Technical Advisory Body (TAB)

Public comments on 2023 Applications

November 2023

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If, despite this moderation policy, a comment posted in this document appears to be offensive or defamatory, you are invited to immediately contact the Organization by email (officeenv@icao.int). If your request appears legitimate, the comment will be withdrawn.

Comment Set Name: Wayne Sharpe Organization: Global Environmental Markets Pty Ltd Date of receipt: 3 May 2023

TAB Market Monitoring Form

The public is invited to submit comments pertaining to observations of any potential deviation from the Emissions Units Criteria (EUC)¹, CORSIA Eligible Emissions Unit Programme's Scope of Eligibility², and/or Terms of Eligibility³ on an on-going basis.

This form and its assessment are referred to in TAB Procedures paragraphs 7.7, 9.7, and 9.8⁴.

Please note that this form is distinct from any open, time-limited public consultations on the responses to the call for applications or material updates to previously assessed programmes that are submitted for assessment by the TAB for a given assessment cycle⁵.

Market monitoring comments received will be periodically compiled and taken into account by the TAB, as appropriate, in line with procedures for material change assessments or for re-assessment of eligible emissions units programmes. Depending on the nature of an observation, TAB may also apply procedures for assessing eligibility deviations (paragraph 10 of TAB Procedures).

A completed form should be sent by email, along with supporting evidence, to officeenv@icao.int.

Name	Wayne Sharpe	
Organization	Global Environmental Markets Pty Ltd	
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Programme Name	International Carbon Registry

¹ The ICAO document *"CORSIA Emissions Unit Eligibility Criteria"* is available <u>here</u> in PDF format. Supplementary information on the assessment of Emissions Unit Programmes by TAB, including the *Guidelines for Criteria Interpretation* that TAB uses in its assessments, is available in <u>here</u> in DOCX format.

⁴ The TAB Procedures are available <u>here</u> in PDF format.

² The Scope of Eligibility for each CORSIA Eligible Emissions Unit Programme is specified in the ICAO document "CORSIA Eligible Emissions Units", available <u>here</u> in PDF format.

³ Each programme included in the ICAO document "CORSIA Eligible Emissions Units" have agreed to the terms, conditions, and limitations to the scope of eligibility and further action(s) requested by the ICAO Council included in the TAB's Report, and have agreed to maintain the programme's consistency with the Emissions Unit Criteria (EUC) in the manner (e.g., procedures, measures, governance arrangements) described in the programme's application form and in any subsequent communications with TAB.

⁵ ICAO conducts public consultation for responses to the call for applications and material updates to previously assessed programmes through "Call for Public Comments", in line with *Transparency and Public Comments* of the *TAB Procedure*. In addition to submitting the Market Monitoring Comments, the public is invited to respond to "Call for Public Comments", where appropriate and as available on the <u>TAB website</u>.

Type of observation	Deviation from Terms of Eligibility
Description of the	International Carbon Registry (ICR) has intentionally defaulted on its contract for its Registry
observation	technology with Global Environmental Markets Pty Ltd (GEM). Having entered into a technology license agreement for its registry technology in good faith , we now believe they have been trading
	insolvently for many months, and have refused to provide evidence to the contrary. Their payments
	at up to 18 months past due, and they issued no new credits for over one year, which implies zero
	revenue. This despite approximately 20 introductions from GEM subsidiary /sister company Carbon
	Trade eXchange (CTX), which they refused to give feedback on progress. GEM has amplified its demands over some months, but it now appears they are copying GEM Registry technology
	unlawfully and had planned to do so for some time prior to termination by GEM in December.
	The ICR website states: A service license agreement between the International Carbon
	Registry and Global Environmental Markets has been terminated. ICR is currently
	working on a permanent replacement registry solution. All information on registered projects and their status can be requested from ICR in the meantime
	Plus, in what we think is a breach of GDPR all the data was downloaded from the registry in November
	and is now public on their website without the authority of the projects or credit owners.
Supporting Evidence ⁶	2. GEM_ICR Presentation 291119_JB
	 Iceland Registry HoA signed GEM GEM Iceland Carbon Registry Service License Agreement Final – signed
	5. Invoice INV-0037 Iceland OVERDUE INVOICE due 30 June 21
	6. Invoice INV-0061 Iceland OVERDUE INVOICE DUE 14 SEP 22
	7. ICR Invoice INV-0070
	8. ICR Invoice INV-0071
	9. GEM Final Notice to ICR re Payments and Breaches
	10. GEM ICR Breach Notice Fees Outstanding 15.12.22
	11. Email Iceland Past Due Outstanding Invoices - recovery action will commence if no immediate
	action taken

6. Such evidence may be found in programme standards, requirements, or guidance documents; templates; programme website or registry contents; or in some cases, in specific methodologies. The evidentiary documents enable TAB to a) assess whether a deviation has occurred, b) more fully comprehend the submitter's observation, and c) archive the information as a reference for potential future assessments. Submitters are strongly encouraged to submit observations and evidence in English. Where this is not possible, the submitter may provide documents in a readily translatable format (e.g., Microsoft Word). To help manage file size, the submitter should limit supporting documentation to that which directly substantiates their observations.

Comment Set Name:

Dr. Pedro Piris-Cabezas, Senior Director, International Transportation & Lead Senior Economist

Organization:

Environmental Defense Fund **Date of receipt:**

3 June 2023



TAB Public Comment Template Form

The public is invited to submit comments on the responses to the call for applications, including regarding their alignment with the emissions units criteria (EUC). Please send your comments to <u>officeenv@icao.int</u>

ICAO requests the public to use this form to provide structured comments on the responses to the call for applications that were submitted for assessment by the TAB.

Public comments received during this assessment cycle, including commenter names and organizations, will be published on the ICAO CORSIA website following the decision by the Council in respect of TAB's eligibility recommendations for this cycle.

ICAO reserves its rights to exclude from publication any submissions that are inconsistent with these guidelines, or which contain information that can be perceived as offensive, defamatory, and/or third-party advertising (e.g. spam).

All comments received by the deadline are considered in full, but due to time constraints, ICAO is unable to provide individualized responses.

Commenters may request confidential treatment for a portion of their submission that they wish to designate as "provided in confidence". Any such information must be clearly marked and placed in a separate annex. The information contained in this annex will inform the TAB's assessment, but will not be published on the ICAO CORSIA website. ICAO will not consider any submission from the public that requests confidential treatment of all, or a substantial part, of the submission.

Commenter Name:

Dr. Pedro Piris-Cabezas, Senior Director, International Transportation & Lead Senior Economist

Commenter Organization:

ENVIRONMENTAL DEFENSE FUND

Programme Name	Reference in Programme	Emissions	Comment
	Application Form	Unit	
		Criteria	
		reference*	
SOCIALCARBON	SOCIALCARBON's	Eligibility	Measurement and verification challenges of agricultural soil
	Programme Re-	criterion	carbon sequestration
• INTERNATIONAL	application Form,	#3.2	

CARBON REGISTRY	Appendix B_Sheet B &	(carbon	Soil organic carbon credits reward farmers for enhancing soil carbon
	Programme change	offset	sequestration through practices such as crop rotation, no-tillage,
• PREMIUM	notification #5_SCM0005	credits	cover crops, and perennial cultivation. Done right, the practices can
THAILAND	- Methodology for	must be	help cut agricultural emissions — but granting eligibility to such
VOLUNTARY	regenerative land	based on a	credits under ICAO CORSIA would be premature because there is not yet a standard approach to measuring soil carbon stock changes
EMISSION	management.	realistic	over time nor a realistic, defensible, and conservative baseline
REDUCTION		and	estimation of emissions (1). Therefore, no soil carbon sequestration
PROGRAM	INTERNATIONAL CARBON	credible	mitigation activity should be eligible for CORSIA purposes until a
	REGISTRY 's Programme	baseline),	cost-effective and consistent methodology addressing uncertainties
	Re-application Form:		related to compliance with eligibility criteria #2 (carbon offset credits
		Eligibility	must be based on a realistic and credible baseline) and $#3$ (carbon
	Appendix B_Sheet B_	criterion	offset credit must be quantified, reported, and verified) has been fully developed and approved. Furthermore, in the absence of compliance
	VM0017 Adoption of	#3.3	with such criteria, it is not possible to evaluate compliance with
	Sustainable Agricultural	(carbon	CORSIA eligibility criterion #5 (permanence), which requires
	Land Management	offset	mitigation measures to monitor, mitigate, and compensate any
	&	credit must	material incidence of non-permanence.
	Appendix B_Sheet B_	be	
	VM0042 Methodology for	quantified,	The opportunity for managing soil as a climate mitigation strategy
	Improved Agricultural	reported,	with co-benefits for agricultural systems has been highlighted by scientists for decades (2). The recent explosion in interest and
	Land Management	and	development of markets and other incentive-based programs for soil
		verified)	carbon sequestration has led to a re-examination of key principles and
			underlying assumptions around soils as a climate solution (3) . Heated
			debate in the scientific literature and beyond centers primarily around
	REDUCTION PROGRAM		the true magnitude of mitigation potential, whether soil-based
	Programme Re-		greenhouse gas (GHG) targets are achievable given social and
	application Form:		economic constraints, the ability to detect changes in soil carbon, and the magnitude of undesired outcomes (e.g., nitrous oxide (N ₂ O)
	Appendix B_Sheet D_		emissions) $(4-8)$. Here, we specifically address the critical challenges
	T-VER-P-METH-13-		associated with measurement and verification of soil carbon
	06_Enhanced Good		sequestration and net greenhouse gas mitigation which include:
	Practices in Agricultural		

Land	reliable and accurate quantification of soil carbon stock changes;
	predicting where/why/how soil carbon responds to management
	interventions; accounting for other agricultural greenhouse gases
	(especially N ₂ O and methane (CH ₄) in agricultural landscapes); and
	defining and measuring an appropriate baseline $(1, 9)$.
	Detecting change in soil carbon through measurements and models
	Quantifying and verifying real changes in soil organic carbon (SOC)
	resulting from agricultural practice changes is difficult due to
	measurement challenges. The amount of SOC can vary markedly
	across a field due to pronounced differences in biophysical and
	landscape conditions such as soil moisture, soil texture and slope.
	Furthermore, soil carbon is slow to accrue, and it may take many
	years to detect a meaningful change in response to a management
	intervention (7). For example, a commonly cited rate of SOC
	accumulation under cover cropping is 0.3 t C ha ⁻¹ yr ⁻¹ (10). If the soil
	compaction, or bulk density, equals 1 g cm ⁻³ , the annual increase in
	SOC would be 0.01%. Such small changes are within the
	measurement error of commonly used analytical techniques for
	measuring SOC (i.e., loss-on-ignition, Walkley-Black and dry $(11, 12)$ and are assortially undetectable. Underscoring
	combustion) (11, 12), and are essentially undetectable. Underscoring
	the heterogeneity of soils and slow pace of soil carbon accumulation,
	research from 13 agricultural field trials across the U.S. Midwest demonstrated that it can take between 11 and 71 years to detect
	statistically significant soil carbon stock changes ($n = 5$ plot
	replicates) (13).
	repricates) (15).
	Whereas our understanding of how management interventions impact
	SOC stocks has been gleaned largely from long-term agricultural
	research trials in strips and plots, translating these results to what we
	might expect on working farms is a challenge. Management

treatments in long-term field trials are not necessarily reflective of actual farming practices. For example, experiments often introduce large amounts of organic matter, such as manure and compost, which may not be accessible to most farmers $(14, 15)$. The typical on-farm practice of no-till in alternate years (or other tillage interruptions) differs from no-till research trials that measure outcomes after continuous no-till over many years. Thus, trial results often result in larger apparent carbon benefits than those that are found in commercial fields (16) .
Measuring SOC is time intensive and expensive, which limits the scale at which data are collected (17). The estimated cost of measurement remains high at an estimated U.S. \$32 per hectare (18), which may preclude soil sampling at a density that would provide confidence in the ability to detect meaningful change (9). An approach to account for this issue is to develop large, aggregated projects that encompass many farms over thousands of acres, under the assumption that over these large areas, the average changes in soil carbon will be positive. However, this assumption has never been rigorously tested and the uncertainty around the context dependence of soil carbon responses makes it extremely difficult to predict whether it will hold. Given these logistical (time and money) constraints, measurement, reporting and verification (MRV) protocols for soil carbon sequestration tend to rely on process-based biogeochemical models and less on field measurements to estimate changes in SOC over the short term (1-5 years).
Appropriately calibrated and validated models can extrapolate over space and time to assess SOC and other relevant GHG outcomes at the landscape scale, potentially reducing costs and allowing for finer time increments to quantify changes in response to management. Process-based biogeochemical models can, in theory, be deployed at

different scales from subfield to farm to region. However, limited
e .
precision associated with model inputs can increase uncertainty at the
site level; thus, process-based models generally do not provide
accurate estimates for a single field, especially without detailed site-
specific data (19). Uncertainty is inversely related to scale in process-
model estimates of SOC changes, with uncertainties of roughly 20%
at a US national scale increasing to 600 to 700% at the site scale (20).
As a result, aggregation of model results over large scales (i.e.,
hundreds of thousands of acres), is necessary to overcome low model
accuracy at the field scale.
A key concern of using models at larger scales is whether the models
are appropriately calibrated and validated to cover the range and
extent of practices, soil types, and climates for which they are being
used (19, 21). While the basic soil management practices that are
most likely to increase soil carbon are included in multiple models,
validation of these models with high-quality field data is limited to
only certain cropping systems and geographic conditions — generally
the most common crops and most intensive cropland use (19).
Given the reliance on modeled results of annual soil carbon
sequestration in pay-for-performance programs (i.e., SAF tax credits,
the voluntary carbon market), we need models that produce estimates
of net soil carbon sequestration with high confidence — accounting
for emissions of all GHGs — and meet standards of accuracy,
uncertainty and transparency. Such standards are not currently agreed
upon. Furthermore, models are increasingly residing in the domain of
the private sector, preventing third party examination of the data and
methods used to calibrate and validate models. Within this context,
there have been repeated calls for increased transparency and open-
source benchmarking data to enable evaluation of model performance

and quality (9, 21–23).
<u>Accounting for other agricultural GHGs – especially N_2O</u>
The impact of agricultural management on <i>net</i> emission reductions represents another critical knowledge gap. Agriculture is a significant source of anthropogenic N ₂ O, CH ₄ and CO ₂ emissions. As a result, efforts using soil as a natural climate change solution must discount the carbon stored with GHG emissions resulting from shifts in practices. For example, agricultural practices that build SOC could potentially result in increased N ₂ O emissions, which could offset sequestration gains (8, 24). If additional fertilizer is applied to improve establishment and productivity of cover crops, emissions of N ₂ O may increase. No-till management is also known to generate increased N ₂ O emissions in certain soil-climate zones because of impacts on soil moisture, especially in the first years after adoption (25). Evidence suggests that the mitigation potential of no-till systems is only realized when practiced over longer (>10 year) timeframes (26).
Quantifying this potential trade-off is difficult, however, because N ₂ O emissions vary temporally and spatially and constitute an uncertain component of agricultural GHG budgets (24). Current methodologies for estimating N ₂ O for emission reduction credits typically rely on very coarse emission factors developed by IPCC that may be accurate at broad national scales but likely represent underestimates of this GHG at smaller regional and field scales (27). Again, we are severely hampered by the lack of high-quality measurements across different contexts and practice changes, which generates a lack of confidence and high uncertainty when it comes to our understanding of the capacity for improved agricultural management to generate meaningful and lasting net GHG reductions through SOC sequestration. The use of metrics such as nitrogen balance — the difference between nitrogen inputs and outputs — can

help approximate on-farm nitrogen losses to understand management impacts on these potential trade-offs (28).
Measuring against a baseline
Defining a baseline (also referred to as the counterfactual or business- as-usual (BAU)) against which to measure accrual in soil carbon is essential to understand the ultimate benefit of agricultural practices to the climate. Multiple different approaches are currently applied, including: static baselines, which begin with an initial soil sampling and then measure changes in SOC over time; dynamic baselines, which model what <i>would have happened</i> had past practices continued; paired plot approaches, which compare change in SOC under BAU to SOC dynamics under a management intervention. Each approach has limitations and many scientists agree that defining, establishing and measuring the baseline is one of the biggest challenges to carbon crediting projects and has serious implications for the derived climate benefit of these projects $(29-31)$.
True baselines are naturally dynamic, as SOC can change from year to year because of environmental or management influences. Thus, setting a static baseline could over or underestimate changes in soil carbon (32). For instance, improved management practices may slow SOC loss compared to the baseline rather than increasing SOC (32–34). Without measuring SOC under the conventional treatment, a static baseline would have revealed only losses in SOC as opposed to capturing that slower rate of loss.
The use of modeled baselines can potentially account for dynamic trajectories if past practice and current climate/weather data are used to estimate the baseline scenario. However, a modeled baseline is impossible to validate since it is never measured (1). Modeled baselines that employ default values for "a representative baseline"

and/or 30-year averages for weather rest on a series of assumptions (e.g., tillage practices, fertilizer use, irrigation and climate conditions) that are not suited to capture with accuracy what would actually have happened under the baseline scenario (this is the current approach for the GREET model).
<u>Conclusions</u>
Understanding the realistic potential for net GHG mitigation from croplands is critical for establishing policy and funding mechanisms to achieve climate goals $(35-37)$. However, the estimated potential for net GHG mitigation through cropland soil carbon sequestration varies widely, from replacing some or all of the organic carbon that has been lost from soils $(38, 39)$ to exceeding that amount by almost four-fold $(35, 40)$. For instance, proposed annual estimates for global cropland SOC sequestration range from 0.25 to 6.78 petagrams (Pg) CO ₂ per year $(41, 42)$, with the highest values greater than the total annual GHG emissions of the United States (5.8 Pg CO ₂ in 2019) $(43)^1$. This range underscores the fact that there is substantial uncertainty about the mitigation potential of soil carbon sequestration.
Confidence in soil carbon offsets requires an unequivocal understanding of the sign of the net change in GHG emissions, or the offset is not ready for deployment. If the sign is clear, then high uncertainty can be managed by applying conservative crediting criteria. However, the scientific literature states that we are not certain about the sign of net change in GHG emissions (including N ₂ O and deep soil C) in many circumstances (<i>8</i> , <i>14</i> , <i>44–46</i>). This strongly suggests that more research is needed to establish when and

¹ For a comprehensive review of SOC sequestration estimates, see Table 1 in this report: <u>https://www.edf.org/sites/default/files/2022-12/realizable-magnitude-carbon-sequestration-cropland-soils-socioeconomic-factors.pdf</u>

where specific practices warrant crediting. In the meantime, non-
offset mechanisms should be pursued to realize the environmental
and agronomic benefits that can result from improvements in soil
health (47–49).
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RIVERSE RIVERSE:	Eligibility	Emissions reduction units eligible for CORSIA compliance purposes must

		Programme Application	criterion	avoid causing emissions to materially increase elsewhere. As such offset
	INTERNATIONAL	Form_Question 4.6	#3.6 (A	credit programmes need to have an established process for assessing and
	CARBON REGISTRY	(Assess and mitigate	system	mitigating such emissions to ensure the integrity of the emissions
	CARDON REGISTRI	against potential increase	must have	reduction claims.
		in emissions elsewhere).	measures	
•	CERCARBONO	in enissions eisewhere).		This is particularly salient in the context of hiseparay applications where
		Annordiy D. Chaot	in place to	This is particularly salient in the context of bioenergy applications where
•	PREMIUM	Appendix B_Sheet	assess and	the largest risks of leakage emissions are expressed through indirect land
	THAILAND	B_Riverse Standard Rules	mitigate	use change emissions (ILUC), a dangerous global phenomenon driven by
	VOLUNTARY	-Scaling carbon mitigation	incidences	far-reaching market forces resulting in land competition between
	EMISSION	greentechs (bioenergies	of material	croplands and natural lands. ILUC occurs, inter alia, when pasture or
	REDUCTION	and BECCS)	leakage)	cropland previously used for growing food and feed is diverted to produce
	PROGRAM			biomass for energy purposes.
		INTERNATIONAL CARBON	Eligibility	
		REGISTRY:	criterion	ICAO CAEP has dedicated significant resources to the quantification of ILUC
		Programme Re-	#3.8 (Do no	emissions factors in the context of the ICAO CORSIA's Sustainable Aviation
		application Form:	net harm)	Fuels (SAF) methodology. Analogous to CORSIA eligibility criterion #3.2 for
				emissions units, ILUC emissions are de facto deducted from the emissions
		Appendix B_Sheet B &		benefits resulting from SAF usage. In addition to leakage monitoring and
		Sheet D,		compensation, SAF feedstock producers can mitigate ILUC emissions by
		Including methodologies		implementing land management practices regulated under ICAO document
		involving the use of		"CORSIA Methodology for Calculating Actual Life Cycle Emissions Values"
		biomass for energy		Section 5-Low Land Use Change (LUC) Risk Practices. Likewise, offset credit
		purposes such as:		programmes need these specific measures to monitor, compensate and
		- Biodiesel production		mitigate ILUC-related leakage emissions, especially where bioenergy
		and use for transport		activities underpin the claimed emissions reduction unit.
		applications		
		 Biogas/biomass thermal applications for households/small 		Section 5 from the SAF methodology also provides a practical means to meet with CORSIA emissions unit eligibility criterion #3.8 (do no net harm) by mitigating the environmental and social risks, beyond GHG accounting, associated with ILUC.

 users Use of biomass in heat generation equipment Biodiesel production and use for energy generation in stationary applications Plant oil production and use for energy generation in stationary applications Use of charcoal from planted renewable biomass in a new iron ore reduction system Switch from fossil fuel to biomass in existing manufacturing facilities. Electricity and heat generation from biomass Electricity generation from biomass in power- only plants Analysis of the 	At a minimum, emissions reduction units eligible under CORSIA would need to have measures as stringent as ICAO CORSIA's fuel feedstock ILUC methodologies to quantify and compensate leakage emissions. Otherwise, not only would the integrity of the units be questionable –lenient crediting would also generate perverse incentives to scale up unsustainable behaviours and unreasonably tilt the playing field in favor of legacy first- generation bioenergy production methods over other means of emissions reductions. None of the methodologies in question provide sufficient information to evaluate their ILUC leakage risk. Therefore the Technical Advisory Body should put on hold their eligibility until the programmes provide proper guidance with sufficient environmental integrity. Programmes could easily enhance their methodologies by cross-referencing ICAO CORSIA ILUC methodologies for SAF as guidance for project developers.
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least-cost fuel
option for
seasonally-
operating biomass
cogeneration plants
- Use of biomass in
heat generation
equipment
- Use of charcoal
from planted
renewable biomass
in a new iron ore
reduction system
- Production of diesel
using a mixed
feedstock of gasoil
and vegetable oil
- Distribution of
biomass based
stove and/or heater
for household or
institutional use
CERCARBONO
Programme Re-
application
Form_Appendix
B_Sheet B (in Spanish):
- "Metodología M/E-
ER01 para la
ejecución de
proyectos de

reducción de emisiones de gei mediante el uso de energía renovable" PREMIUM THAILAND VOLUNTARY EMISSION REDUCTION PROGRAM Programme Re-		
0		
Form_Appendix B_Sheet		
В:		
- Electricity and Thermal Energy Cogeneration from Biomass for Reselling T-VER- P-METH-01-03		
Programme Re-	Eligibility	The Technical Advisory Body should constrain the eligibility of
 application Form_Appendix B_Sheet B: Carbon Capture and Storage Projects - ACR12 	criterion #3.6 (A system must have measures in place to assess and	credits using Carbon Capture and Storage Projects v1.1 until the methodology owner (American Carbon Registry) provides an assessment and mitigation measures for leakage. The current version of the methodology for Carbon Capture and Storage Projects applies to enhanced oil and gas recovery projects in which CO ₂ is injected to enhance production from hydrocarbon-producing reservoirs or currently non-producing reservoirs in the United States and Canada. In accordance with the EUC, the offset credit programmes should
	emisiones de gei mediante el uso de energía renovable"PREMIUM THAILAND VOLUNTARY EMISSION REDUCTION PROGRAMProgramme Re- applicationForm_Appendix B_Sheet B:-Electricity and Thermal Energy Cogeneration from Biomass for Reselling T-VER- P-METH-01-03Programme Re- applicationProgramme Re- Biomass for Reselling T-VER- P-METH-01-03Programme Re- applicationProgramme Re- Biomass for Reselling T-VER- P-METH-01-03Programme Re- applicationForm_Appendix B_Sheet B:-Carbon Capture and Storage Projects -	emisiones de gei mediante el uso de energía renovable" PREMIUM THAILAND VOLUNTARY EMISSION REDUCTION PROGRAM Programme Re- application Form_Appendix B_Sheet B: - Electricity and Thermal Energy Cogeneration from Biomass for Reselling T-VER- P-METH-01-03 Programme Re- application Form_Appendix B_Sheet B: - Carbon Capture and Storage Projects - ACR12

	mitigate incidences of material leakage)	have measures in place to assess and mitigate incidences of material leakage of emissions that may result from the implementation of an offset project. In this context, leakage means emissions increase elsewhere (i.e., either in the production value chain or through market-mediated responses).
		The methodology owner has not provided enough evidence supporting the claim that leakage emissions are not significant. First, the methodology owner claims that the methodology encourages the domestic production of oil with a "lower carbon footprint" due to the simultaneous injection and storage of anthropogenic CO ₂ that would otherwise be emitted to the atmosphere. Second, the methodology owner claims that any incremental increase in domestic oil production through enhanced oil recovery would offset an equivalent quantity of imported oil that is produced without enhanced oil recovery with CO ₂ sequestration. These claims do not consider that (1) upstream and midstream CO ₂ emissions associated with the crude oil produced using enhance oil recovery techniques could be significantly larger than those applicable to the crude oils it would replace –resulting in a first source of leakage, and (2) an increase in crude oil production using enhanced oil recovery involving CO ₂ sequestration credits could have a significant impact on crude oil prices that lead to higher consumption –resulting in an second source of leakage. Therefore, we would like to highlight the need for the TAB to reassess the methodology for Carbon Capture and Storage Projects v1.1 vis-à-vis that criterion to ensure environmental integrity
* Diama and a Diama Anni Lingting France A		and proper implementation of the EUC pertaining to the assessment and mitigation of material leakage.

* Please refer to Programme Application Form, Appendix A - Supplementary Information for Assessment of Emissions Unit Programs