

Quantifying the "carbon loophole" and its significance for specific sectors July 18, 17



Request for Proposals (RfP)

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Request

This request for proposals seeks to identify an organization interested in working with the ClimateWorks Foundation (CWF) to quantify the global embodied carbon flows which make up the "carbon loophole", with some deep dive case studies into significant industrial sectors and geographies.

About ClimateWorks Foundation

The ClimateWorks Foundation mobilizes philanthropic investments to prevent the climate crisis and ensure a prosperous future.

CWF was created to help tackle the problem of climate change on a global scale, offering our funders, grantees, and partners the necessary combination of expertise, insight, and ability to strengthen their efforts to develop research and generate insights, engage industry and the general public, influence key decision makers, and mobilize investments to address global climate change.

CWF envisions a future where the world's use of energy and natural resources sustains a safe climate that supports healthy communities and global prosperity. We align our work with the internationally-agreed objective to prevent global average temperature increase from exceeding 2 degrees compared to preindustrial levels — a level that would enable us to prevent catastrophic climate change and stabilize the world's climate.

Background context and rationale

The globalized trade system entails substantial flows of goods and services from countries of production and provision to different countries of consumption. In many cases, and increasingly so, the majority of production and provision is occurring in developing countries, with developed countries acting as importers/ net consumers.

The UNFCCC's greenhouse gas (GHG) accounting system works on the basis of national production rather than consumption of emissions. This means that when goods are traded, their embodied emissions (emissions associated with manufacture, e.g. "cradle to factory gate") are also traded. However these imported emissions are not counted towards a country's reported climate impacts. This means that in general while developed countries appear to be decarbonizing (at least on a per capita basis, or per unit GDP basis), and developing countries seem to have increasing emissions, this trend is, in part or whole, an externality of the way that traded emissions are accounted for in international climate fora.

This discrepancy can be described as a "carbon loophole". It is estimated that 22% of global CO2 emissions comprise goods and services which have been internationally traded¹. Better understanding and providing solutions to address the carbon loophole will therefore be critical in global and national efforts to decarbonize industry. To this end, determining the extent of the carbon loophole is critical to ClimateWorks' broader efforts to promote the adoption of science-based emissions reductions targets and Scope 3 supply chain commitments by companies.

Historic data and relevant research have quantified the carbon loophole at relatively low-resolution² but an up-to-date global quantification is not available. As an example, Dr. Steve Davis and the team at UC Irvine produced a paper including the database of global emissions imports and exports in 2010.³

ClimateWorks Foundation's goal for this project is to update the existing body of analysis, including the latest available data (and if relevant new data sets). A key deliverable for the project is a global assessment of the extent of the carbon loophole. A second key deliverable is a set of higher-resolution, deeper dive case studies into sectors and geographies of most importance in carbon pollution terms and of interest to ClimateWorks (see below). Potential ways to update this analysis on a regular basis (e.g. annually or bi-annually), along with the feasibility of such an effort, should be included in the scope.

In addition, ClimateWorks intends to promote key findings with key target audiences, including policymakers, NGOs, and the media; respondents should therefore describe methods for data visualization and related communication of the key findings as output of the final work product.

Proposals should include the approach and methodology which will be employed for the global analysis. This should include which existing models (e.g. GTAP, WITS) are expected to be used, any original modelling that will be used (our preference is that existing models should be used where possible), and proposed ways to facilitate annual or bi-annual data updates to the model from the outset. Data sets that will be used should be identified in the proposal, along with the most recent year available. We do not expect researchers to be undertaking significant new data collection. Proposed data visualization options should be outlined, along with cost.

Methodologies should also be proposed for the deep dive case studies. We prefer that that these be in geographies and/or sectors of specific interest to ClimateWorks, either on the basis of interest (e.g. China, USA, Europe), emissions intensity of production and/or significance of trade between developing and developed countries (e.g. iron and steel, cement, chemicals, apparel), or geographical interest (e.g. London, Los Angeles, Berlin, Paris).

 $Stockholm\ Environment\ Institute,\ 2017\ Consumption\ based\ accounting\ reveals\ global\ redistribution\ of\ carbon\ emissions-https://www.sei-international.org/mediamanager/documents/Publicaltions/SEI-2017-DB-Dawkins-Croft-CBA-pdf$

Global Carbon Project - http://www.globalcarbonproject.org/carbonbudget/16/data.htm

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¹ http://www.biogeoscien<u>ces.net/9/3247/2012/bg-9-3247-2012.html</u>

² The Carbon Map – http://www.carbonmap.org/#Consumption

³ http://www.pnas.org/content/108/45/18554.full.pdf

It is important that teams have the following capabilities:

- Robust research and analysis track record and skills;
- Strong program management abilities, including a commitment to regular updates and ad-hoc discussions with ClimateWorks on methodology when necessary; as well as the ability to meet interim deadlines and provide early drafts to ClimateWorks for comment;
- Engaging presentation skills we expect that at an early stage of this project (September 2017), we will invite the project leader to present the approach and scope of work at a ClimateWorks hosted event on the carbon loophole during Climate Week NYC.

We envisage a project timeline of 6 months from a multi-person team, each devoting significant time to this project.

An important outcome from this work is the contribution of the research findings to ClimateWorks' communications effort to establish the urgency of addressing the carbon loophole. This will include the production of high quality and engaging data visualizations. Communications capacity will be provided by ClimateWorks as needed, but we expect that the research team will be involved and willing to contribute to the development of the communications effort. Where organizations/teams have specific capacity in data visualization, they are welcome to include details and potential costing for this in their proposal.

Activities and deliverables

Activities:

Undertake a study to provide a global analysis of the carbon loophole (traded carbon), and dive deeper into a number of case studies at sub-national and / or sector level.

- Conduct a literature search to determine the current status of research on this issue globally, to validate the model used, and to avoid duplication of work.
- Use the most recent available data and methodologies to provide a high level view of global traded carbon:
 - Methodology should include clear definition and consideration of a "traded end product", and how to account for travel miles in the production process. Travel miles of traded final goods are not to be included in embodied emissions values.
 - Methodology should be open to being updated regularly (e.g. annually/ every 2-3 years).
- Provide a scoping of the process, effort needed and feasibility of updating the global carbon loophole analysis on an annual or multi-annual basis.
- Conduct deeper dive case studies with analysis and appropriate storyboarding of special interest geographies and industry sectors. The scope and number of these case studies is to be determined in consultation with ClimateWorks, based on initial global findings and cost per case study presented in the proposal. Possible examples include:
 - o California
 - o One province in China

- One state in India
- o One EU country
- o International city e.g. London, Paris, Los Angeles
- o Global iron and steel
- o Global cement
- o Global apparel
- Scope and present options for producing engaging visualizations of the key findings (the visualization itself falls under a separate scope of work).

Deliverables:

- Kick-off call or meeting with ClimateWorks (e.g. a half day) at project outset to present and discussed proposed methodology and approach.
- Bi-weekly check-in with CWF Buildings and Industry team on work progress, or as necessary.
- Presentation of initial global research findings for traded carbon.
- Interim call or meeting with CWF to finalize the scope of the deep dive case studies.
- Analysis for the deep dive case studies.
- Final report of the global traded carbon research. Note that ClimateWorks will identify some partners who will review the work, but the grantee should also name around 5 peer reviewers. The report should be publishable quality, and it is likely (but to be determined) that ClimateWorks will want to co-brand the report.
- Narrative reports produced for the deep dive case studies.

Individual /Organization requirements

- List of team members 1 page max CV per individual
- Completed table with organizational information (table available in the Appendix)
- 5 examples of similar work previously undertaken (citations)
- Teams representing a consortium of different organizations are welcome

Budget

Proposals are requested not exceeding a budget of \$100,000. Please note that cost is weighted in our evaluation of proposals (see below), so methodologies that can leverage existing work are recommended, where possible. When an original methodology is required or superior, provide an explanation as to why it justifies a higher cost.

Timing

The report should be delivered 6 months after contract signing (expected March 1, 2018).

Application instructions and details

Application deadline: August 6, 2017

<u>Word limit:</u> proposals should set out how the activities and deliverables will be undertaken and how the final report will be structured (i.e. the approach). A simple budget table should also be included, highlighting person time and associated cost per activity / deliverable. Proposals should be in font type and size Arial 10 or 12 and no longer than 10 pages including CVs, citations and the budget table.

All proposals should be either in Word or PDF format and should be e-mailed to the Director of Buildings and Industry, Dan Hamza-Goodacre, at dan.hamza-goodacre@climateworks.org.

Further instructions regarding your application include:

- Errors or omissions will potentially delay or disqualify your application from further consideration
- No late or updated submissions will be accepted after the deadline date
- Any text over the word limit specified will be deleted and not made available to reviewers which
 may compromise the quality and integrity of your application

For all inquiries, please contact Prodipto Roy at prodipto.roy@climateworks.org.

Evaluation criteria

Proposals will be scored according to the following criteria:

Approach 50% Team 30% Cost 20%

Terms & Conditions (T&Cs)

The draft global traded carbon findings should be delivered within 6 months of contract signing. The interim meeting with CWF to scope the case studies is expected to be during March 2018. The final global report and case studies should be delivered by March 2018.

CWF retains the right to design the report and publish hard copies where and when needed.

On the basis that CWF is first consulted regarding reference of support, the T&Cs permit the contractor to publish and share the findings and deliverables from this work.

Please also refer to a detailed set of CWF T&Cs in the appendix below.

Payment

50% will be paid upon contract signing and 50% upon satisfactory completion of the report.

APPENDIX

Contractual T&Cs

1.	Engagement and Duties. During the term of this Agreement, the Consultant will provide consulting services to the Foundation as described in Attachment A attached to this Agreement (the "Services"). The Consultant represents that he / she / it is duly licensed (as applicable) and has the qualifications, the experience, and the ability to properly perform the Services. The Consultant will not violate any agreement with or rights of any third party in connection with the Services or otherwise for or on behalf of the Foundation. The Consultant shall be available to work at reasonable times and for reasonable periods of time and will use his / her / its best efforts to perform such that the results are satisfactory to the Foundation.
2.	Term and Termination. This Agreement shall begin on and shall terminate on unless extended in writing by mutual agreement by both parties.
	Notwithstanding the above, either party may terminate this Agreement at any time upon 30 days' written notice. In the event of such termination, the Consultant shall be paid for any portion of the Services that have been performed prior to the termination.
	Should either party default in the performance of this Agreement or materially breach any of its obligations under this Agreement, the non-breaching party may terminate this Agreement immediately if the breaching party fails to cure the breach within 15 business days after having received written notice by the non-breaching party of the breach or default.
3.	<u>Fees</u> . In consideration of performing the Services proposed in Attachment A, total professional fees and expenses for the project shall not exceed The Consultant shall submit invoices based on the Invoicing Schedule established in Attachment A and the Foundation will pay invoices net 30 days, upon documentation that the appropriate work has been completed and/or the submission of one or more invoices.
4.	Expenses. The Consultant shall not be authorized to incur any expenses on behalf of the Foundation and will be responsible for all expenses incurred while performing the Services except as expressly specified in Attachment A. Expenses expressly specified in Attachment A shall be reasonable and necessary and comply with the Foundation's policies and procedures. Receipts for all expenses shall be included with the invoice. Time spent in local travel to and from ClimateWorks offices shall not be considered time worked.
5.	Insurance and Indemnification. The Consultant will carry all necessary and appropriate business

The Consultant will indemnify and hold harmless the Foundation, its officers, directors, employees, sublicensees, customers, and agents from any and all claims, losses, liabilities, damages, expenses, and costs (including reasonable attorneys' fees and court costs) resulting

and professional services insurance coverage during the terms of this Agreement.

from a breach or alleged breach of any representation or warranty of the Consultant (a "Claim") under this Agreement, provided the Foundation gives the Consultant written notice of any such Claim, and the Consultant has the right to participate in the defense of any such Claim at his / her / its expense. The Foundation will indemnify and hold harmless the Consultant, its officers, directors, employees, sublicensees, customers, and agents from any and all claims, losses, liabilities, damages, expenses, and costs (including reasonable attorneys' fees and court costs) resulting from a breach or alleged breach of any representation or warranty of the Foundation (a "Claim") under this Agreement, provided the Consultant gives the Foundation written notice of any such Claim, and the Foundation has the right to participate in the defense of any such Claim at its expense.

- 6. <u>Independent Contractor</u>. The Consultant's relationship with the Foundation will be that of an independent contractor and not that of an employee.
 - (a) Method of Provision of Services: The Consultant shall be solely responsible for determining the method, details and means of performing the Services. The Consultant may, at his / her / its own expense, employ or engage the services of such employees, subcontractors, partners, or agents as the Consultant deems necessary to perform the Services (collectively, the "Assistants"). The Assistants are not and shall not be employees of the Foundation, and the Consultant shall be wholly responsible for the professional performance of the Services by the Assistants such that the results are satisfactory to the Foundation. The Consultant shall expressly advise the Assistants of the terms of this Agreement.
 - (b) No Authority to Bind the Foundation. The Consultant acknowledges and agrees that the Consultant and its Assistants have no authority to enter into contracts that bind the Foundation or create obligations on the part of the Foundation without the Foundation's prior written authorization.
 - (c) No Benefits. The Consultant acknowledges and agrees that the Consultant and its Assistants shall not be eligible for any Foundation employee benefits and, to the extent the Consultant otherwise would be eligible for any Foundation employee benefits but for the express terms of this Agreement, the Consultant (on behalf of himself / herself / itself and his / her /its employees) hereby expressly declines to participate in such Foundation employee benefits.
 - (d) Withholding; Indemnification. The Consultant shall have full responsibility for applicable withholding taxes for all compensation paid to the Consultant or his / her / its Assistants under this Agreement, and for compliance with all applicable labor and employment requirements with respect to the Consultant's self-employment, sole proprietorship, or other form of business organization, and with respect to the Assistants, including state workers' compensation insurance coverage requirements and any U.S. immigration visa requirements. The Consultant agrees to indemnify, defend, and hold the Foundation harmless from any liability for, or assessment of, any claims or penalties with respect to such withholding taxes, labor or employment requirements, including any liability for, or assessment of, withholding taxes imposed on the Foundation by the relevant taxing

authorities with respect to any compensation paid to the Consultant or his / her / its Assistants.

7. Confidentiality. The Consultant acknowledges that he / she / it will have access to proprietary and confidential information in order to perform his / her / its duties. "Confidential Information" means the Foundation's non-public information including but not limited to business plans, technical data, specifications, documentation, rules and procedures, contracts, presentations, expertise, business methods, product functionality, services, data, customers, markets, competitive analysis, methodologies, applications, developments, inventions, processes, designs, drawings, algorithms, formulas, or information related to business, marketing, or finance. The Consultant agrees that all items of confidential information are proprietary and shall remain the sole property of the Foundation.

Consultant agrees:

- (a) To use the Confidential Information only for the purposes described herein, not to reproduce the Confidential Information, to hold in confidence and protect the Confidential Information from dissemination to and use by anyone not a party to this Agreement, and not to use the Confidential Information to benefit the Consultant or others.
- (b) To restrict access to the Confidential Information to personnel of the Consultant who (a) have a need to have such access and (b) have been advised of and have agreed to treat such information in accordance with the terms of this Agreement.
- (c) To return all Confidential Information in the Consultant's possession upon termination of this Agreement or upon the request of the Foundation.
- (d) To hold in confidence information and materials, if any, developed pursuant to the Services hereunder.

This warranty shall not apply where the Foundation has expressly directed the Consultant, in writing, to disclose information to a third party, where information has entered into the public domain, or where the Consultant is required to disclose in response to a valid order by a court or other governmental entity with jurisdiction—provided the Consultant provides the Foundation with prompt written notice of such demand (prior to any scheduled disclosure).

The Consultant agrees that during the period that he / she / it is providing Services, the Consultant will not engage in any activity that is in any way competitive with the business or demonstrably anticipated business of the Foundation, and the Consultant will not assist any other person or organization in competing or in preparing to compete with any business or demonstrably anticipated business of the Foundation. Without limiting the foregoing, the Consultant may perform services for other persons if such services do not represent a conflict of interest or a breach of the Consultant's obligation under this Agreement.

8. <u>Intellectual Property</u>. The Consultant agrees that all designs, plans, reports, specifications, drawings, schematics, prototypes, models, inventions, and all of the information and items

made during the course of this agreement ("Work Product") and arising from the Services shall be and are assigned to the Foundation as its sole and exclusive property.

If Consultant's Work Product is based on or incorporates, constitutes improvements or derivatives of, or cannot be reasonably made, used, reproduced, or distributed without using or violating other rights owned or licensed by the Consultant (and not assigned hereunder), then the Foundation shall be granted a non-exclusive, global, royalty-free, perpetual license to use the intellectual property.

9. <u>Governing Law</u>. The laws of the State of California shall govern the interpretation of this Agreement. Any action to enforce the Agreement shall be brought in the Superior Court for the City and County of San Francisco or in the U.S. District Court for the Northern District of California, San Francisco, California.

10. <u>Miscellaneous</u>.

- (a) <u>Amendments and Waivers</u>: Any terms of this Agreement may be amended or waived only with the written mutual consent of the Foundation and the Consultant.
- (b) Notices: All notices under this Agreement shall be in writing and shall be deemed given when delivered personally; by courier, overnight delivery service, or confirmed facsimile; or three days after being sent by prepaid certified or registered U.S. mail to the address of the party to be noticed.
- (c) Severability: If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provisions in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision then (i) such provision shall be excluded from the Agreement, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded, and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.
- (d) <u>Counterparts</u>: This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.
- (e) Advice of Counsel. Each party acknowledges that, in executing this agreement, such party has had the opportunity to seek the advice of independent legal counsel and has read and understood all of the terms and provisions of this Agreement. This Agreement shall not be construed against any party by reason of the drafting or preparation hereof.

Organizational Details Table

(Please complete one table for each partner organisation and add tables as necessary)			
Name of organization			
Name of main contact for the			
proposal			
- 1 11			
Email address			
Postal address			
Postal code			
City			
Country			
Phone number (including			
international dialling and			
country code)			
Organisation website			