow
Morocco	Green Hydrogen	Green	Yellow
Nigeria	Circular Economy	Green	Green
	Solar Energy	Green	Yellow
Senegal	Waste-to-energy*	Yellow	Red
South Africa	Just Energy Transition (linked to GH2 and Grootvlei)	Green	Yellow
South Korea	Offshore Wind	Yellow	Yellow
	Green Hydrogen	Yellow	Red
Ukraine	Circular Economy	Yellow	Red
	Green Hydrogen	Red	Red
Vietnam	Critical Raw Materials	Yellow	Red

Source: SEO Amsterdam Economics, based on CERF's Light Intervention Strategies, reflexive monitoring sheets, overview of CERF tracks (and interviews with CERF advisors for selected countries). Where missing, information was complemented by the CERF team. Scale: red refers to no outputs (outcomes) achieved yet. Yellow refers to at least one output (outcome) foreseen by the end of the current phase. Green refers to at least one output (outcome) achieved by September 2024. Note: countries that have the same colours, might have achieved more results than others. Tracks marked with a \* are under development.

**In terms of sectors, CERF has developed tracks in green hydrogen - 6 countries - (despite various challenges, outlined in Box 3.1) followed by circular economy and offshore wind, both 4 countries (see Table 3.2).**

- **CERF is implementing a significant number of activities in the offshore wind niche in India, Indonesia, Colombia and South Korea.** These activities led to outcomes regarding awareness raising. However, the value

added of CERF for outcomes under pathway 3 (promoting Dutch business and knowledge) is not always clear. Evaluators did not yet find clear outcomes in terms of investments or mobilised finance. For offshore wind both large Dutch companies in this sector (dredging firms, big engineering companies, etc.) and SMEs are targeted. However, the larger firms often have sufficient own resources and access and are often already supported by the Embassies economic departments.

- **The GH2 niche faces substantial uncertainties, particularly in partner countries where green electricity is currently scarce, and lobbying efforts are strong.** Infrastructure and GH2 facility development takes significant time (often more than 5 years). This can reduce the probability of achieving GH2 production in the next 2-5 years. Box 3.1 further outlines uncertainty and opportunities for CERF in the GH2 sector.
- **In some niches (such as Circular Economy) it is not clear whether and how much GHG emissions would be reduced,** due to lack of specific information on material flows and the CO2 footprint of these materials. In this context, CE has a more indirect link to climate mitigation and is also aiming at sustainability in a broader sense, such as resource efficiency and preventing waste pollution. This could then also be reflected in the overall CERF monitoring framework and for the intervention logic of CE related activities.

### Box 3.1 Uncertainties and opportunities around global GH2 economy.

#### How could CERF support GH2 in partner countries?

The EU's Fit for 55 policy sets a 2030 target for at least 42% of industrial hydrogen (mainly for fertiliser and steel industries) to come from renewable sources, aiming for 100% by 2050. In response, the Dutch government launched the Green Hydrogen Diplomacy initiative to position the Netherlands as a key GH2 hub for imports and exports, leveraging its expertise in maritime gas transport and existing infrastructure to lead in the Western European GH2 market.

**The role of GH2 in climate mitigation and achieving net zero emissions by 2050 is uncertain, with projections ranging from 2% to 23% of the global energy mix.** The key issue is whether GH2 can become cost-effective across sectors or be replaced by alternatives like electrification or synfuels. Currently, GH2 production costs €6-8/kg, much higher than blue hydrogen (€1/kg) and LNG. Market failures, such as supply-demand mismatches and uncertainties, drive prices up.

- On the supply side, global production is limited by technological barriers, with gigawatt-scale PEM electrolyzers expected by 2030. In addition, underinvestment persists due to risks, and many countries struggle to produce affordable renewable energy and ensure water availability.
- On the demand side, uncertainty exists over which sectors can adopt GH2 cost-effectively. If prices stay high, GH2 may be limited to fertilisers and high-temperature industries like steel, though even these may relocate to regions with cheaper GH2, further complicating the issue.

These uncertainties around the GH2 transition have two potential implications for CERF:

- **Establishing a viable GH2 economy requires many conditions, in addition to renewable energy production.** These are: a central location to minimise transport costs, which increase with distance; existing infrastructure to support production and distribution; and access to public or private investment for renewable energy projects and electrolyzers. Based on these factors, certain regions, such as North Africa, Latin America, and the Gulf States, appear better positioned to become GH2 hubs in the near term than other regions with high renewable potential. CERF could consider these regional dynamics when advising Embassies on their sector prioritisation.
- **The Dutch private sector has a comparative advantage in several niches of the GH2 economy, which can support GH2 production in CERF countries and promote Dutch private sector involvement (Pathway 3).** These include expertise in waterworks integrated with offshore wind, engineering for land-use and safety, port and pipeline infrastructure, desalination, and innovative PEM electrolyzers with circular designs. Additionally, the Netherlands is home to key suppliers of critical electrolyser components, such as membranes. In other areas, including Dutch private sector involvement in establishing export-import hubs through maritime routes via Dutch ports is less likely to take off considering that repurposing existing pipelines (between North Africa and Europe) is economically more cost-effective in the long run.

Source: IEA (2023), Global Hydrogen Review 2023, and IRENA (2022)

**Two examples of successes are the Aquifer Thermal Energy Storage (ATES) in Japan, and circular economy in Nigeria.** A common factor in these examples of successes is the showcasing of expertise and technologies

developed by Dutch SMEs in specific subsectors (“niches of niches”). Showcasing such expertise not only helps raise awareness, but also creates potential investment and trade opportunities for Dutch companies. Furthermore, Nigeria was one of the first examples of the success of the multi-stakeholder workshop approach, where CERF gathered different stakeholders to analyse needs and opportunities, create visibility and lay out steps to foster investments.

### 3.1.2 CERF’s contribution to results in case study countries

**In this section, we present detailed case study findings for Algeria, Colombia, South Africa, and Indonesia, organised by pathway.** These findings are based on a contribution analysis that examines CERF’s role in achieving anticipated outcomes in each case study country, as outlined in the Theory of Change (ToC) (see Table 3.1). The analysis evaluates CERF’s relative contributions to these outcomes compared to other external factors, using a scale of 1 to 5 (1= no contribution, 2= minor contribution, 3= moderate contribution, 4 = large contribution, 5 = crucial contribution). Appendix B provides a detailed contribution story for each case study country.

Table 3.3 Outcomes used for the contribution analysis of CERF interventions in case study countries.

Pathway	Short-term outcomes	Long-term outcomes
1: Policy development and ambition	<ul style="list-style-type: none"> <li>• Raised climate awareness and/or ambitions of the Dutch Embassy in partner country.</li> <li>• Raised climate awareness and/or ambitions of government in partner country.</li> </ul>	<ul style="list-style-type: none"> <li>• Increased capacity of government/private sector in partner country (e.g., knowledge or technical assistance tracks).</li> <li>• Increased policy proposed/adopted by government in partner country.</li> </ul>
2: Climate mitigation measures and actions		<ul style="list-style-type: none"> <li>• Increased partner country’s public sector climate measures and/or actions (e.g., increase in public spending).</li> <li>• Increased partner country’s private sector climate measures and/or action (e.g., private sector project in green transition).</li> </ul>
3: Dutch private sector investments	<ul style="list-style-type: none"> <li>• Raised climate ambition of Dutch private sector in partner country (e.g., MoUs signed).</li> <li>• Raised climate awareness of Dutch green private sector with partner country public/private sector (e.g., reputation of Dutch companies increased).</li> </ul>	<ul style="list-style-type: none"> <li>• Increased Dutch green private sector activity in partner country (e.g., green or brownfield investments).</li> </ul>

Source: SEO Amsterdam Economics, adapted from the original CERF’s intervention framework.

#### Pathway 1: Policy development and ambition (moderate to significant contributions)

**CERF had a large contribution (score 4) in advancing Dutch Embassies climate priorities by enhancing and “greening” existing programmes like combi-tracks, and RVO activities, despite many Embassies already having climate-focused ambitions and programmes.** CERF played a key role in elevating the Dutch Embassies climate priorities, notably in Algeria by promoting GH2, leading to increased Embassy engagement. In South Africa, CERF’s JETP study raised awareness of Dutch climate solutions, though operational challenges affected



collaboration. In Colombia, CERF helped maintain Embassies ambitions on deforestation and contributed to establishing two new focal sectors, despite initial miscommunication (and consequent delays) about the available budget.

**CERF had a moderate contribution (score 3) to raising climate awareness and ambitions in partner countries, despite the more decisive contribution of other development partners' activities.** In Algeria, CERF facilitated the advancement of the GH2 economy by supporting public media campaigns and identifying economic opportunities for the Algerian private sector, particularly in emerging sectors related to the GH2 transition (e.g., energy, water, infrastructure). However, German initiatives played a more decisive role in this transition, largely due to the longer-standing and better-funded presence of organizations like GIZ, which actively supported both public and private investments. In South Africa and Colombia, CERF raised (economic) awareness of ecological planning and offshore wind development, contributing to training programmes and a key MoU between Colombian and Dutch ministries. In Indonesia, CERF played contributed in raising awareness about green lithium mining by demonstrating the economic feasibility of adopting environmentally sustainable mining practices.

**CERF until now, had no contribution yet to policy changes (score 1-2), as these changes 1) take time to occur, and 2) are hindered by strong political and economic interests in the fossil fuel industry, among others.** However, stakeholders have expressed expectations of potential future contributions, particularly through strengthening other outcomes in this pathway, such as raising awareness and increasing capacity in partner countries (see section 3.4 on transformative impact).

### **Pathway 2: Climate mitigation measures and actions (modest contributions)**

**CERF made a moderate contribution to enhancing transition capacity (score 3) in the private sector and partner countries, mainly by facilitating matchmaking between Dutch knowledge institutions and partner countries.** In Algeria, CERF enhanced CEREF's (energy transition commission of the Prime Minister) capacity with Dutch expertise, particularly in communication, evaluation, and monitoring, while in South Africa and Algeria, CERF facilitated partnerships between Dutch knowledge institutes (e.g., TNO) and authorities to foster future capacity development. For instance, in Colombia that is an MoU signed to increase knowledge and experience exchange with Dutch companies and institutions.

**CERF had minor contribution to increasing climate measures and actions (score 2).** In Colombia, CERF played a pivotal role in creating the conditions for effective public sector action by directly facilitating the initiation and establishment of the OSW coordination platform, developed in collaboration with the Colombian government and various development partners. Moreover, CERF financed a pilot on the potentialities and limitations of radar technology for forest monitoring, However, evaluators did not identify such outcomes or potential hard investments or Letters of Intents from financiers, for other case study countries. At the same time, stakeholders acknowledge that CERF has the potential for future indirect contributions—such as through capacity development and raising awareness (Pathway 1), and through cooperation with Dutch private sector in partner countries (pathway 3), as explained in section 3.4.

### **Pathway 3: Dutch private sector investments (modest to major contributions)**

**CERF had a large contribution (score 4) in advancing Dutch private sector interests in partner countries, particularly through facilitating MoUs between Dutch private sector and partner country.** In Algeria and Colombia, CERF played a critical role in promoting and securing key MoUs (e.g. between the PoA and Algerian government), paving the way for future port infrastructure development and GH2 investments. Due to political instability and changes in government (priorities) in Algeria, the MoU with PoA has not been enacted. In all partner

countries, CERF has identified significant economic opportunities for the Dutch private sector in the green transition through market and scoping studies.

**CERF made a major contribution to enhancing the reputation of the Dutch private sector in partner countries, promoting the green transition (score 3).** In all case study countries, CERF conducted relevant market studies that were effective in identifying suitable companies for partner countries. However, CERF’s additionality is not always clear, as Dutch companies already have a strong reputation and a significant economic incentive to invest. In some countries (such as South Africa) the additionality of CERF for this pathway to combi-tracks is less clear. The JET-P study was initiated by CERF to enhance Dutch private sector investments, but interest is not yet shown.

**CERF had a minor contribution to increasing Dutch green investments in partner countries thus far (score 2).** In Colombia and Indonesia, Dutch companies have begun initiating pre-feasibility studies and launching initial pilot projects, such as SarVision in Colombia and Witteveen and Bosch in Indonesia. This increase in private sector activity can be attributed in part to CERF. However, in Algeria and South Africa the short-term outcomes in Pathway 3 have yet to materialise in real investments and until now CERF did not contribute to significant investments (or Lols with financiers). Furthermore, international competition is strong, particularly in GH2 and OSW.

### 3.2 Programmatic approach

The programmatic approach fits well with CERF’s role as “enabling tool” for identifying opportunities and connecting stakeholders and existing initiatives. In some cases, different objectives among different programmes generate trade-offs, such as striving for GHG emissions reduction versus promoting Dutch companies.

Table 3.4 Evaluation questions for programmatic approach

Evaluation question 2	Does the programmatic approach benefit the effectiveness, coherence and added value of activities and does this lead to a new way of working that facilitates systemic change?
2.a	Do all CERF stakeholders have the same understanding of the programmatic approach?
2.b	How does CERF interact with different (RVO) activities and interventions within each CERF (case study) country? What are the opportunities and bottlenecks of joining subsequent programmes of RVO and other organisations (other train carriages)?
2.c	Does the ‘treintjes approach’ (approach with combined instruments) strengthen the programme design and implementation?

**The programmatic approach is a “long-term and strategic arrangement of individual interventions” (“treintje”) that are linked to maximise complementarity and synergy, with the aim to achieve large-scale impacts.**<sup>12</sup> This way of working fits a context in which different programmes/initiatives aim to achieve partly

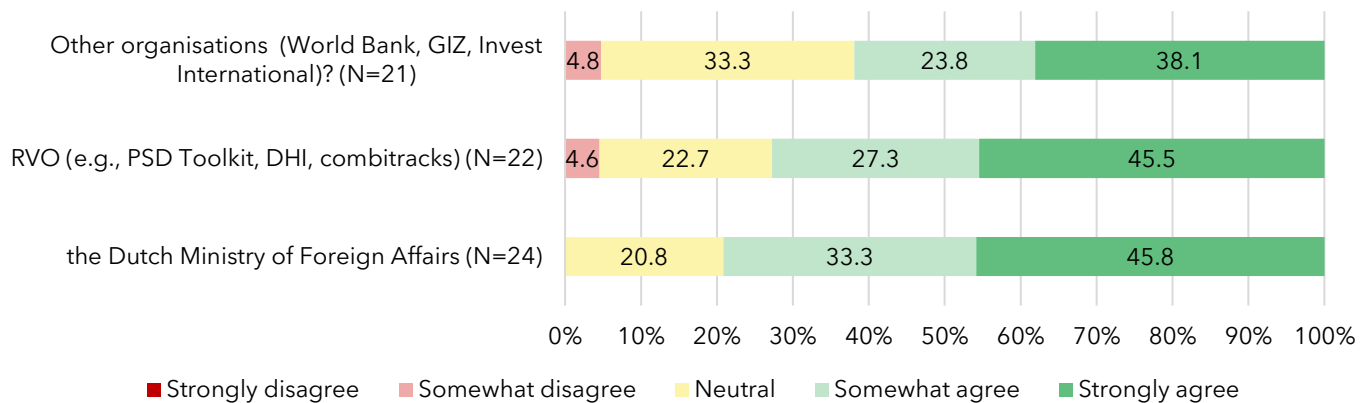
<sup>12</sup> This definition is based on the following definition, shared by the CERF MEL advisors: “A long-term and strategic arrangement of individual yet interlinked projects/interventions aimed at achieving large-scale impacts, whereby coherence/complementarity/synergy is sought out in applying different instruments. It’s about strategically applying and strengthening interventions that are linked and complementary to each other to increase impact.”

overlapping objectives. It generally results in *added value* of CERF activities with respect to activities by other RVO programmes and funded by other development partners.

**Stakeholders within RVO consistently view CERF as one of the instruments that works together with other RVO instruments to help achieve each other’s goals, whereas stakeholders outside RVO have a different understanding.** Specifically, CERF staff speak of CERF as a “enabling tool”, that helps identify opportunities, connect the dots among stakeholders and various existing projects and initiatives, thereby accelerating climate action. Embassies are aware of the programmatic approach and CERF’s role, while other stakeholders often view RVO as one “box” (i.e. they do not distinguish among the different RVO programmes) in line with the programmatic approach. However, some Embassies and external stakeholders regard CERF as merely a source of funding, as a source of funding, as outlined by a small share of survey respondents and one case study

Figure 3.2 Survey respondents are generally positive about CERF alignment with activities by MFA, RVO and other partners, with respondents from B-countries being slightly more positive.

### CERF aligns activities with other activities funded by...



**CERF’s programmatic approach is coherent, especially within RVO and in relation with combi-tracks.** This result was highlighted both in the four case studies and in the Embassies survey (Figure 3.2). In all case study countries, there is regular alignment between PSD, BD coaches and CERF advisors, when there is a combi-track approach for that country. The CERF advisors, as well as the BD and PSD advisors interviewed consider the collaboration between CERF, PSD, and BD fruitful. This holds true especially in countries where CERF tracks partly overlap (or are part of) combi-tracks. For example, in Colombia, an improved forest monitoring will also benefit combi-tracks, which is focusing on the development of sustainable production for coffee and avocado; and improved forest monitoring is in line with the need of local producers to comply with deforestation regulations. In Algeria, synergies are exploited with CERF focussing on thematic areas such as climate and energy, and the PSD coach collaborating closely with the Embassy and has a strong network among Dutch companies.

**However, different objectives among different RVO programmes might give rise to trade-offs (e.g. involving Dutch companies vs striving for GHG emissions reduction).** In South Africa, although there is a clear *treintje* with combi-tracks, its objective to raise business potential for Dutch companies and ports (through fostering the production of Hydrogen, including port development and maritime transport) is problematic for the depletion of water reserves needed for the production of Hydrogen and given the high dependence on fossil fuels for electricity

and shortage of electricity.<sup>13</sup> CERF objective of “greening” the combi-track might potentially delay the process of hydrogen development. Here the objectives of the combi-track and CERF are partly conflicting and the trade-off is between a fast production of hydrogen versus a greener production of Hydrogen that takes longer.

**CERF also strives to join programmes by other organisations, making use of existing programmes and structures (e.g. roadmaps, twinning programmes).** Examples include the following:

- In Algeria, CERF aligns with GIZ activities (via the EU Twinning programme) aiming at developing Green Hydrogen production (also for investment purposes).
- In Colombia, CERF is focussing on port development, and capacity development of officials from the Government of Colombia, in line with the WB RoadMap for OSW in Colombia; and is looking at other initiatives on forest preservation in Colombia. One example is how the CERF OW strategy in Colombia feeds into the WB roadmap, in line with the WB roadmap.
- In Indonesia, CERF supported Dutch bid (including public and private partners) for the EU GGI initiative, which focuses on enhancing the EU-NL green partnership with Indonesia.

**Despite this cooperation, CERF has not yet managed to attract funding by other Dutch or international investors, partly due to CERF’s small budgets.** CERF’s budget is not intended for major investments. In at least two countries, CERF’s envisaged projects could not take off due to insufficient budgets. For this reason, CERF needs support from other Dutch funds (e.g. from FMO, Invest International) or other international donors. However, the evaluation team did not find concrete involvements of such investors yet in case study countries or other countries. However, there are preliminary engagements with possibilities for investments in Algeria and Colombia. For example, in Colombia, CERF is planning to show the results of the pilot project on forest monitoring at the Biodiversity COP, where various potential financiers will be present.

### 3.3 Programme design

Flexibility ensures good collaboration with embassies and a wide variety of activities, though limited by contained budgets. The reflexive monitoring approach fosters learning but did not initially provide a clear overview of activities and progresses at programme level. Gender guidelines have only recently been included in programme design.

Table 3.5 Evaluation questions for programme design

Evaluation question 3	How does the programme design (flexible set up, role division, niche, and country focus) affect the efficiency and effectiveness in practice?
3.a	What are the strong and weak points of the programme design?
3.b	How is the quality and effectiveness of the role division and collaboration between the Dutch Embassies and the CERF Advisors perceived?
3.c	How is reflexive monitoring adding value to the programme design and implementation and does it help with programme management (adapting the programme approach etc.)?

<sup>13</sup> Moreover, maritime transport of green hydrogen can result in more greenhouse emissions.

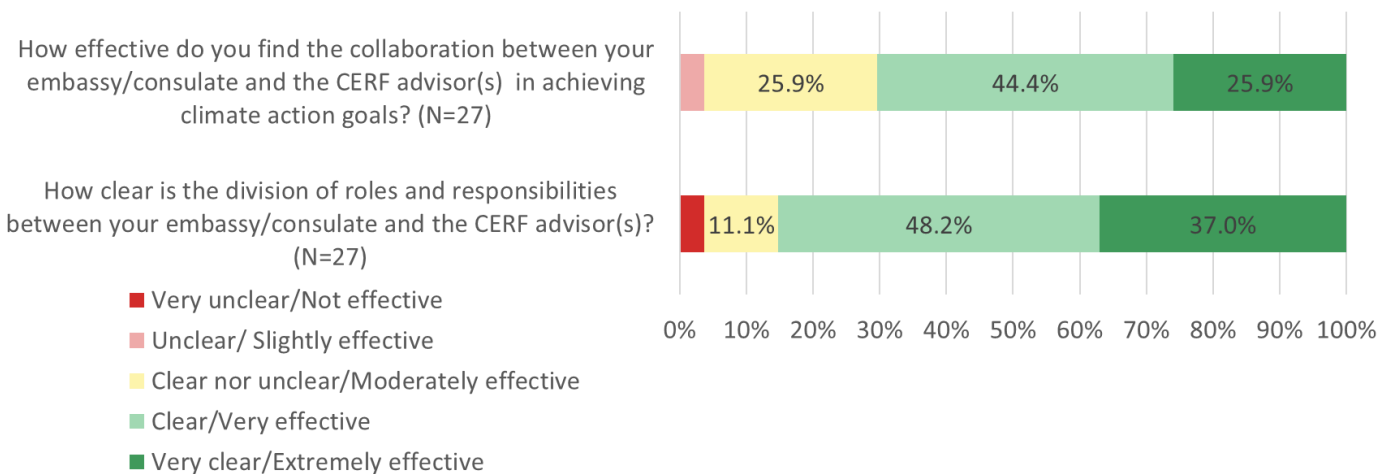
3.d

How is the gender dimension embedded in the programme design?

**Flexibility, demand drivenness and collaboration with Embassy and combi-tracks are strong points of programme design.** Activities are generally flexible, ensuring these can take place faster than with other competitors (e.g. GIZ), in line with the idea of CERF acting as an “enabler”. Being demand driven and aligning with Embassies Multi-annual Country Strategies (MACSs) also ensures ownership and buy-in by the Embassy. Finally, close collaboration with combi-tracks often helps maximise synergies (see also section 3.2 on programmatic approach).

**Collaboration between Embassies and CERF advisors is generally deemed positive both by the Embassy (see Figure 3.3) and the advisors, although it is in a small part of cases hindered by lack of clarity on CERF’s role or capacity constraints.** Embassies view CERF advisors as very helpful (both by case study interviews and survey responses). Their expertise and connections are valued, especially in countries where advisors’ expertise align with the chosen niches. Nevertheless, some survey respondents, as well as interviewees, indicated that collaboration is hindered by lack of clarity on CERF’s role (e.g. on budget that can be provided by CERF), capacity constraints at the Embassy, and occasionally an excessive amount of people involved on RVO’s side (although this is relevant only when combi-tracks are involved).<sup>14</sup> In addition, usual turnover both within CERF and at the Embassies side further contributes to unclarity in the collaboration between CERF advisors and the Embassy.

Figure 3.3 Embassy respondents are generally positive about collaboration and division of roles with CERF advisors, with a few exceptions.



Source: SEO Amsterdam Economics, based on Embassies survey responses.

**Light Intervention Strategies (LISs) are another strong point of programme design, as they help maintain a clear focus on objectives, although they are regarded by many stakeholders as heavy.** LISs help define objectives, outline the necessary strategy to achieve them (e.g. which stakeholders to approach, what steps to take) and maintain focus on the original goals. Nevertheless, many Embassy representatives and CERF advisors still see

<sup>14</sup> The lack of clarity in CERF’s role is partly due to the change in CERF mandate from climate mitigation only, to a broader mandate that includes climate adaptation, biodiversity, and greening within the combi-tracks.

them as quite “heavy”, due to the time required to write them. Despite this, risk assessments sometimes lack elaboration and could be updated more often to reflect recent developments.

**However, the flexible design results in missed opportunities, as being demand driven (bottom-up) comes at the expense of a lack of more top-down strategy on niche and country focus, as well as donor engagement.**

CERF does not yet have an overall programme strategy on which niches and countries to focus on, as well as on synergies within countries, between countries and with other climate funds. For example, leveraging synergies would mean aligning a country's niche in green hydrogen with another niche in renewables, as green hydrogen production requires green electricity; however, this alignment is not always present. A central CERF strategy on stakeholder and donor engagement (Development Partners in climate finance), is also lacking. This results in involvement of investors (e.g. Invest International or other Dutch or international funds) lagging behind. In this respect, the “treintje” approach is currently not used to its full potential.

**Being demand driven might also give rise to trade-offs, due to Dutch interests.** In the previous section we mentioned trade-offs with objectives of other programmes (e.g. combi-tracks); however, examples of trade-offs exist even when other RVO programmes are not involved. In Algeria, repurposing existing pipelines for green hydrogen export is the most cost-effective strategy to advance the GH2 economy and reduce global CO2 emissions. However, relying on pipelines reduces the need for maritime routes, thereby diminishing the role of Dutch ports, such as the Port of Amsterdam. Another example is Indonesia: promoting sustainable lithium mining in Indonesia is relevant to securing rare metal supplies and supporting the Netherlands' economic security, but it may not represent the most impactful opportunity to enhance overall sustainability efforts in Indonesia.

**A weakness of the programme design is the limited possible range of activities also related to limitations to the maximum budgets per partner country.** As mentioned in the previous section, CERF faces limitations in project generation activities, as well as in donor engagements. Climate finance studies show that significant amount of funds is available, but there is a lack of proper developed bankable climate projects.<sup>15</sup> In this respect CERF could facilitate early stage project identification and generation studies. But often these early-stage project generation activities need funding over 40,000 euros.

**Another weak point of the design is the absence of a general training programme for CERF advisors.** Case study interviews, as well as interviews with CERF advisors for the factsheets and workshops highlighted that the pool of CERF advisors is quite diverse in terms of background and experience. While this could potentially be an asset, it is also important to ensure that all advisors are given a short training (“starter package”) where main requirements of the work are explained. Examples include core CERF mandate; role of the advisors; budget limitations; and basics on Embassies annual plans and MACSs. So far, CERF has adopted a “learning-on-the-job” approach, in addition to regular learning sessions (see section on reflexive monitoring).

### 3.3.2 Reflexive monitoring

**Reflexive monitoring in CERF mostly entails a) monitoring through reflexive monitoring sheets and b) learning sessions.** Reflexive monitoring is a monitoring framework aimed at learning, adaptability, and system innovation, with a participatory and system-focused approach. Reflexive monitoring allows to capture results often

---

<sup>15</sup> Examples of development partners with funds of project generation are Invest International (Develop to Build), RVO (Water as Leverage) and World Bank, EIB and GIZ (City Climate Finance Gap Fund).



associated with policy influencing work, which are usually more qualitative and less tangible results than in more traditional sectors. In CERF, this encompasses reflexive monitoring sheets (excel) and learning sessions. Reflexive monitoring sheets, for each country, consist of a monitoring of each activity, output, and outcome, by linking each activity to strategic learning questions and next steps in the process towards reaching long-term impact. They aim to serve not only as a monitoring tool, but also as a reflection tool for advisors, thinking how each activity fits into their own strategy. Learning sessions are workshops where CERF advisors participatorily share lessons learned and bottlenecks; these take place once every two months. Evaluators participated in one of these learning sessions on 27 May 2024.

**While reflexive monitoring contributes to learn from early activities in the first years of CERF, in many cases sheets were seen by advisors as a burden.** Monitoring sheets facilitated the tracking of lessons learned from each activity, which were shared during the monthly learning sessions. However, the number of fields that the advisors needed to fill in in the reflexive monitoring sheets diluted the effectiveness of the process, as advisors were often seen this as a “to do”, rather than a tool helping them to think about the objectives (and intervention logic) they wanted to achieve with each activity. In at least two instances, sheets were explicitly filled in due to this mid-term evaluation.

**At the beginning of the evaluation period, monitoring sheets lacked an overview at the CERF aggregate level about the activities and results (outputs and outcomes, niches, and allocation of resources over the countries).** While the sheets contained specific information on the activities for each country (when filled in), there was no overview on activities, outputs, and outcomes at programme level. For example, it was unclear what type of activities were most frequent, which countries and sectors showed the most progress or the most bottlenecks, and whether CERF was so far more successful in some pathway compared to another. The absence of comprehensive progress monitoring has also hampered this mid-term evaluation to some extent, as evaluators lacked access to complete information to assess overall performance of the pathways over all CERF countries.

**Nevertheless, the CERF MEL team improved the reflexive monitoring sheets and the CERF results framework, based on early recommendations from the evaluators, enabling the overview of results at the programme level.** Following the first evaluation workshop on MEL, CERF revised its overall theory of change and results framework. Each country advisor is developing an intervention logic (basically a small ToC adapted to the country-specific objectives and activities), which helps the advisors taking concrete steps towards the stated objectives. Further, the CERF MEL advisors made output and outcome indicators more explicit in the results framework, to better guide CERF advisors in the understanding of the “intervention logic” for each country. Reflexive monitoring sheets were also updated, shifting focus to monitoring outputs and outcomes: the number of fields in reflexive monitoring sheets has been nearly halved; and the outputs/outcomes fields now have a selection menu; this should facilitate both 1) the advisors to fill in new information and 2) the CERF management to have overview at the programme level.

**In addition to the monitoring sheets, monthly learning sessions are a useful tool for reflection, but they do not always result in actionable steps for advisors.** Learning sessions are moments where the CERF advisors can share successes and bottlenecks encountered, so that other advisors can learn from each other. These are also a chance to understand what progresses were made in other countries. In 2024 the sessions have shifted from diving into on specific country cases to sessions structured around the key CERF strategic learning questions. However, after general sharing on lessons learned there is not always a moment to make actionable recommendations or a plan to implement these (formalise the actions or follow-up): CERF organised ad-hoc learning sessions for such follow up for a few selected topics (e.g. developing the monitoring sheets, and more recently around improving the

monitoring and building intervention logic). Evaluators therefore believe these sessions would benefit from a dedicated time, at the end of sessions, where CERF advisors could collectively come up with concrete actions to implement the lessons learned or tackle the bottlenecks identified. Main actions to identify bottlenecks and lessons learned could then become part of CERF guidelines for advisors, and a part of the advisors' "starter pack".

### 3.3.3 Gender

**General guidelines on how to have a gender lens in activities was introduced only in June 2024.** Gender guidance was lacking until early 2024, when CERF commissioned one of the advisors to develop the CERF gender guide, in collaboration with RVO gender experts. The advisor then trained other advisors on the basics of gender terminology and the importance of ensuring that CERF-financed activities are not gender blind. The gender guide contains a section on how to operationalise the gender-climate nexus in CERF's work; while the section contains many useful questions, it is not yet clear to what extent advisors will incorporate these questions into their activities.

**While no gender criteria in activity proposals was available until September 2024, CERF will implement such criteria as of January 2025.** Until the period of this mid-term evaluation, CERF introduced no markers on gender for the selection of activities. As a result, most activities did not have a gender lens, as the inclusion of gender was left up to the advisors (though encouraged). The CERF MEL team recently informed the evaluators that CERF introduced a box in the activity proposals, where the advisors should explain how they will include gender in the activity, based on the four pillars identified in the gender strategy. Such gender markers were also recommended by a significant number of Embassies in our survey. The gender box could then be further operationalised by including specific gender questions, e.g. on awareness (see recommendation 6).

**As a result, very few activities on gender took place so far, as case studies indicate.**

- In Colombia, gender was part of an initial project on deforestation, which was subsequently dismissed due to the budget exceeding the threshold for competitive assignment; gender was not structurally included in the OSW programme design, but some consideration to gender balance in events was considered.
- In Algeria, the twinning programme has gender equality objectives (e.g. Orange Corners is making an active effort to support female entrepreneurs).
- In South Africa, gender is considered, but not explicitly targeted in CERF activities. Grootvlei has options in terms of both direct women employment, e.g. horticulture, and (reducing obstacles for) indirect employment of the energy coal plant.

**Notwithstanding the few activities on gender, positive examples exist where women speakers led webinars in sectors traditionally dominated by men.** As some Embassies survey respondents pointed out, the presence of women in Dutch delegations to conferences impressed partner country's counterparts. This represents a small but meaningful step toward challenging established norms, and CERF could do more to ensure the presence of women in delegations as well as showcase such efforts in CERF newsletters or webinars.

**In the short term, CERF activities can be at most gender aware (as opposed to gender transformative).** The RVO gender guide indeed requires projects to be at minimum 'gender aware' and encourages to proactively seek opportunities for 'gender transformative' programmes and projects. However, gender transformative approaches usually require dedicated time and resources, which might be incompatible with the limited budget that each CERF activity has. Furthermore, in some countries, there might be a trade-off between pursuing climate mitigation goals and some gender approaches, such as having female participants as key stakeholders in meetings or policy discussions. In Algeria, for example, interviews highlighted a trade-off between these two when engaging in high

level policy discussions. As one moves up the policy hierarchy, these positions are increasingly dominated by men. In such contexts progress on gender might be slower and CERF should work on gender from a different angle, e.g. making sure CERF takes into account effects of their own activities on women.

**The evaluation team further explored examples of projects and activities including gender in the energy domain, as well as indicators on gender in energy programmes (see Gender Annex).** As agreed in the inception phase, the evaluation team identified best practices through analysing similar activities by other development partners, to provide useful examples of how CERF can embed gender in some of its activities. Moreover, the team analysed indicators which could potentially guide CERF advisors in selecting more gender-relevant activities, based on a gender-gap analysis (e.g. countries that (a) have higher gender gaps, and (b) have a higher chance to improve gender mainstreaming). Key recommendations for gender-sensitive indicators and activities to be taken into consideration by CERF going forward are reported in Section 4.2.

### 3.4 Transformative impact

CERF has a high likelihood to drive transformative impact through climate diplomacy, despite challenges in contributing to the phase-out of polluting sectors through climate diplomacy. CERF has a lower expected contribution to promoting direct climate action in partner countries.

Table 3.6 Evaluation question for transformative impact

<u>Evaluation question 4</u>	<b>What are the expected long-term transformative effects of the interventions, based on what has been achieved thus far?</b>
<b>4.a</b>	Do the Light Intervention Strategies sufficiently contribute to systems change? What adaptations are needed to improve this? How do CERF interventions fit within an understanding of systems change and pathways of change?
<b>4.b</b>	What are the transformative effects of the interventions (positive/negative, intended/unintended)?

**In the case study countries, the LISs effectively focus on fostering new sectors.**<sup>16</sup> The LISs are strategically positioned to identify potential "winners" during this transitional phase, an area in which the Netherlands brings significant expertise and where partner countries may have comparative advantages. Most activities concentrate on experimenting with and accelerating the growth of new green industries, while focussing less on institutionalisation. In Indonesia, for instance, the LIS allows for rapid pivoting to alternative sectors or niches if initial results prove less promising, supporting the natural dynamics of systems change and creative destruction.

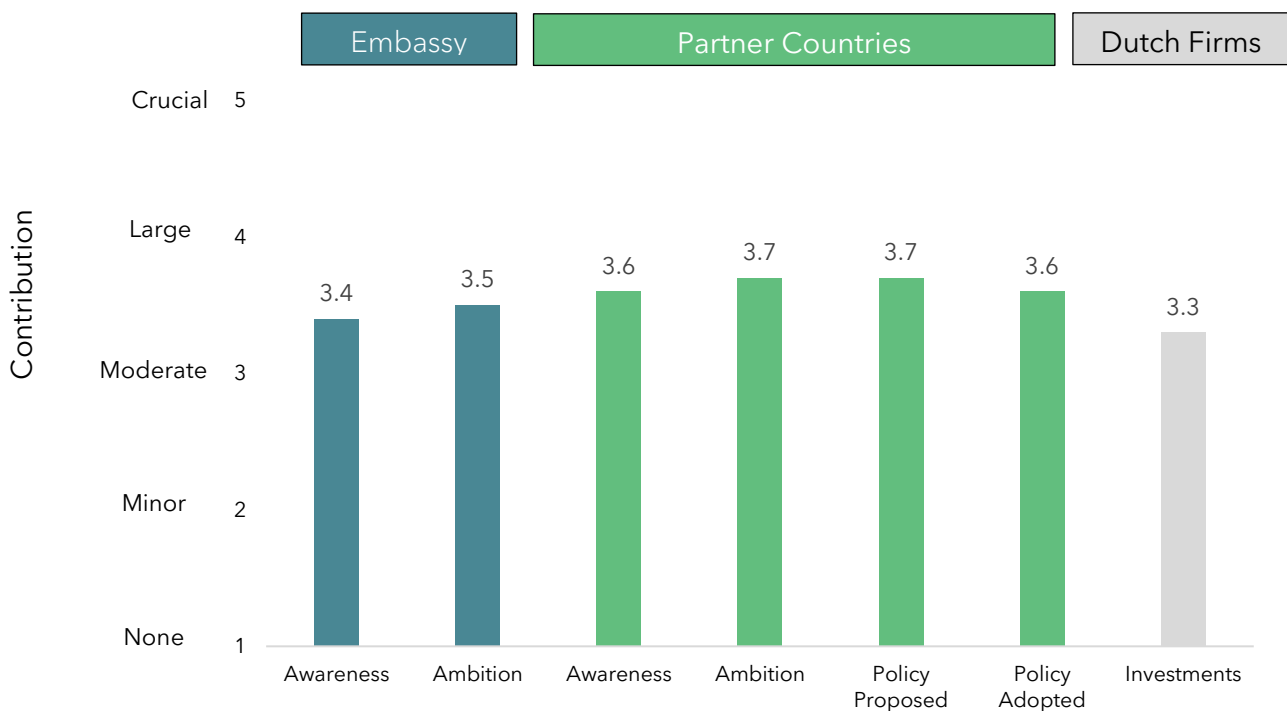
**However, CERF’s approach is less engaged with the breakdown of established industries or curbing the influence of polluting sectors.** According to the Drift's X-curve framework for system change, the focus of interventions should be both on building up new sectors as well as dismantling the old, polluting, sectors. One of

<sup>16</sup> The idea within the X-curve framework of CERF support to breaking down existing fossil fuel sectors could be regarded as rather ambitious given the character and size (budgets) of CERF activities. Existing fossil fuel industries have often large resources and lobby power.

the key bottlenecks for green growth acceleration lies in the powerful lobbies of existing industries. For instance, both Indonesia and Algeria have robust oil and gas lobbies with deep political ties. The LISs are currently not strongly aligned with challenging these entrenched interests. Stakeholders have suggested that CERF could do more to showcase the economic benefits of a green transition compared to the status quo, possibly through targeted studies emphasising the long-term gains of sustainable economic restructuring.

**Furthermore, in some countries the LISs face challenges regarding their adaptability and relevance.** In some instances, the LISs appear to be overlooked or left unrefined over time, resulting in objectives becoming outdated and no longer aligned with evolving market conditions or policy priorities. This was specifically mentioned by interviewees regarding South Africa and recent floodings and the need for activities in the field of climate adaptation. Additionally, while designed as a “light” approach, some interventions have proven to be overly complex or intensive, undermining the flexibility intended for quick adaptation. This discrepancy not only limits LIS's capacity to address emerging opportunities or obstacles but can also dilute its strategic focus on fostering agile, responsive sectoral transitions. The CERF team mentioned that for the tracks now under development, CERF aims to first carry out a multi-stakeholder workshop, following the successful example of Nigeria, and develop the LISs only after involving a diverse group of stakeholders.<sup>17</sup>

Figure 3.4 Embassies assessment of *expected* contribution of CERF in different areas indicate that CERF could have a moderate to large contribution also to new policy proposed and investments by Dutch companies.



Source: SEO Amsterdam Economics, based on survey responses.

<sup>17</sup> CERF is following this approach for the development of the waste-to-energy track in Senegal.

**Embassies expect CERF to have a moderate to large expected contribution to outcomes at the policy level, and investments from Dutch firms (Figure 3.4), although in many cases impact is limited or might take time to materialise.** Figure 3.1 showed that while Embassies representatives view CERF effective in raising investments for Dutch companies, promoting policy change is seen as limited. This is primarily attributed to the programme's small scale, short duration of activities and the time required for its actions to have a tangible impact. When asked about *expected* contribution to long term results, however, they deemed it significant, especially in accelerating policy changes within partner countries and the adoption and implementation of green policies. Nevertheless, some respondents highlighted how, despite being able to change some local government regulation, CERF is not able to change the discourse on climate change ambition in large countries, as CERF is a small intervention. More detailed survey results are presented in the Survey Annex.

### 3.4.1 Expected contribution to long-term outcomes in case study countries

**In this section, we report the likelihood of CERF's contribution to transformative impacts for each pathway in the four case study countries.** We rate the likelihood of contribution on a scale of 1-5, as in the case of the effectiveness questions. Additionally, we include brief illustrative examples from the case studies to substantiate the assigned likelihood scores. We also highlight key factors that either support or challenge the expected outcomes. We then report more detailed contribution stories for each case study country in Appendix B.

**Stakeholders in case study countries perceive that CERF has a moderate to high likelihood to drive transformative impact through climate diplomacy (Pathway 1).** By fostering experimentation and accelerating the development of green sectors in partner countries, CERF's flexible climate diplomacy, particularly when focused on raising climate ambitions, significantly strengthens this potential. While the likelihood of CERF directly contributing to policy changes in case study countries is considered low, its adaptable, light-intervention strategy enables Embassies and partner countries to capitalise on emerging opportunities in complex contexts – that result from technological advancements or political shifts – through rapid assessments and robust networks. This approach promotes the experimentation and acceleration of green sectors in partner countries. Long-term partnerships with organisations like GIZ, WB, and the EU could further enhance CERF's effectiveness in this pathway. A strong example from OSW in Colombia showed that the assistance to government partners (based on very specific focal topics) resulted in increased sector coordination. This will likely have a positive effect on the speed of implementation of Colombia's OSW agenda and the WB supported OSW roadmap. In addition, the increased momentum seems to have been noticed by government counterparts, further increasing the position of the Embassy and the effectiveness of climate diplomacy efforts.

**Furthermore, through climate diplomacy, stakeholders in case study countries expect CERF to have a high likelihood of contributing to the institutionalisation of green transformation.** For example, its support in Colombia with the WB OSW roadmap and Algeria's CEREF highlights how CERF strengthens national capacities. By fostering climate diplomacy, CERF increases the likelihood that it will indirectly promote climate action in the future. The case study results show that CERF can contribute to two forms of institutionalisation:

- Promote the institutionalisation of a supportive enabling environment for green sectors through targeted capacity development.
- Facilitate the institutionalisation and formalisation of the Dutch position through roundtables and working groups aimed at introducing Dutch climate solutions in partner countries.

**At the same time, in the case study countries, CERF encounters significant challenges in contributing to the phase-out of polluting sectors through climate diplomacy.** While its activities often focus on fostering new, greener niches, they are less equipped to directly address the phasing out of polluting industries. This limitation is compounded by strong opposition from entrenched economic and political interests within these sectors, which constrains CERF's overall impact. Moreover, climate diplomacy efforts tend to prioritise other areas, leaving these deeply rooted interests largely unchallenged, further limiting CERF's ability to drive transformative change.

**CERF's expected contribution to promoting direct climate action in partner countries (Pathway 2) has a low to moderate likelihood of success, with a score of 3.** Given the limited budget and scope of CERF, the likelihood of direct contributions to GHG emission reduction through large investments is low. However, CERF indirectly supports this pathway by exerting influence through Pathway 1 or driving transformative impacts through proof-of-concept projects such as Grootvlei - which demonstrates alternative approaches to coal-dependent industries in South Africa - and pilot projects such as radar forest monitoring in Colombia. Additionally, CERF plays an important role in fostering networking and partnerships between Dutch businesses and partner countries, thereby strengthening climate action and potentially encouraging future public and private investments in partner countries. However, CERF's added value is sometimes unclear, especially in large, pre-existing projects like Twinning or World Bank initiatives. Political instability, limited domestic funding, and a shortage of technical expertise further constrain the full realisation of CERF's potential impact to achieve climate action in partner countries.

**CERF faces challenges in significantly contributing to green private sector activities and investments (Pathway 3), with a low to medium likelihood of transformative impact in this area (Score 2-3).** In countries like South Africa and Algeria, reliance on fossil fuels and the economic uncertainty surrounding green hydrogen act as substantial barriers. Engaging more financiers could strengthen these initiatives, but political and economic instability in partner countries remains a risk, along with international competition in the green sector. Furthermore, Dutch companies might pursue projects like offshore wind and GH2 independently, reducing CERF's additionality. A positive example in this case is SarVision's forest monitoring technology in Colombia, where CERF had a major contribution in connecting SarVision with the Colombian government.

**For some niches, such as circular economy, the evaluation finds that the intervention logic of CERF actions towards climate mitigation impacts is not always straightforward.** Evaluators lacked clarity from the CERF CE activities and documents regarding the precise relations with specific sectors or specific material flows, important to define the link with. Therefore, it is difficult to assess if the intervention logic of some of these CE actions will work in relation to transformative impacts on GHG emission reduction (climate mitigation). More information on possible follow-up of CERF activities in specific sectors and materials could shed more light on this logic. Moreover, a broader formulation of CERF's objectives (thank GHG emission reduction alone, i.e. sustainability and waste prevention), would also help in defining the intervention logics for circular economy.

### Box 3.2 Uncertainties regarding climate mitigation effects of Circular Economy actions

#### Circular economy and climate mitigation

CERF is undertaking actions in the circular economy sector in a number of countries, specifically Nigeria, Japan, and Bangladesh. Circular Economy aims at a more efficient use of resources. Materials management is estimated to represent 67% of total global greenhouse gas (GHG) emissions (Ramboll, 2020). Due to economic growth, the use of material resources is growing, in turn increasing the greenhouse gas emissions associated with the extraction, processing, assembly, destruction and disposal of products and their materials. However, the relationship between prevention or re-use or recycling of materials and GHG emission reduction is not always straightforward and depends



on a number of factors (Ramboll, 2020). The methodology by Ramboll shows that the climate mitigation impacts of actions depend on several factors, namely:

- the scope of the relevant sector;
- the specific materials the sector uses and the GHG emission footprint;
- the effectiveness of the specific CE project to reduce the material flow (with GHG emission footprint) (i.e. the future actions or project as a result of CERF actions);
- substitution effects (between materials).

## 4 Conclusions and recommendations

CERF was most effective in raising awareness on climate mitigation and sustainability, due to its flexible design and connection with other instruments. For the future, CERF should focus on more achievable outcomes at the policy level, as well as a more systematic engagement with investors.

### 4.1 Synthesis and conclusions

The evaluators formulated the main conclusions and recommendations and discussed these with the CERF advisors in a validation workshop.

#### **Effectiveness:**

- **CERF has been effective in terms of achieving short-term outcomes in raising awareness and Dutch private sector prospects generation.** CERF was most effective in raising awareness on climate mitigation and sustainability topics, both at Embassies, and in partner countries. CERF has also been effective in leveraging the Dutch expertise, by connecting Dutch companies with partner countries for knowledge transfer, or by mobilising innovative expertise and investments by the Dutch private sector. Successes to mention are showcasing expertise and technologies of Dutch SMEs in specific “niches of niches” (subsectors), such as thermal energy storage in Japan, deforestation monitoring in Colombia and circular economy (waste to energy) in Nigeria. Showcasing such expertise not only helps raise awareness, but also creates potential investment and trade opportunities for Dutch companies.
- **Signs of effectiveness in terms of achieving longer-term outcomes are weaker thus far.** This is particularly the case regarding the pathway on raising policy ambitions and the pathway on promoting climate measures and investments in partner countries. Achieving actual policy change in terms of changing laws or regulations will take time and is not expected within CERF’s current phase. However, there are signs that less ambitious policy level outcomes (such as policy working groups) could be achieved within the current CERF phase. Furthermore, due to the timing of this mid-term evaluation, evaluators could not see outcomes related to project plans or investments by other funding programmes or investors, although these could be expected in the long run. The overall effectiveness of CERF varies by county and niche, depending also on personal relations and capacity of CERF advisors and Embassies (including technical niche know-how and network).

#### **Programmatic approach:**

- **CERF’s programmatic approach is broadly coherent, and effective at creating linkages (“treintjes”).** The latter are opportunities for CERF to initiate and support other activities or programmes within RVO and the Dutch Ministry of Foreign Affairs, particularly the combi-tracks. To a lesser extent there was coordination with other programmes or funds outside RVO, such as Invest International and FMO funds. External coherence could be strengthened by engaging more with other Dutch-funded programmes, development finance institutions, and NGOs.

#### **Programme design:**

- **CERF’s programme design is demand-driven and relevant for Dutch Embassies but could have more focus and depth regarding country and niche selection.** Dutch Embassy respondents particularly valued the

flexible set-up of the programme, combined with the technical know-how and sector specialisation of CERF advisors. However, the selection of countries and niches does not yet sufficiently take into account all country-specific risks, including location; available facilities for renewables; existing political commitments related to wind, solar or green hydrogen; or existing lobbies for fossil fuel-based energy production. CERF could therefore more strongly substantiate the selection of niches and countries, based on a deeper assessment of opportunities and risks.

- **In some cases, the evaluators observed a tension between achieving climate impacts versus Dutch private sector mobilisation** (for example related to initiatives of Embassies or combi-tracks). An example of such a tension is in the field of GH2 and its needs for infrastructure and facility development due to polluting emissions of port development, related activities, and maritime transport.
- **The CERF MEL framework has been improved, simplified and has been more targeted towards monitoring overall programme level achievements.** Reflexive monitoring contributed to learn from early activities in the first years of CERF, but an overview of the results and the programme level was initially not present. Based on early recommendations from the evaluators, the CERF MEL team streamlined the indicator framework enabling the overview of results at the programme level.
- **General guidelines on how to have a gender lens in activities were introduced only in June 2024.** While very few gender-focused activities took place so far, the recently developed CERF Gender Guide puts more emphasis on gender in CERF activities, and gender objectives started to become part of intake forms at the end of 2024. On the one hand, it should be recognised that CERF activities, especially in the short term, can be at most gender aware (as opposed to gender transformative). On the other hand, CERF could do more to explicitly promote gender mainstreaming in the longer run; develop more activities in selected countries with a gender gap; conduct more gender analysis for specific mitigation niches and consider offering specific skills-based capacity building training to women, particularly in areas that are traditionally dominated by men.

#### **Transformative impact:**

- **The potential to achieve transformative impact differs by country and will take substantial time.** It is unlikely that CERF will have substantial transformative impact in this first phase, due to the time required for significant policy changes to take effect, and due to the limited budget size and intermediating character of CERF. In some countries, such as Algeria and Colombia, there is potential for CERF to have a transformative impact, while in other countries, such as South Africa and Indonesia, this is more uncertain (due to existing barriers related to renewable energy starting points, vested interests, and bureaucracies). Specifically, CERF encounters significant challenges in contributing to the phase-out of polluting sectors through climate diplomacy. While its activities often focus on fostering new, greener niches, they are less equipped to directly address the phasing out of polluting industries.
- **There are more signs of expected impact through raising climate ambitions, than through investments.** By fostering experimentation and accelerating the development of green sectors in partner countries, CERF's flexible climate diplomacy, particularly when focused on raising climate ambitions, significantly strengthens the transformative potential of its activities. In contrast, the likelihood of direct contributions to GHG emission reduction through large investments is low, given the limited budget and scope of CERF. However, CERF indirectly supports this pathway by exerting influence through Pathway 1 or driving transformative impacts through proof-of-concept projects.

## 4.2 Overall recommendations

**The recommendations below follow from evaluation findings and conclusions and are formulated both for the remaining CERF period (until end of 2025) and for the long term.** These recommendations were discussed and validated with the CERF advisors in a validation and recommendation workshop. Within a session in the workshop a number of practical actions were formulated by the CERF advisors to accelerate outcomes in the three CERF pathways. These are discussed in paragraph 5.3.

### 4.2.1 Remaining CERF period

Based upon the evaluation findings and conclusions the evaluators provide the below recommendations for the remaining period of CERF (short-term until end of 2025) to accelerate achievement of the foreseen outcomes of the CERF pathways.

3. **Stay flexible but adapt towards achieving immediate outcomes in the remaining CERF period.** Adapt based on monitoring outcomes: consider shifting resources towards countries with high opportunities, needs for specific Dutch expertise and technologies, local commitment, and strong CERF advisor - Embassy relationships. In these cases, chances of success are high for the achievement of immediate to medium-term outcomes (especially in pathways 1 and 3). CERF might contemplate an exit strategy for niches or countries where opportunities are less obvious and the added value of CERF with combi-tracks is less clear.
4. **Build upon success stories to position the expertise and technologies of the Dutch private sector and knowledge institutes.** We advise to build upon the success stories of showcasing very specific Dutch expertise and technologies (as for example from Japan, Nigeria and Colombia). Some of these technologies might also be relevant for other countries with similar needs. The value added of CERF is highest for Dutch SMEs with innovative expertise and limited own resources for international exposure. Examples of such SMEs were seen in the activities in Japan, Nigeria, and Colombia.
5. **Focus on more achievable outcomes at policy level** in the short run in selected countries and for niches with low obstacles or threats. This could involve focussing on achievable short-term outcomes, such as establishment of platforms, working groups- or lobby for the appointment of government officials ('champions') for certain niches including wind, solar, Circular Economy, thermal energy storage).
6. **Improve investor and donor engagement for improving effectiveness regarding climate actions and attracting Dutch investments.** CERF could usefully develop an IFI and investor engagement strategy with a focus on the top development partners in climate finance that are most synergetic with CERF. Examples of such development partners active in climate action and project generation are Invest International, FMO, SNV, WWF, GIZ. We advise to appoint a CERF climate finance staff member for engagement with these investors and the link with Team Internationale Organisaties (within RVO).
7. **Update CERF's monitoring and impact framework with more realistic medium-term targets and a broader focus on climate adaptation and sustainability.** Due to the evolution of CERF activities over time, it is time to update and broaden the Theory of Change to include adaptation, biodiversity, and other broader sustainability goals. This view was shared by multiple survey respondents and interview partners and was confirmed by our analysis of circular economy activities. CERF advisors and coordinators also agreed that the CERF monitoring framework could be updated with more realistic medium-term outcome indicators, thereby better matching with the character and size of CERF interventions (especially regarding policy change ambitions).

8. **Recommendations to further improve gender awareness and inclusion (see also ):**

- a. **Further sharpen requirements on gender in activity proposals.** Recent progress was already made by including a box on gender in the recently updated intake form (effective from next year), where advisors explain how they will include gender in the activity, based on the four pillars identified in the gender strategy. This could be further developed by:
    1. ensuring that advisors explain the expected *impact* on gender in activity proposals along the three pillar of gender awareness mentioned in the CERF gender guide; Examples of this are: a) ensuring inclusion: explain how the activity ensures to “increase the visibility and recognition of female experts”; b) stimulating dialogue: explain which gender topics are covered in the activity c) challenging norms: how does the activity challenge “traditional gender norms that may limit women’s full participation in climate action?”<sup>18</sup>
    2. asking country advisors to propose a (non-zero) target for inclusion of women (or other excluded groups) in proposed activities;<sup>19</sup>
    3. asking gender advisors to consult on the gender considerations identified in the activity proposal and on the proposed targets (which should be country-specific, depending on existing gender gaps) and to review before the activity is approved.
  - b. **Further improve reporting on gender and inclusion.** In the most recent version of the monitoring sheet, there is now already a requirement to report on gender. This could be further broadened to include requirements to report on e.g. (1) share of female participants; (2) gender impact achieved by activity, based on the expected impact from the activity proposal (from recommendation a.1 above); (3) reasons why gender targets were not met. Specific indicators could be further developed by the CERF MEL team in collaboration with the RVO gender experts. A gender advisor should also review the reporting on gender results in the monitoring sheet.
  - c. **Make more use of gender awareness sessions and gender training in the design of activities**, and actively including men in these. For example, this could be useful for projects relating to access to (renewable) energy or employment in CERF niches, or to vulnerability of women to climate change (floods, droughts etc.). Including men in such sessions is particularly important, as this could foster a shift in their perspective and lead to positive changes in behaviour.
  - d. **Showcase positive examples of gender aware activities.** As suggested by some Embassies in the survey, CERF could showcase positive examples in order to recognise efforts, maximise learning and create demonstration effects for other Embassies. One example mentioned by the Embassies is a webinar where speakers were predominantly women in a traditionally male-dominated sector.
9. **Consider using CERF’s improved monitoring framework and its sharpened outcome indicators more broadly as a management information system** for strategic management purposes, for example showcasing successful achievements by the end of the current phase, a future potential ex-post evaluation after 2025, or helping to make future decisions regarding sectors for new CERF tracks.
10. **Enhance the efficiency of the Light Intervention Strategies (LIS) for Embassies by leveraging CERF or external resources more effectively.** Engaging external sectoral or country experts could provide valuable

<sup>18</sup> Further examples from the literature on gender in energy and climate policy include addressing bottlenecks for (renewable) energy access or (limited) participation of women in policy dialogues or platforms, women empowerment, or flood or drought impacts for specific communities, women, or other excluded groups.

<sup>19</sup> As noted in our gender annex, the use of quotas and balanced recruitment have proven to be effective in other programmes. However, since there can be large differences by country regarding the appropriate quota (depending on gender gaps), the use of generic quota or overall gender targets is not recommended. Rather these targets could be based on gender-gap country (and sector) indicators, as shown in the gender annex.

insights in this process. At the same time, conduct a more thorough assessment of potential bottlenecks and risks in the partner country and sector, potentially re-assessing identified bottlenecks after a period of 2-3 years.

## 4.2.2 Long term (after 2025)

The evaluation team formulated the following recommendations for the potential future phase of CERF, after 2025.

11. **Develop an internally coherent long-term strategy for country, niche, and investor engagement.** In the longer term, CERF could develop a more strategic approach towards country and niche selection aimed at maximising potential outcomes and impacts. This strategy could be based on an assessment of opportunities, risks, and Embassy capacities for both A and B countries. CERF could then focus on those countries and niches where opportunities are prevalent, where CERF has most added value, and where threats or bottlenecks are not significant (e.g. by re-assessing identified bottlenecks after a period of 2-3 years, and concentrating resources on countries and niches that have made progress in addressing these bottlenecks). Although this could imply a trade-off with the flexibility of the programme, it also provides a more effective and efficient basis to assess the requests of the Embassies.
12. **Appoint specific CERF advisors on climate adaptation (or any new sectors).** This will foster internal capacity and knowledge development within the CERF team of advisors and fits with the ongoing broadening of CERF activities.
13. **Expand the CERF toolbox of potential types of activities and related necessary budgets.** The strong point of CERF is the ability to stimulate awareness and to initiate new climate related approaches or technologies.
  - a. Aim to have more expert twinning projects of other development partners (Government to Government expertise exchange)
  - b. Allow CERF to also organise study visits or conferences outside the Netherlands (or partner country).
  - c. Consider playing a bigger role in early-stage climate project generation, e.g. through more early-stage project identification and feasibility studies.
  - d. Look for more synergies with project development facilities of Invest International (Develop to Build), DFCD (project generation by SNV and WWF), World Bank (Climate Finance Gap Fund) and Water as Leverage (RVO).
14. Longer-term recommendations on gender (see also Appendix C):
  - a. **Collect and analyse data on gender gaps to better identify where gender mainstreaming is most needed.** Based on such a gender gap analysis, which is described further in our Gender Annex (see also Appendix C) and which could be updated annually, CERF can do more to develop gender-related activities in countries that (a) have higher gender gaps, and (b) have a higher chance to improve gender mainstreaming, or even (c) have gender transformative effects. The gender gap analysis can also help to improve the country-specific gender targets proposed under our short-term recommendations.
  - b. **Conduct more gender analysis for specific mitigation niches.** Both the BEMO and the gender guide already state that “[f]or each mitigation niche, CERF will provide a general gender analysis to raise awareness of the role of women as driver and benefiter of climate mitigation actions in that specific niche (decentral vs. central; understand bottlenecks for female entrepreneurs, etc). This could also be combined with the gender-gap analysis outlined in the previous recommendation. The gender analysis should inform the light intervention strategies so that gender is more integrated in the country interventions.
  - c. **Consider offering specific skills-based capacity building training to women, particularly in areas that are traditionally dominated by men.** As our literature review shows, this can challenge social norms and empower women to become more active, valued members of their communities empower women to



become more active, valued members of their communities, while also fostering financial independence and greater inclusion.

# Literature

CERF (2021) Beleids Memorandum (activity appraisal document)

CERF (2022-2024), Light Intervention Strategies for A-countries.

CERF (2022-2024) Reflexive monitoring sheets

CERF (2022-2024) Project documents (ToRs, studies, presentations) for the case study countries.

CERF (2023-2024) Overview of countries and tracks

CERF (2023-2024) Learning loops aantekeningen (summaries of learning sessions)

CERF (2024) Country annual reports 2023

CERF (2024), Gender guide Climate Energy Response Facility, Practical interventions for project advisors

IEA (2023), Global Hydrogen Review, 2023, report by the International Energy Agency,

IRENA (2022), World Energy Transitions Outlook 2022, Report by the International Renewable Energy Agency.

Ramboll (2020), The decarbonisation benefits of sectoral circular economy actions. Study conducted for the European Environment Agency (EEA) by Ramboll, Fraunhofer ISI and the Ecologic Institute.

Van Mierlo et al (2010), Reflexive Monitoring in Action. A guide for monitoring system innovation projects

## Appendix A List of interview partners

General	Algeria	Colombia	Indonesia	South Africa
<ul style="list-style-type: none"> <li>• Sacha Slootheer, Jasmijn Snippe (bi-weekly engagements)</li> <li>• Andree Lozekoot (IGG)</li> <li>• Opeyemi Oriniowo (Embassy Nigeria)</li> <li>• Mijke van den Boogaard (CERF strategy)</li> <li>• Cecilia Costella (CERF strategy)</li> <li>• Sacha Slootheer, Jasmijn Snippe, Cecilia Costella, Karel Vieler (MEL framework)</li> <li>• Anneqah Tariq (IGG)</li> <li>• Martijn van Dijk (B-countries and gender)</li> <li>• Yvonne A'Campo (Japan ATEs)</li> <li>• Robin van der Plas (Egypt &amp; South Korea)</li> <li>• Jasmijn Vrooland (Bangladesh)</li> <li>• Mijke van den Boogaard (India)</li> <li>• Cecilia Costella (Vietnam)</li> <li>• Sacha Slootheer (gender)</li> </ul>	<ul style="list-style-type: none"> <li>• Thomas Olejniczak (CERF advisor) x3</li> <li>• Manon Janssen (Embassy)</li> <li>• Yamina Bennacer (Embassy)</li> <li>• Rabah Sellami (CEREFEE)</li> <li>• Mark Hoolwerf (Port of Amsterdam)</li> <li>• Bernd Schmidt (GIZ)</li> </ul>	<ul style="list-style-type: none"> <li>• Yvonne A'Campo (advisors) x 3</li> <li>• Nicolas Gonzalez, Leontine Crisson (Embassy - agro-forest)</li> <li>• Martijn Groen (Embassy OSW)</li> <li>• Marcela Quinones (SarVision)</li> <li>• Wolt Bodewes (PSD-Combi-tracks advisor)</li> <li>• Jose Manzano, Natalia Alaguna (Ministry of Mines and Energy)</li> </ul>	<ul style="list-style-type: none"> <li>• Jasmijn Vrooland (CERF advisor) x2</li> <li>• Robin van Boxtel (Embassy)</li> <li>• Robbert Groenen (Pondera)</li> <li>• Arjan Dekker (WitteveenBos)</li> <li>• Haqi Isa and H2 Team (MME)</li> </ul>	<ul style="list-style-type: none"> <li>• Anja Roymans (CERF advisor) x2</li> <li>• Anneeqah Tariq (Embassy / IGG)</li> <li>• Marlies den Boer (Embassy)</li> <li>• Gerben Kleinlebbink (Embassy)</li> <li>• Alwin Quispel (RVO)</li> </ul>

# Appendix B Case studies and contribution analysis

This Appendix provides a contribution analysis detailing observed outcomes and assessing the likelihood of future contributions for Algeria (Appendix B1), Colombia (Appendix B2), Indonesia (Appendix B3), and South Africa (Appendix B4). For each case study country, we present a reconstructed treintje, an evaluations of CERF contributions to observed outcomes, and the likelihood that CERF will present to expected (transformative) outcomes. The analysis employs the following scoring methodology:

- **1 = No actual contribution**
  - **Definition:** The outcome would have occurred exactly as it did, with or without the intervention (CERF). Alternatively, the outcome did not occur at all, regardless of the intervention.
  - **Characteristics** (at least one of those three is true):
    - There is no observable change attributable to the intervention.
    - The timeline, scope, and scale of the outcome remain unchanged.
    - The intervention was irrelevant or redundant.
- **2 = Minor actual contribution**
  - **Definition:** The intervention had a minimal effect on the outcome. The outcome might have been slightly different without the intervention, but the overall result would still have occurred.
  - **Characteristics** (at least one of those three is true):
    - Some evidence of influence by the intervention, but the change is small and possibly inconsequential.
    - The intervention may have supported existing processes or provided minor resources that were not critical.
    - The outcome's timeline or quality might have experienced slight improvements.
- **3 = Moderate actual contribution**
  - **Definition:** The intervention had a noticeable effect on the outcome. While the outcome might have occurred without the intervention, the intervention significantly enhanced the process, speed, or quality.
  - **Characteristics:**
    - The intervention is a contributing factor but not the sole reason for the outcome.
    - The outcome's scope, quality, or timeline is moderately improved due to the intervention.
    - There is clear evidence linking the intervention to the observed improvements.
- **4 = Large actual contribution**
  - **Definition:** The intervention played a major role in the outcome, either accelerating it, improving its quality significantly, or making the effect notably stronger. Without the intervention, the outcome would have been less impactful, slower, or of lower quality.
  - **Characteristics:**
    - The outcome is significantly better in quality, reach, or timeliness due to the intervention.
    - The intervention is identified as one of the key drivers behind the outcome.
    - There is strong evidence that the intervention added substantial value to the process or outcome.
- **5. Crucial actual contribution**
  - **Definition:** The outcome would not have occurred without the intervention. The intervention is essential and the primary driver of the outcome.
  - **Characteristics:**
    - The intervention is the determining factor in achieving the outcome.

- Without the intervention, the outcome would either not have occurred or would have been significantly delayed, diminished, or altered.
- There is overwhelming evidence that the outcome is directly attributable to the intervention.

**For scoring the likelihood of CERF contributing to expected transformative outcomes we use a similar score, but take into account that we measure the probability of having an effect rather than the effect size of the contribution.**

**The reliability of the contribution scores is based on the following scoring methodology:**

- 1 = One source
- 2 = Two sources - yet not completely coherent
- 3 = Three sources - yet not completely coherent
- 4 = Two sources - completely coherent
- 5 = Three sources - completely coherent

**Scoring for complementary and contradicting factors:**

- 1 = No actual contribution
- 2 = Minor actual contribution
- 3 = Moderate actual contribution
- 4 = Large actual contribution
- 5 = Crucial actual contribution

Country	Effectiveness (observed outcomes thus far)	Expected transformative impact	On track
<b>Algeria</b> Green hydrogen	<b>Strong-</b> CERF elevated GH2 as a priority for the Dutch Embassy in Algeria, leading to increased MFA engagement and involvement of the Dutch private sector in promoting GH2 solutions. CERF also raised awareness about Dutch GH2 solutions and contributed to GH2 capacity development of the Algerian authorities. However, achieving tangible outcomes has been difficult, in part due to political and bureaucratic delays.	<b>Probable</b> - CERF has a moderate likelihood to contribute to climate mitigation in Algeria by raising the government’s ambitions, promoting Dutch expertise in green hydrogen, though Algeria’s fossil fuel interests and uncertainties around GH2 influence progress.	
<b>Colombia</b> Offshore wind and deforestation	<b>Noticeable</b> - CERF contributed to Embassies increased ambition and sector development in OSW in the context of the World Bank’s OSW roadmap. It did so by identifying and supporting specific niches for Dutch added value; facilitating government-to-government cooperation through MoUs and training courses; and improving sector coordination. Regarding deforestation, CERF reinstated collaboration between Dutch radar company SarVision and the Colombian Ministry IDEAM, through a pilot project on forest monitoring.	<b>Probable</b> - In OSW, CERF has a moderate likelihood to accelerate climate mitigation through operationalising the WB OSW roadmap, increased coordination between stakeholders and enhancing MME capacity. In deforestation, CERF has raised awareness for large-scale radar monitoring technology, and is currently seeking partnerships with global investors, to support SarVision’s radar technology transfer to IDEAM, aiming for impactful, large-scale implementation in Colombia. Despite multiple uncertainties, (CERF contribution to) impact is high.	
<b>South Africa</b> Green hydrogen and Grootvlei	<b>Emerging</b> - CERF’s focus in SA is on a Just Energy Transition (JET), by pushing for and facilitating JET in the 2 combi-tracks green hydrogen and Grootvlei. Main CERF activities focus on a more sustainable green hydrogen	<b>Somewhat possible</b> - CERF’s own contribution to climate mitigation and greening in South Africa through (more sustainable) GH2 projects is expected to be highly uncertain due to several obstacles for G2H in SA. These are: the	

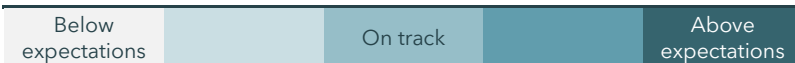
transition and to support phasing out coal-based electricity production in the Grootvlei area (a sustainable area transition). CERF played a relevant role in raising Embassies and local partners awareness of Dutch capabilities for a just and green transition in South Africa, aided by its JETP study. However, effectiveness in terms of expected outcomes (G2G, wetlands preservation and area plans) is hindered by coordination challenges (e.g., priority setting), lobbies and for G2H in SA low starting point of renewable energy production. For Grootvlei, CERF somewhat contributed to improving Dutch companies' visibility, ecological design awareness, resulting in a Letter of Interest with ESKOM.

dependency for success of a more environmentally sustainable G2G production on the combi-track, a strong fossil fuel lobby, a limited starting point of renewable electricity production (input for G2H) and the location disadvantage of SA for maritime transport and pipelines (exports of G2G). The support for ecological preservation and climate adaptation and mitigation through the Grootvlei coal transition shows more potential for impacts if the transition can develop as a proof of concept for transitioning other coal energy areas in SA.

**Indonesia**  
Multiple

**Emerging** - CERF somewhat enhanced Embassies positioning in the sustainable energy sector through studies and events. It played a minor role in raising awareness within the Indonesian government about Dutch technical solutions, identifying bottlenecks, and spurring early interest from Dutch companies in sustainable investments, yet policy impact and private sector engagement are still developing. CERF has given substance to the MoU which was signed between the Dutch Ministry of Economic Affairs and Climate and the Indonesian Ministry of Energy and Mineral resources. CERF has done this by organising the first Joint Working Group between the two parties and CERF. During the first Joint Working 4 topics were identified on which all parties agreed to cooperate. Moreover, various activities on those 4 topics were set up and financed by CERF.

**Possible** - CERF has some potential to support climate mitigation in OSW through improved stakeholder capacity and positioning Dutch companies for the energy transition, though contributions to sustainable lithium mining have limited transformative potential given cost and emissions impact constraints, despite some Dutch commercial interest.





# Appendix B.1 Algeria

Figure B.1 Reconstructed treintje Algeria

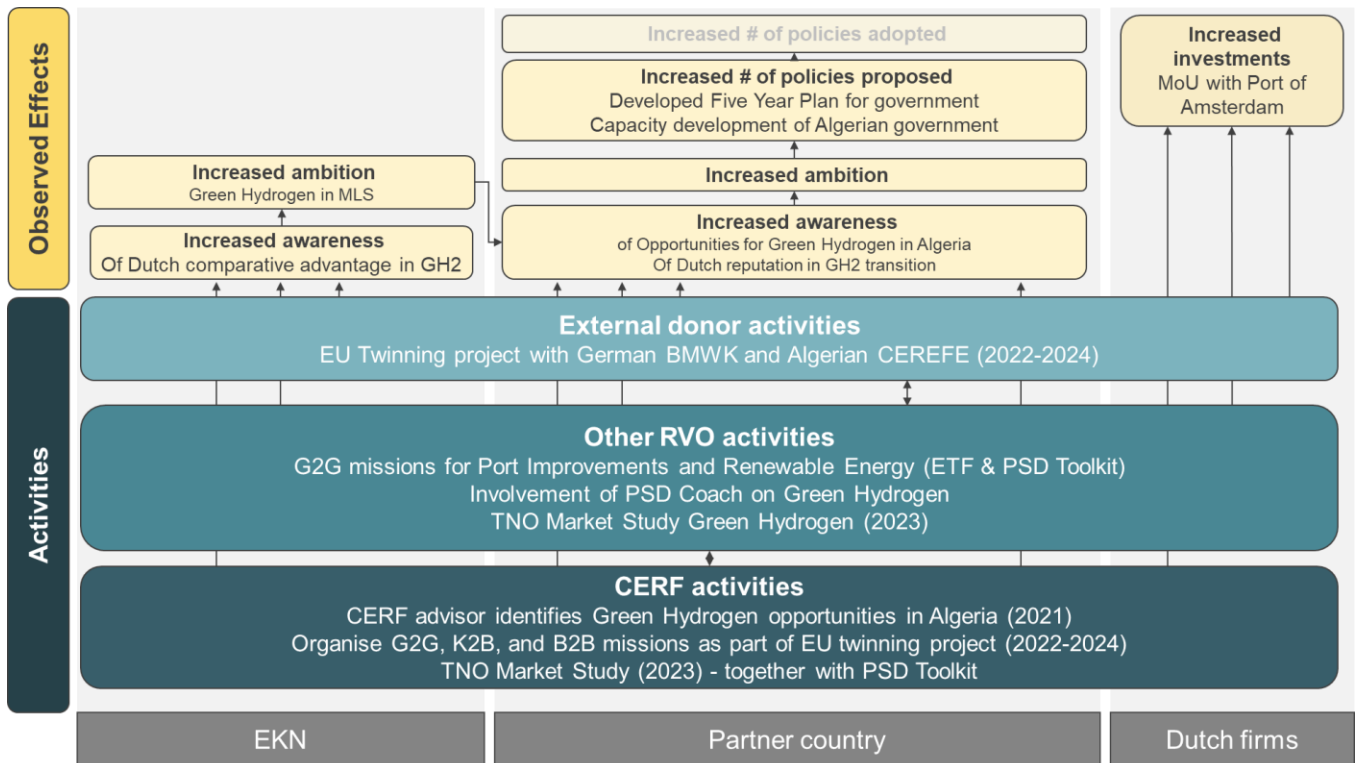



Table B.1 Contributions of CERF for observe (short-term) outcomes in Algeria.

Niche	Observed outcome in Algeria	Contribution score [1-5]	Explanation of contribution score	Reliability [1-5]	Other contributing factors [1-5]	Opposing/Contradicting factor [1-5]
GH2	Ambition the Embassy raised: Integrated ambitious climate goals in MLS	4	CERF made major contribution in elevating GH2 as a key priority for the Dutch Embassy in Algiers as part of their MACS/MLS. As a result, the Embassy increased its activities and involvement to promote GH2 (and Dutch solutions) in Algeria. Due to CERF, Algeria has become more important Algeria has gained increased significance on the MFA's agenda due to the contributions of CERF.	5	1. Dutch hydrogen diplomacy to promote GH2 export to NL: 3 2. Plan national du Climate Algeria to lower GHG emission by 22% in 2030: 5	1. Other (climate) priorities in Algeria that do not directly align with GH2, such as off-grid solar initiatives: 2.
	Awareness in partner country raised: Improved Dutch GH2 reputation in Algeria + communication in popular media outlets.	3	CERF noticeably contributed to raising awareness about GH2 potential in Algeria and the value of Dutch solutions. However, the scope and scale of German activities have been more decisive in shaping outcomes. CERF's contributions include: CERF has invited Algerians to WHS/trade missions to successfully make them aware of Dutch solutions and improved matchmaking with public and private Dutch entities. The Twinning project has launched multiple media campaigns in popular outlets to promote GH2 production in Algeria. TNO's mapping study has contributed to identifying opportunities for Algeria in GH2 transition.	3	1. Germany (GIZ) and Algeria have a strong, long-standing partnership (e.g., GIZ has office in Algeria) to promote GH2 production/export: 5. 2. Gov't hydrogen roadmap highlights GH2 export as key to economic growth:3	1. Significant economic and political interests currently embedded in the fossil fuel industries: Changing political interest have led to the cancellation of activities by the Algerian authorities. 5.
	Climate policy in partner country developed: Developed five-year plan for CEREFÉ (including capacity development)	4	As part of the twinning project, CERF made a significant contribution to the development of CEREFÉ's strategy, offering unique Dutch expertise (next to German expertise) to improve CEREFÉ's communication, evaluation, and monitoring capacity. Although GIZ plays a more significant role in promoting climate policy, the Dutch comparative advantage is that CERF activities are more flexible and fast.	5	1. Germany (GIZ) and Algeria have a strong, long-standing partnership to advance GH2 production/export: 5.	1. Significant economic and political interests currently embedded in the fossil fuel industries: 5 2. Limited expertise and knowledge in GH2 production and infrastructure currently hampers development.: 2

<p>Dutch green private sector activity increased: MoU between Algeria and Port of Amsterdam + identified potential leads for Dutch private sector involvement</p>	<p>3</p>	<p>While the initial efforts to align PoA with Algerian entities were led by the Embassy, CERF played a supporting but major role in maintaining and strengthening these relationships, particularly through multiple trade missions and during the WHS. However, the MoU has yet to be signed due to ongoing political resistance and bureaucratic delays in Algeria.</p>	<p>5</p>	<p>1. Developing GH2 routes is key priority for PoA: 5 2. Dutch comparative advantage in developing maritime hydrogen routes: 3</p>	<p>1. International competition for GH2 exports from Algeria (e.g., German, with SoutH2 pipeline project): 3 2. Competition with other EU ports for establishment of maritime infrastructure (Port of Rotterdam): 2 3. Political insecurity about Algerian interest in GH2: 4 4. Uncertainty around the future role of GH2 in the global energy mix: 3 5. Concerns about Algeria's capacity to produce GH2, particularly due to current limited renewable energy production: 3</p>
<p>Furthermore, CERF has played a key role in identifying potential opportunities for future Dutch-Algerian private sector cooperation as a result of TNO's mapping study. However, the tangible effects of these efforts have yet to materialise.</p>					

Table B.2 Likelihood of CERF's contributions for expected transformative outcomes in Algeria.

Niche	Expected outcomes in Algeria	Likelihood of Contribution CERF [1-5]	Explanation of contribution score	Reliability of evidence [1-5]	Other contributing factors	Contradicting factors
GH2	Partner countries' climate mitigation ambition raised (PW1)	3	CERF's role in enhancing the capacity of CEREFEE holds significant promise, particularly given that CEREFEE reports directly to the Prime Minister. As a key institution in Algeria, CEREFEE plays a crucial role in raising public awareness and driving national initiatives.	3	1. Germany (GIZ), along with Austria and Italy, and Algeria have a strong, long-standing partnership to advance and promote GH2 production/export (with bilateral hydrogen task force). Furthermore, Germany and Algeria have a close energy partnership since 2015.	1. Significant economic and political interests currently embedded in the fossil fuel industries (natural gas).
	Partner countries' climate mitigation actions accelerated (PW2 and 3)	2	While CERF has played a minor yet notable role in enhancing Algeria's potential for GH2 growth,	2	1. Algeria holds significant potential for cost-effective renewable energy production, particularly solar PV. The country has plans to reach 15-22 GW of	1. Concerns exist regarding Algeria's capacity to produce GH2, primarily due to its currently limited renewable energy output, which



particularly promoting Dutch solutions for maritime transport and electrolyser expertise (e.g., PoA, Gasunie, TNO), other factors appear more influential, both supporting and contradicting this trend. These include uncertainty surrounding green hydrogen and Algeria's ongoing economic interest in fossil fuels.

renewable energy capacity by 2035, positioning it as a key player in the global green hydrogen market.

2. Algeria possesses significant expertise in gas infrastructure, gained through its LNG production, which is highly relevant for the development and export of GH2
3. The European Union is projected to rely heavily on importing GH2 from non-EU countries, with an estimated demand of 10 million tons per year by 2030. This creates economic opportunities for Algeria to export GH2 (instead of LNG).

makes up less than 10% of the national energy mix. With domestic energy consumption peaking at 19.5 GW during the summer, the country will require a substantial surplus of renewable energy to support GH2 production while meeting local demand.

2. Strong uncertainty surrounds the future role of GH2 in the global energy mix, with concerns about the technical and economic feasibility of large-scale GH2 production and export, particularly via maritime routes.

## Appendix B.2 Colombia

Figure B.2 Reconstructed treintjes Colombia: OSW and deforestation

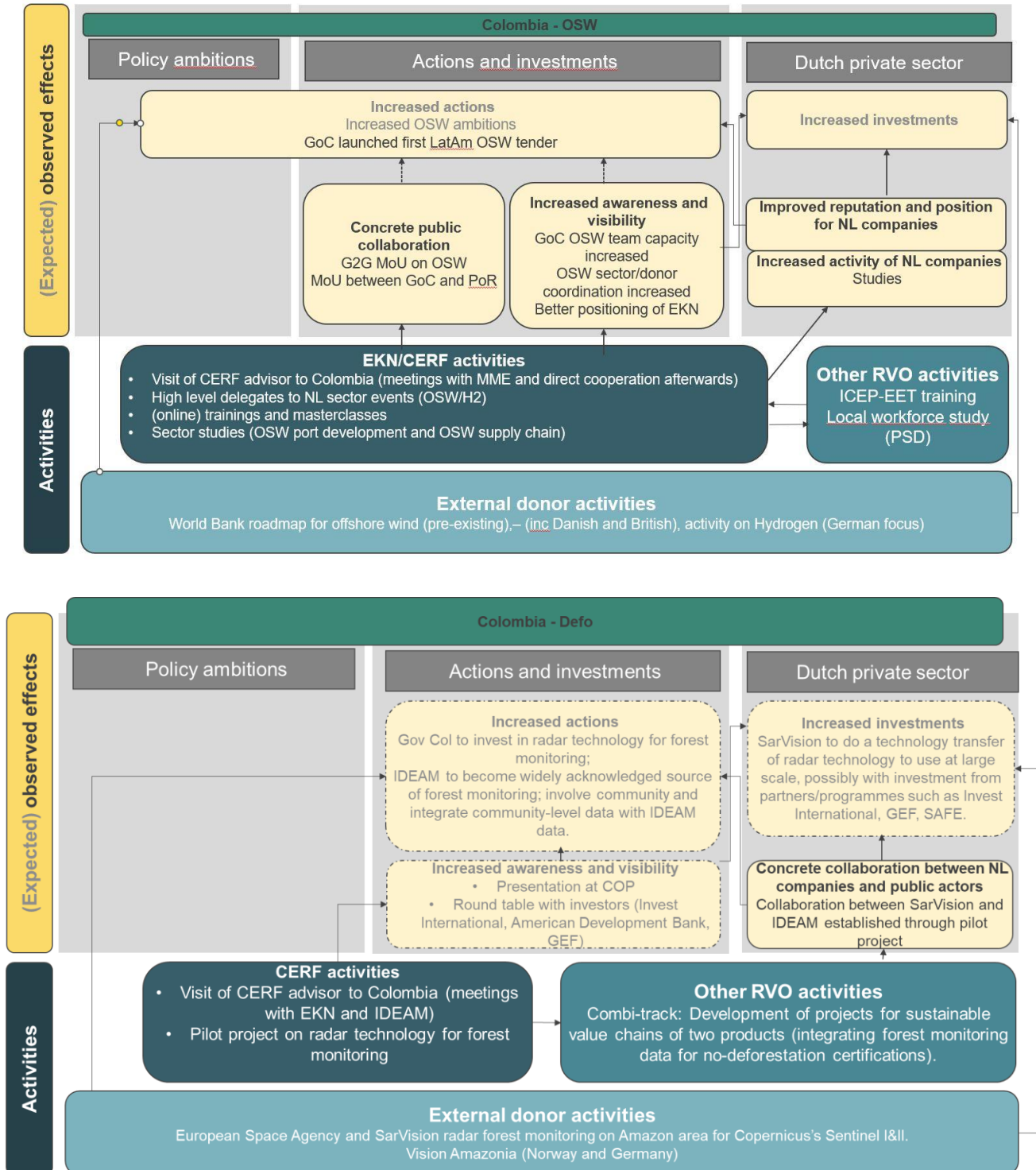


Table B.3 Contributions of CERF for observed (short-term) outcomes in Colombia.

Niche	Observed outcome in Colombia	Contribution CERF [1-5]	Explanation of contribution score	Reliability of evidence [1-5]	Other contributing factors [1-5]	Opposing/contradicting factor [1-5]
OSW	Increased ambition Embassy (PW1): Embassy initiated focus on OSW.	4	CERF contributed to the establishment of two new focal sectors (OSW and DEF) of the Embassy. For OSW, through CERF main subtopics were identified as: Port development/supply chain GoC human capacity development	5	1. Earlier ICEP/Combi-tracks attention 3	
	Increased ambition government (PW1): OSW: Improved sector capacity and coordination Signed G2G MoU	3	OSW training courses were offered to MME and other stakeholders. CERF supports several studies identified by MME as crucial for OSW development. MoU was signed between MME(Col) and MFA(NL). General energy sector coordination existed, but CERF initiated OSW specific coordination by MME with other development partners	4	1. Large WB study/masterplan on OSW 5 2. Other development partners (DK/UK) 4	1. Vested interest in fossil fuels 4 2. Staff mobility at MME and other institutions 3
	Increased investments (PW 3): Dutch companies position and reputation increased	2	Dutch companies have been introduced to local networks and some are taking up studies mentioned above. This has increased the position and reputation of Dutch OSW companies as well as their local networks.	4		1. Other countries/regions are more promising at the moment for Dutch OSW companies
Deforestation	Ambition Embassy raised (PW1): established contacts with IDEAM on forest monitoring	2	CERF's activities helped reinforce Embassies ambitions on deforestation, although Embassies ambitions were already part of the Embassies MACS before CERF. Ambitions on work with radar technology for forest monitoring remained high notwithstanding lack of initial clarity on the CERF which caused inefficiencies and frustration to Embassy and SarVision: first project (one year of work), was dismissed due to miscommunication on the role and funding capabilities of CERF.	5	1. Pre-existing priority of Embassy in MACS; 4	
	Concrete collaboration with Dutch companies (PW 3): Pilot project between SarVision and IDEAM on Forest monitoring	5	Collaboration between IDEAM and SarVision happened thanks to the work of CERF and Embassy, which is then the primary driver of this output. CERF was	5	1. SarVIsion project with ESA on monitoring forest in Amazon 5	1. Limited capacity on IDEAM's side



deemed crucial to reinstate contacts with IDEAM.

Table B.4 Likelihood of CERF's contributions for expected transformative outcomes in Colombia.

Niche	Expected outcome in Colombia	Likelihood of contribution CERF [1-5]	Explanation of contribution score	Reliability of evidence [1-5]	Other contributing factors	Contradicting factor
OSW	Increased action (PW 2)	2	CERF's role in operationalising the ambitious plans of the WB OSW roadmap and increasing MME capacity and ability to implement seem significant, but rather accelerating the process than raising the ambitions	3	WB OSW Roadmap	
Deforestation	Increased action (PW 2) - Large scale investments into radar technology for forest monitoring	3	CERF is planning to increase awareness about the importance and potentiality of radar technology in forest monitoring through presentation of the pilot project results to the biodiversity COP, and creating a round table with potential partner investors (such as Invest International, American Development Bank, Team Europe, the Global Environment Facility, as well as the Embassies of UK and Norway). IDEAM is interested in applying radar technology at large scale (although the evaluation team did not manage to directly interview sources from IDEAM): the pilot project financed by CERF is a crucial step in this direction, although other contributions are also crucial. In parallel to the technology transfer by IDEAM, CERF aims to engage local communities and NGOs that are monitoring data at the local level, to increase effectiveness, reliability, and acceptance of monitoring. However, there is not yet a concrete plan on how to do so.	4	1. New government that places high value on forest monitoring - 3 2. Copernicus by ESA (potential for making Colombia the data centre for the region, in terms of forest monitoring data) - 5 3. Initiatives funded by the government of Colombia and other external financiers (e.g. Vision Amazonia, with the contribute of Germany and Norway) aimed at forest protection - 3	1. Limited capacity (funds) on Colombian government side (medium) 2. Shift of policies of a potential new government (that might favour companies causing deforestation) 3. Limited government capacity (funds) 4. Changing political environment in Colombia
	Green private sector investments increased (PW 2)	5	SarVision has the objective to be present on a larger scale in Colombia	4	Same as for PW 2	Same as for PW 2



3) - Full technology transfer from the Dutch Company SarVision (see PW 2)

and in the region, after the knowledge transfer of the radar technology to IDEAM. Chances of success are still uncertain, but impact is high (high risk, high reward) and contribution of CERF is high. (see PW 2)

---

## Appendix B.3 Indonesia

Figure B.3 Reconstructed treintje Indonesia for OSW and Solar PV

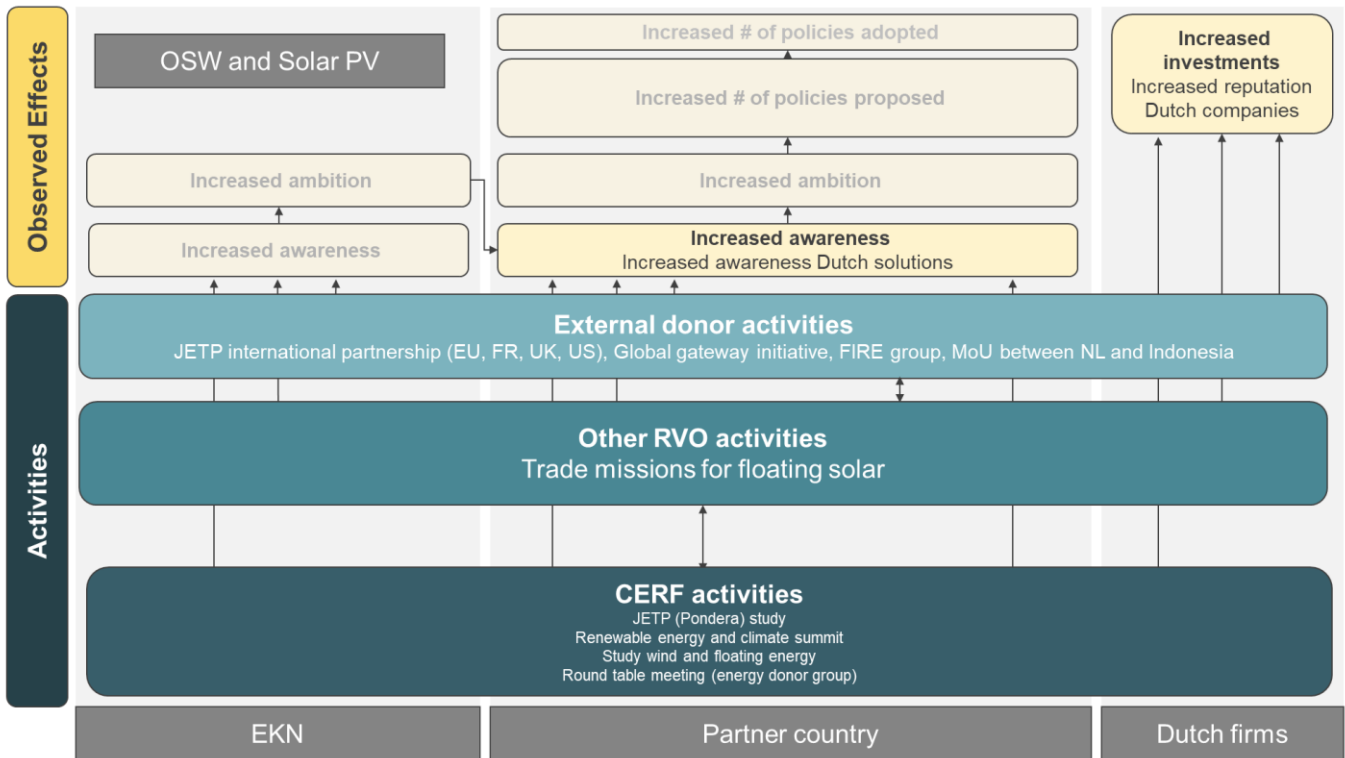


Table B.5 Contributions of CERF for observed (short-term) outcomes in Indonesia.

Niche	Observed outcome in Indonesia	Contribution score [1-5]	Explanation of contribution score	Reliability [1-5]	Other contributing factors [1-5]	Opposing/contradicting factor [1-5]
OSW and lithium mining	Ambition Embassy raised: Position and network of Embassy improved	3	CERF had a moderate contribution to raising awareness of sustainability opportunities for the Embassy in Jakarta. Through studies and events, CERF activities enhanced the Embassies network and positioning within the sustainable energy sector. While LIS remains primarily demand-driven, CERF enables the Embassy to explore emerging niche areas. However, the additionality of CERF remains limited.	4	1. Interest for the NL to join JET-P in Indonesia	1. The Embassy replaced water expert with a climate / energy focused diplomat before CERF started 2. Other RVO activities (BD): Aid vs. Trade.
	Awareness in partner country raised: Identified bottlenecks and opportunities for transition in Indonesia	2	CERF had a minor contribution to raising awareness of Indonesian government in technical solutions and economic opportunities within green transition. The studies conducted by CERF have somewhat helped define the main opportunities and bottlenecks for the Indonesian energy transition. Especially relevant are joint working group meetings that CERF attends, visits from Indonesia to NL that were supported by CERF, and WHS visit. However, at the same time,	3	1. Indonesia signed Paris agreement. 2. JET-P active in Indonesia	1. Existing political and economic interest in fossil industries. 2. Political volatility - transitioning to new government.
	Climate policy in partner country developed: First joint working group between Dutch MFA and Indonesian government	2	CERF explores possibility for green lithium mining. CERF has given substance to the MoU which was signed between the Dutch Ministry of Economic Affairs and Climate and the Indonesian Ministry of Energy and Mineral resources. CERF has done this by organising the first Joint Working Group between the two parties and CERF. During the first Joint Working 4 topics were identified on which all parties agreed to cooperate. Moreover, various activities on those 4 topics were set up and financed by CERF.	3	1. Strong Dutch expertise on OSW and infrastructure 2. Enabling knowledge environment is strong in Indonesia.	1. Lack of existing infrastructure 2. Unawareness of economic opportunities in green transitioning/ cost of green transition 3. Political volatility - transition to new government
	Dutch green private sector activity increased: Several NL companies involved in early stage work	2	The JETP study has identified the potential for sustainable investment opportunities with the Dutch private sector. Multiple companies have increased their interest in Indonesia (e.g., W+B).	3	1. Many of the companies have very active international business development activities and a strong international reputation.	1. International competition 2. Political volatility - transition to new government

Table B.6 Likelihood of CERF’s contributions for expected transformative outcomes in Indonesia.

Expected Contribution of CERF to long-term outcome in Indonesia	Likelihood of contribution CERF	Explanation of contribution score	Reliability of evidence [1-5]	Other contributing factors	Opposing/contradicting factor
Climate mitigation through OSW (PW 1, 2, and 3)	3	CERF has a moderate likelihood of contributing to transformative change and climate mitigation through its support in the OSW niche. Although there is no solid indication of new policy or increased climate ambition, but abilities and networks of public stakeholders have improved. Potential of EU-NL GGI proposal (particularly on OSW) is promising to initiate climate action (pw 2) and increase Dutch investments (Pw 3). Due to CERF activities, Dutch companies are better positioned (and their reputation in Indonesia improved and can potentially play a role in the Indonesian energy transition	3	1. Active role of many other DPs (through JTP) 2. Strategic interest in Indonesia (for Dutch companies and EU commission)	1. International competition and Geopolitical instability 2.
Climate mitigation through sustainable lithium mining (PW 2 and 3)	1	CERF’s support for sustainable lithium mining shows limited/low potential to drive transformative change or significantly contribute to climate mitigation. While upcoming projects may serve as proof of concept and potentially pave the way for more sustainable mining practices, the cost-effectiveness of green mining remains unproven. However, Dutch firms have already shown commercial interest in exploring investment opportunities and feasibility studies, highlighting a readiness to engage. Nevertheless, the niche focus on green lithium mining appears suboptimal for achieving substantial CO <sub>2</sub> reductions, as its impact on emission mitigation may be relatively modest.	2	1. Strategic interest in raw metals from EU and NL (increasing interest)	1. International competition for access to raw materials 2. Concept is not proven yet

# Appendix B.4 South Africa

Figure B.4 Reconstructed treintje for South Africa

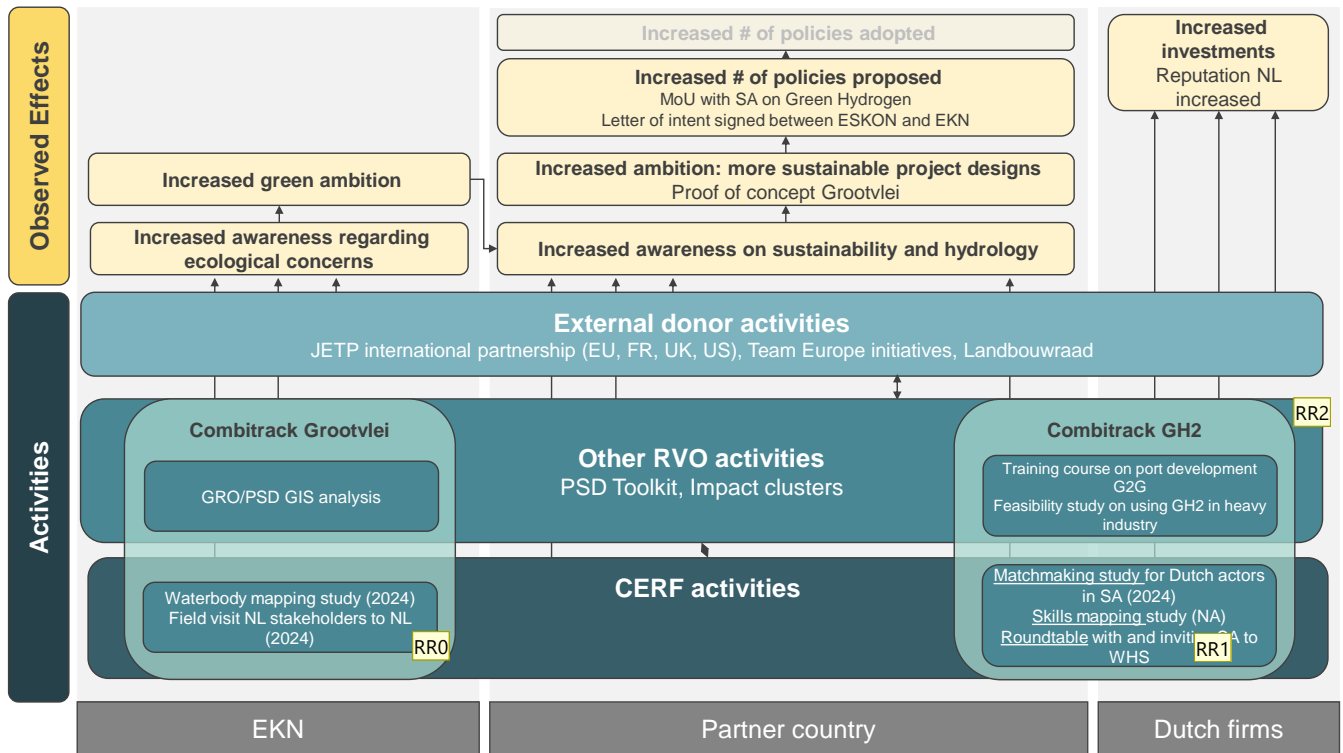




Table B.7 Contributions of CERF for observe (short-term) outcomes in South Africa.

Niche	Observed outcome	Contribution score [1-5]	Explanation of contribution score	Reliability [1-5]	Other contributing factors [1-5]	Opposing/contradicting factor [1-5]
GH2	Increased awareness Embassy (PW1): Improved awareness of Dutch in doing green and blue in GH2 transition	2-3	CERF had a minor to moderate contribution in increasing the Embassies awareness about the sustainability gains within the GH2 transition. CERF's JETP study identified key companies and knowledge institutions in South Africa that play a critical role in raising awareness of Dutch climate solutions for the Embassy. However, the collaboration of the Embassy with CERF has faced challenges, including long turnaround times and a high effort-to-budget ratio.	4	Climate goals were already on the Embassy's agenda before CERF (since 2020): 5. South Africa has GH2 as a key priority: 5. JET-P present in South Africa: 4	Uncertainty around GH2 and business development concept: 5. Many other stakeholders within RVO/MFA with diverging interests (e.g., BD, PSD).
	Increased investments (PW3): Improved reputation of Dutch companies and institutions in South Africa	2	CERF had a minor contribution in improving the reputation of Dutch companies for the GH2 transition in South Africa. CERF had an important role in facilitating matchmaking between South African authorities and Dutch companies at WHS. However, no investments or MoUs can be attributed to these efforts at this time. Furthermore, the reputation of Dutch companies is already high - and the competition fierce.	3	Strong Dutch expertise and reputation in storage, pipeline and port infrastructure development and management: 4	Intensifying international competition (Germany, others): 5. Insufficient renewable energy (electricity) production capacity and water shortage in South Africa (needed for GH2): 5. Limited public awareness and understanding of green hydrogen (GH2) in South Africa: 4. No off-take agreements yet with first movers in shipping or heavy industries: 3
Grootvlei	Increased ambition (PW1): importance of ecological design among relevant stakeholders	4	Hydrological + ecological study (Dutch expertise) Visits to Netherlands SA entities are more aware of benefits of ecological plan.	5	Dutch expertise in wetlands and water management.	1. Costs considerations Potential employment losses and difficulties in labour market transitions
	Increased policies proposed (PW2): Letter of Intent (LoI) signed between ESKON and the Embassy.	2	CERF aims at more ecological transition of Grootvlei area (coal-based electricity plant area to a horticulture area). This is now mainly influenced by study trips and studies (knowledge exchange). However, evaluators did not find a Grootvlei area transformation plan with ecological elements as observed key immediate outcome. The outcomes are too large	4	Dutch expertise in ecological area transition and horticulture. Synergy with combi-track (horticulture)	High dependency of CERF on combi-track (on the bandwagon). Existing interest and lobby of existing coal plants, lobby of labour unions for safeguarding employment in coal-based electricity production, low starting point and increase of renewable energy (needed for scaling up to

	<p>extent dependent on ESKON, Landbouwraad, combi-tracks and other players, where CERF can add value with more ecological development (but is not initiating or on the steering wheel).</p>	<p>other closures), electricity and water shortages.</p>
--	---	--

Table B.8 Likelihood of CERF’s contributions for expected transformative impacts in South Africa.

Expected Contribution of CERF to long-term outcome in South Africa	Likelihood of Contribution CERF [1-5]	Explanation of contribution score	Reliability [1-5]	Other contributing factors	Opposing/Contradicting factor
Climate mitigation through GH2 (PW 2 and 3)	2	The likelihood of CERF contributing to climate mitigation through green hydrogen GH2 projects and investments is low. Significant uncertainties persist around the viability of a GH2 economy, particularly in South Africa, where high transportation costs make it a less cost-effective option for many importing nations (see Box 1). Furthermore, South Africa lacks a first-mover advantage in GH2 sector development due to an underdeveloped renewable energy sector and a powerful fossil fuel lobby. Rapid advancement is essential, as delays could lead private sector partners to prioritise other countries for GH2 production.	3	<p>1. Extensive Dutch expertise in port infrastructure, pipeline systems, and green hydrogen (GH2) transport, with integration efforts led by prominent international stakeholders in the GH2 sector.</p> <p>2. South Africa (and Namibia) has a high potential of producing renewable energy cost effectively.</p>	<p>1. Significant economic and political interests currently embedded in the fossil fuel industries (natural gas).</p> <p>2. Concerns exist regarding South Africa’s capacity to produce GH2, primarily due to its currently limited renewable energy output and electricity shortage. Furthermore, water shortage is a big issue.</p> <p>3. Strong uncertainty surrounds the future role of GH2 in the global energy mix, with concerns about the technical and economic feasibility of large-scale GH2 production and export, particularly via maritime routes.</p> <p>4. High costs of exporting GH2 from SA to Western Europe – which reduces commercial interest.</p> <p>5. Strong lobby from polluting industries that do not have interest in GH2 development.</p>
Climate adaptation and mitigation through Grootvlei (PW 1 and 2)	3	SA has many coal mines and plants. Proof of concept of transition of coal production area. Proof of concept and scale up possibility to close down other coal-based electricity plants has a clear potential.	4	ESKON is a major energy player in SA and convinced of the transition. Paris agreement. Opportunities for horticulture and green area transition in relation to Dutch experience and knowledge. New employment opportunities to soften the shift in employment.	Existing interest and lobby of existing coal plants, lobby of labour unions for safeguarding employment in coal-based electricity production, low starting point and increase of renewable energy (needed for scaling up to other closures), electricity and water shortages.

# Appendix C Gender recommendations from the Gender Annex

## Appendix C.1 Specific recommendations for gender-responsive programme design

- **Take into account specific constraints faced by women in CERF awareness raising and policy change activities (in selected countries):** To improve the project benefits for women, the design of programmes should ensure to take into consideration the different constraints that many women face.
  - This can include: insecure land tenure due to lack of own land, less access to finance, lower literacy rate, lack of access to information, time constraints due to household chores, low self-esteem, and lack of decision-making roles within the family.
- **Ensure customised support:** CERF could design activities in the three pathways to support women employment, participation and entrepreneurship in the field of certain CERF niches (solar, wind, CE etc.). Efforts should consider the diverse factors that may influence women's decision-making processes, such as a cautious approach to risk and varying comfort levels with adopting new technologies, exploring new markets, and scaling up enterprises.
- **Fostering an inclusive environment:** To encourage participation of more female volunteers, it is important to create a gender friendly environment.
- **Involve local leaders in programme implementation.** The practicality of this could involve identifying and consulting leaders early on, incorporating their input in programme design, and regularly including them in communication practices to foster trust and encouragement.
- **Male involvement in gender awareness training:** It is important to include men in awareness sessions and training, especially on women's rights, access to (renewable) energy or employment in CERF niches and vulnerability of women to climate impacts (floods, droughts etc.). Educating men on this issue could foster a shift in their perspective and lead to positive changes in behaviour.
- **Challenge social norms:** In terms of CERF countries with significant gender gaps, we recommend implementing practices that directly challenge existing social norms. This can be achieved by, for example:
  - Encouraging the hiring of female experts in CERF activities.
  - Income generating activities that help to challenge social norms.
  - Providing women with skills-based capacity building training traditionally carried out by men. This can empower women to become more active, valued members of their communities, while also fostering financial independence and greater inclusivity.
- **Understand that reversing gender norms is a long process:** Light intervention strategies should take into account the fact that addressing deeply ingrained social and cultural barriers requires extended time to achieve lasting impact. Ensuring women's meaningful involvement is a long-term process that must begin with foundational steps, while subsequent steps are needed to sustain these initiatives over time.

## Appendix C.2 Specific recommendations related to MEL

- **Gender gap analysis:** To improve relevance of CERF projects for women, a broad gender gap analysis could be conducted before implementation of new CERF activities. This gender assessment could explore the gender-

related risks, opportunities, and constraints the proposed project may involve, and would thus provide a broad gender gap estimate of the targeted country. A sample of a gender gap analysis can be observed previously in the report when A and B countries with greater gender risks were identified.

- Such analysis can be done in accordance with the five questions highlighted by CERF in its gender guide, and can also be enhanced through the proposed indicators in both Table C.1 and C.2 below.
- **Goals and requirements:** To increase the involvement of women in projects, setting targets, quotas and using motivating strategies prove to be effective strategies.
- **Qualitative data:** To identify specific bottlenecks faced by women in various sectors, qualitative data collection is essential. This approach also ensures that resources are effectively prioritised and allocated to address these challenges.
- **Quantifying outcomes:** To assess effectiveness, quantifying outcome indicators can help ensure proper evaluation at completion.
- **Gender-disaggregated data:** To identify and monitor progress towards goals, as well as to strengthen accountability, it is recommended to collect and analyse sex-disaggregated data regarding the implementation of CERF activities (in line with the CERF gender strategy).
  - Concrete examples of indices were collected from suggestions by the UN and the EBRD can be seen below: (three additional gender inclusion indexes, on the green sector, as a whole, are also included)

Table C.1 Examples of gender-sensitive output indicators

Indicator	Source
• Number of gender-responsive training programmes, seminars, study visits introduced	European Reconstruction and Development Bank
• Number and share of female participants in workshops, seminars, study visits, and training programmes	European Reconstruction and Development Bank
• Number of operations expanding infrastructure and technology capacity to women of which green infrastructure	European Reconstruction and Development Bank
• Share and volume of budget allocated to gender-specific activities.	United Nations

Source: UN <sup>20</sup> / EBRD <sup>21</sup>

Table C.2 Examples of gender-sensitive outcome indicators

Indicator	Source	Data Availability
-----------	--------	-------------------

<sup>20</sup> UN POLICY BRIEFS in SUPPORT of the HIGH-LEVEL POLITICAL FORUM 2022 ADDRESSING ENERGY’S INTERLINKAGES with OTHER SDGs. 2022.

<sup>21</sup> EBRD. Gender & Inclusion - Strategy for the Promotion of Gender Equality 2021-2025. EBRD.

• Proportion of population with access to electricity, disaggregated by female headed and male headed households.	United Nations	Data available (+ 100 countries)
• Proportion of population with primary reliance on clean fuels and technology, disaggregated by female headed and male headed households.	United Nations	Data available - requires construction of independent dataset
• Extent to which national, regional, or international energy policies and frameworks are in place that promote, enforce, and monitor equality and non-discrimination on the basis of sex.	United Nations	Data available (+ 100 countries)
• Proportion and amount of finance available for women-led energy businesses.	United Nations	Limited data
• Proportion of women in senior political positions in relevant ministries, national energy agencies and entities.	United Nations	Limited data
• Proportion of women in managerial positions and proportion of women in senior and middle management positions in the energy sector.	United Nations	Limited data

Source: UN <sup>22</sup>

<sup>22</sup> POLICY BRIEFS in SUPPORT of the HIGH-LEVEL POLITICAL FORUM 2022 ADDRESSING ENERGY'S INTERLINKAGES with OTHER SDGs. 2022.



# “Solid research, Sound advice.”

SEO Amsterdam Economics carries out independent applied economic research on behalf of national and international clients – both public institutions and private sector clients. Our research aims to make a major contribution to the decision-making processes of our clients. Originally founded by, and still affiliated with, the University of Amsterdam, SEO Amsterdam Economics is now an independent research group but retains a strong academic component. Operating on a nonprofit basis, SEO continually invests in the intellectual capital of its staff by granting them time to pursue continuing education, publish in academic journals, and participate in academic networks and conferences.

**SEO-report nr.** 2025-04

**ISBN** 978-90-5220-487-1

## **Information & Disclaimer**

SEO Amsterdam Economics has not performed any research on the obtained information and data that would constitute an audit or due diligence. SEO is not responsible for errors or omissions in the obtained information and data.

## **Copyright © 2025 SEO Amsterdam.**

All rights reserved. Data from this report may be used in articles, studies and syllabi, provided that the source is clearly and accurately mentioned. Data in this report may not be used for commercial purposes without prior permission of the author(s). Permission can be obtained by contacting: [secretariaat@seo.nl](mailto:secretariaat@seo.nl).

Roetersstraat 29  
1018 WB, Amsterdam  
The Netherlands

**+31 20 399 1255**  
[secretariaat@seo.nl](mailto:secretariaat@seo.nl)  
[www.seo.nl/en/](http://www.seo.nl/en/)