

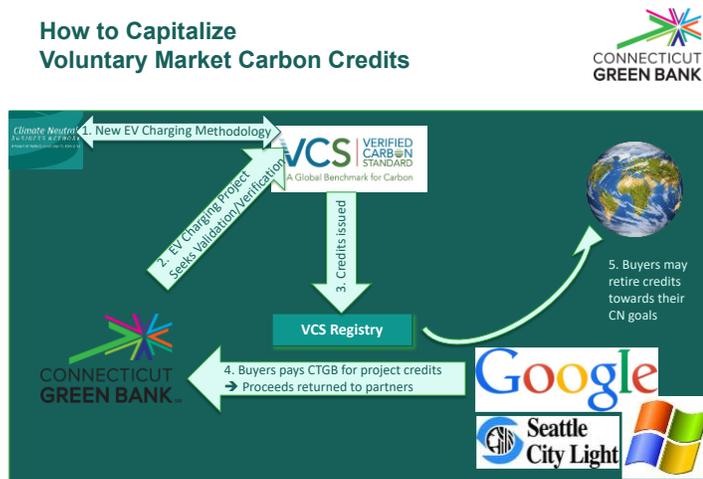
## CTGB EV Charging Carbon Credit Project Factsheet

### 1. What is a carbon credit?

- Over the last couple of decades, new markets have evolved that place a monetary value on the reduction of GHG emissions which contribute towards global climate change, creating new carbon credit markets. These carbon credit markets comprise both compliance and voluntary markets, which operate in largely complementary ways and have a common objective: to integrate the value of carbon reductions into our marketplaces in order to accelerate the pace of innovation needed to progress more rapidly towards a lower carbon future.
- A carbon credit represents a reduction of one tonne of CO<sub>2</sub> emissions that can be bought and sold based upon its third-party certification credentials (see questions 11 and 12 below)

### 2. How does the voluntary carbon credit market work?

- A diverse set of buyers are interested to purchase carbon credits (including Google, Microsoft etc) in order to help achieve their net zero, carbon neutral goals
- Prior to purchase, GHG reductions must be certified by independent organizations such as the verified carbon standard in order to be capitalized as carbon credits
- To conduct such certifications for EV charging networks' carbon credit projects, VCS required a new protocol (a carbon methodology) against which such projects could be assessed to ensure their integrity. The EV Charging Carbon Coalition (EVCCC) created such the VCS EV Charging Carbon methodology (2016-2018) (see Appendix).
- As a result, EV charging carbon credit projects such as those pioneered by the Connecticut Green Bank (CTGB, which was a founding member of the EVCCC) can now be certified and credits issued into the marketplace for purchase



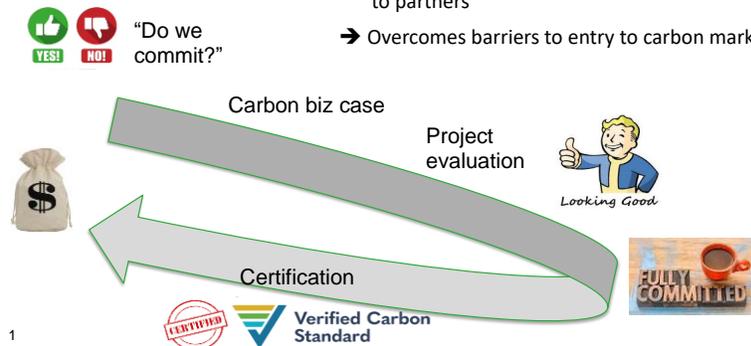
3. What is the CTGB EV charging carbon credit project and why was it formed?

- CTGB’s EV charging carbon credit project offers a diverse array of EV charging partners to bring their networks into its carbon project in order to support and streamline the process by which their carbon credits can secure certification from VCS and their credits issued and sold
- Partners supply their key project information (e.g. kwh data, ownership rights for the carbon reductions) to the bank which, following certification, returns proceeds to the partners (as \$ or certified credits) net of a 25% administrative fee
- The bank’s technical support and the array of simple “tick the box” tools/templates helps reduce the barriers to entry to the carbon capital markets, democratizing access and expanding private capital support for EV charging deployment
- Once certified, the bank markets partners’ credits and returns the proceeds to them (either as funds or as certified credits if preferred)
- The bank is mission driven: as a public/private agency, its aim is solely to help expand the EV charging carbon credit project

**CT Green Bank welcoming partners to access new carbon capital market**



- Streamlined process to access this capital
  - Partners supply kwh data, secure ownership
  - Bank helps certify credits and returns \$ proceeds to partners
- Overcomes barriers to entry to carbon market



4. What is the financial benefit of the carbon credit revenues to EV charging systems?

- Based on range of carbon market boutique pricing and prevailing utilization rates for EV charging systems, EVCCC’s original business case indicated that the carbon credit

revenues from EV charging systems could contribute a 5-10 percent return on capital investment (over the ten year project crediting period).

- The bank engages with partners to assess a tailored carbon business case dedicated to their particular charging networks as one of the first steps in the partner engagement process
- The carbon revenue proceeds from the first 10 years of crediting are typically sufficiently large to overcome market barriers that EV charging can face

## Overcomes Market Barriers for Supply Chain Stakeholders



Carbon Contribution (at \$5/ton)	DCFC 50kW (10 charges / day)	Level 2 (1 charge / day)	Result
Utility rebate of \$7k / \$0.5k	36%	121%	Comparable to rebate contributions
Equipment \$35k / \$2.5k	7%	24%	Profit margins on equipment
Landlord parking \$2.5k	100%	24%	Covers open parking lot costs
Customer rental fee \$240 / year	104%	25%	Covers barrier to adoption

### 5. Who's eligible to potentially issue credits as part of the CTGB project?

- VCS certification determines eligibility
- Chargers spanning L2 through high power DCFC are eligible, when delivering services to LDV and HDV (e-bus and e-truck) vehicles
- Eligibility is global with 40 countries already pre-approved by VCS
- Partners need to have line of sight on the kwh data the chargers deliver to vehicles and the ability to secure/retain ownership of the carbon reductions
  - i. This doesn't require ownership of the chargers per se; such requirements can be met through contracts, T&Cs or other systems

- ii. Some partners are choosing to “sub-aggregate” credits in on behalf of their clients when they can provide an even more efficient, streamlined access to the carbon capital for them (even if their clients, for example, own the charging systems)
- No issuance of carbon credits is possible in regions with carbon caps (e.g. CA)

6. What are the advantage of joining the CTGB project as a partner?

- CTGB’s project has a longer lookback period so that if your chargers were installed in the 2016-2020 timeframe they would still be eligible for crediting provided that they are enrolled during the bank’s 2021 certification event (circa Q2/3). Otherwise there is a two year look back window from the timing of the bank’s annual certification processes (e.g. from Q2 2022, Q2 2023 etc)
- CTGB also has a 30 year potential project crediting period (10 years renewable twice) which is longer than the crediting period otherwise available to new project applicants (21 years)
- CTGB also has a set of streamlined tools and templates that help expedite the process by which partners’ credits can be validated with support services that take the “hassle” off of partners hands

**CTGB Project: Distinct Advantages**



Partners joining CTGB project gain:

- Look back period available now for chargers installed 2016-2020
  - Must join ASAP in time for 2021 certification
  - Otherwise 2022 certification allows only for chargers installed mid-2020 forward
- 30 year potential crediting period
  - vs 21 year max for other new projects
- CTGB support services
  - Simple tools/templates
  - Guidance
  - Low hassle/turnkey capitalization

*CTGB Project Founding Partners*



7. Which partners have joined CTGB so far? And what kinds of partners can join?

- CTGB’s project spans a remarkable diversity of partners and their charging services
- Founding partners include Volta, BLINK (with its acquisition of UGO), Proterra and EV Structure whose operations span light duty EVs through to e-transit buses
- A remarkably diverse set of new partners are seeking to join in 2021/22
- Partners do not necessarily own charging networks; some provide back-end data services or offer peer-to-peer charging networking. What partners have in common is that they have a line to view the kwh data and can take ownership of the chargers’ carbon reductions so that certification can proceed

- All partners are interested to access this new source of private level capital

## EV Charging Carbon Project Insights



*“EV charging should be a natural, seamless experience, not a chore. Volta builds and operates free charging networks where people go to work, shop, and play. We are proud of taking part in founding this project with voluntary carbon credits which adds value to support us building more and better charging. We look forward to continuing our breakthrough work with Connecticut Green Bank.” - Volta*



*“With Blink’s recent acquisition of U-Go Stations, we are pleased to continue U-Go’s partnership for its charging stations with the Green Bank, and examine the expansion opportunities this opens up for the rest of our network.” - Blink*

*“Since Electrify America created the first ever project to use the Verified Carbon Standard methodology for EV charging, we couldn’t be happier to welcome the arrival of this second project. Connecticut Green Bank’s aggregation model provides a nice platform for other companies with charging assets to enjoy the financial benefits of their investments without the legwork of applying for their own projects.” - Electrify America*

### 8. Why might a municipality be an interested join as a partner with the CTGB project?

- Municipalities are often looking for ways to engage their communities in helping to drive down GHG emissions and more actively join city leaders in their efforts to meet low carbon goals
- The CTGB EV charging carbon credits give cities a new private capital market incentive to help engage local citizens, businesses, campuses and charging leaders to turbo-charge their charging system deployments
- When the city help takes responsibility for sub-aggregating its stakeholders’ charging information (that’s shared with CTGB for certification purposes) the city can also help its community leaders access this carbon capital funding in ways that they would otherwise not have had the resources, time or experience to secure

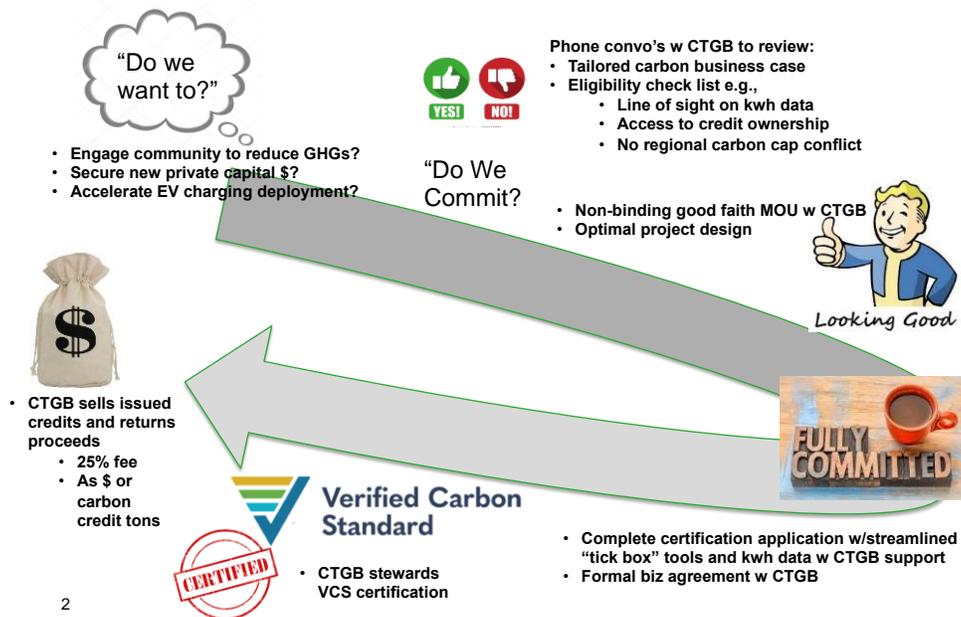
### 9. What’s a good first step in the process to explore this opportunity further?

- Connect with Matt Macunas at the Green Bank to set up a call to learn more and answer your questions, evaluate your EV charging carbon credit opportunity and conduct a tailored carbon business case for your municipality
  - i. Phone:
  - ii. Email:

### 10. What does the process look like to get this new funding?

- Make sure your objectives are aligned and set up the initial conversation with the bank to review project design/eligibility and a tailored carbon business case
- After further due diligence calls, with non-binding MOU's signed, the bank will help complete certification application materials using its streamlined tools/templates
- After formal business agreements are squared away, the bank will then steward the city's credits through VCS certification, market the credits and return the proceeds to the city

## How to capitalize Credits w/CTGB

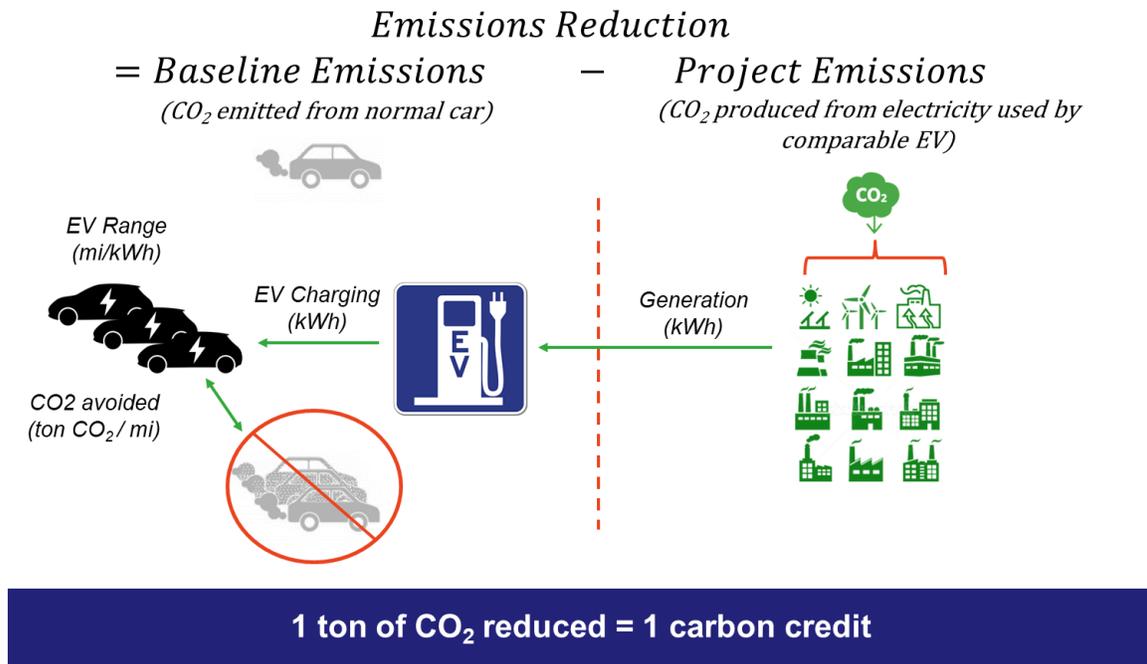


### 11. How are the EV charging credits calculated?

- The kWh of electricity delivered through the chargers is measured and, based on the average kWh/100 mile ratings for the EV's on the road using Level 2 or direct current fast chargers (DCFC), the resulting EV miles driven is calculated.
- By identifying a comparable fossil fuel vehicle for each EV model and given the number of these EV models on the road, the methodology then estimates the equivalent “mile per gallon” (MPG) figure for what would otherwise have been the conventional fossil fuel miles driven. Applying this “average MPG” to the EV miles driven thus estimates the gallons of fuel that would have been consumed, from which, given the GHG emissions from a gallon of fuel, the resulting GHG emissions **avoided** can be calculated (the baseline emissions)
- The GHG emissions **incurred** arise when the electricity needed to power the EVs is generated (the project emissions). Their GHG impacts are calculated by applying the

GHG per kwh rating for the relevant generation region to the kwh consumed by the chargers when servicing the EVs.

- The resulting credits' GHG **reductions** equal the GHG avoided less the GHG incurred



12. What happens if EV's practice "V2G" or infrastructure providers install renewable power?

- The VCS methodology and CTGB's project tools/templates account carefully for any "vehicle to grid" (V2G) exchanges of electricity between the EV itself (with its battery), the grid and any charging station's separate battery storage systems and renewable energy installations. So the resulting carbon credits can appropriately "parse" the greenhouse gas benefits arising from such innovative system practices.
- This is particularly helpful because many leading states recognize that the storage capacity which EVs' and onsite charging stations' batteries deliver will be essential if renewable energy is to reach the ambitious scale which these regions have set for themselves. This is because large scale investments in renewables will require regions to be able to address the "intermittency" challenges – when renewable energy must be stored until dispatched to meet demand at different times of day. V2G practices can therefore provide an important new tool to help these intermittency challenges – and in so doing help regions to scale up their renewable energy investments.

13. How do projects address issues relating to double counting?

- Carbon credit methodologies preclude double counting in many ways. For example, voluntary credits cannot typically be issued in markets with cap and trade systems which

mandate GHG reductions in the same EV charging or transportation sector. So voluntary EV charging credits cannot be issued in California currently (which includes transportation emissions under its cap) but can be issued in RGGI states whose caps do not yet cover the transportation sector.

- i. Drawing upon the Washington state precedent (below) the bank is engaged with the eastern states' Transportation Climate Initiative to help foster designs for this cap that could accommodate continued voluntary credit issuance for EV chargers.

14. Can carbon compliance markets avoid double counting credits issued in their same region while also using voluntary market mechanisms to issue in-state credits?

- Washington State created a Clean Air Rule as a cap and trade system in which it was able to issue in-state credits (using voluntary market methodologies which the state has accredited) in sectors which were also included under its cap (such as transportation) without double counting. It achieved this by creating a "set aside" reserve so that any in-state, transport-based project credits (such as those from EV charging) would draw down allowances from the set aside reserve as their credits were issued; thus, this avoids double counting the resulting reductions against the importing fossil fuel providers' compliance obligations.
- This innovative approach meant that investors committed to "mission critical" clean technology deployment, such as EV charging, could receive the value of the carbon credits their investments delivered even when these were located in-state under the cap. Such well-designed incentives strengthen in-state investment in energy and transport sectors – recognizing that such "downstream" clean tech investors are very often not those "upstream" parties who are regulated under the cap and who would otherwise be the only recipients of the carbon value that downstream investors deliver.

15. What is CNBN and what role did it play in the developing the EV charging methodology? And now with the CTGB?

- The Climate Neutral Business Network (CNBN) is an independent advisory services company dedicated to identifying where the carbon capital markets can most accelerate our progress towards a 21st century low-carbon future. CNBN collaborates with clean-tech pioneers to develop the carbon market foundations needed to open up access to this new source of "patient capital" for mission critical clean technologies.
- CNBN's role with the EVCCC included:
  - i. The original idea of harnessing carbon capital markets to fund EV infrastructure and convened the founding members of the EVCCC to form the coalition
  - ii. Developing the carbon business case which first examined whether carbon capital could provide a salient level of return that could accelerate EV charging investment
  - iii. Consulting with dozens of stakeholders to examine how the most credible foundations for an EV charging carbon methodology

- iv. Held bi-monthly meetings with EVCCC partners to review development progress, gather input and achieve consensus
- v. Developing and securing VCS program accreditation for the EV charging methodology
- vi. Supporting EVCCC partners in then seeking project certification to issue credits
- vii. Engaging broader policy and market stakeholders to examine how EV charging credits could optimally be deployed across a variety of regional settings
- CNBN now support CTGB and its partners to pioneer this new EV charging open architecture project to help aggregate in a diverse portfolio of EV charging carbon credits on an efficient and streamlined basis.

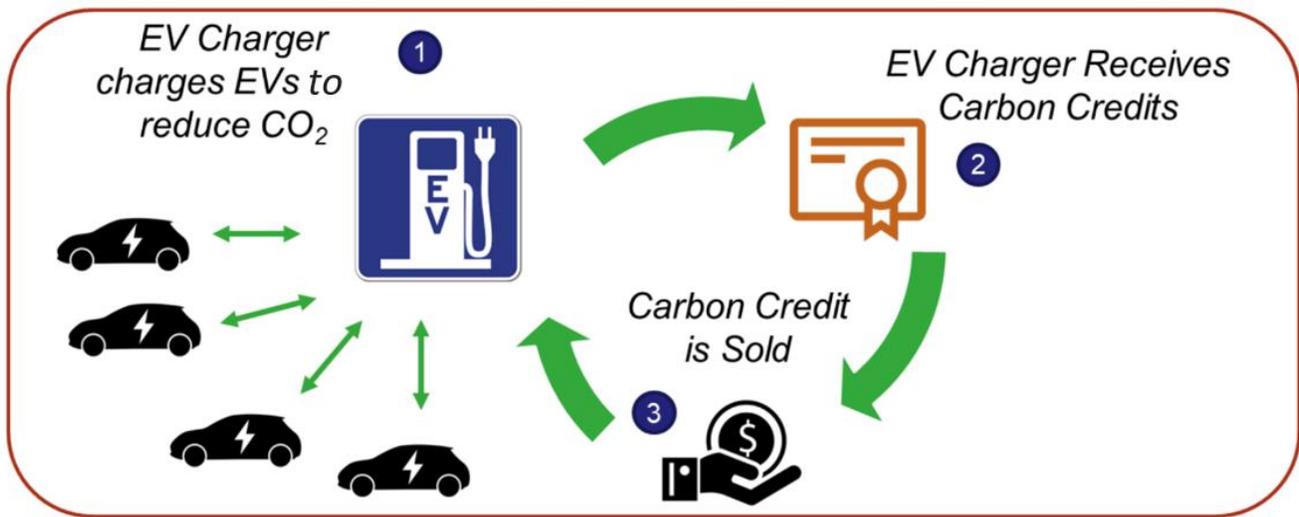
16. What is Verra and the VCS program?

- [Verra](#) is the new brand name under which the [Verified Carbon Standard](#) (VCS) program is managed and operated. The VCS program provides third party independent certification services for carbon credit issuance in the voluntary carbon markets.
- The VCS Program is the world's most widely used voluntary GHG program. More than 1300 certified VCS projects have collectively reduced or removed more than 200 million tonnes of carbon and other GHG emissions from the atmosphere.

## Appendix A: Background on the Opening of the Carbon Capital Markets to EV Charging: EVCCC's Contribution and the Development of the VCS EV Charging Carbon Methodology

1. Why is EV charging infrastructure investment needed?
  - EV charging stations represent the “fueling stations of the 21<sup>st</sup> century” – the infrastructure needed to power electric vehicles (EVs) as they travel distances beyond the range provided by home chargers many EV drivers install. Not only is more widely available infrastructure needed, but faster charging technology is important so that drivers can spend less time waiting for their vehicles to charge.
  - The transition to a low-carbon electricity transportation system is essential for cities, states, companies and other stakeholders to meet their climate goals.
  - Under the Paris Accord, for example, the United States of America (US) originally agreed to target 14 million (m) new EV's and 330,00 public charging outlets by 2025. The US currently has 1m EVs on the road supported by 49,502<sup>i</sup> charging outlets – creating growth targets of 6 x outlets and 14 x EV's to achieve the Paris Accord's EV target.
  
2. Why did the EV Charging Carbon Coalition (EVCCC) form?
  - Any new nationwide public infrastructure investment typically faces hurdles in reaching critical mass: which sector(s) will take the lead to invest? How is investment secured for EV charging when there are fewer EV's on the road? What will best support early stage market development?
  - In response to these questions, the EVCCC was formed to open up access to the carbon credit markets for EV charging systems specifically for the purposes of strengthening their business case fundamentals and thus accelerating their deployment potential
  - EVCCC originally brought together a diverse set of founding partners from the public and private sectors, including EV charging companies, utilities, governmental entities, auto manufacturers, EV equipment suppliers, and financial intermediaries
  - EVCCC members all recognize the essential contribution that EV charging systems make towards accelerating EV adoption: according to Strategic Vision's 2017 *New Vehicle Experience Survey*, expanding EV charging infrastructure and increasing charging speed directly mitigate two reasons why drivers can avoid purchasing EVs.
  
3. Why did EVCCC members seek to unlock a carbon credit market to benefit EV charging infrastructure?
  - In the early stages of market development for any new infrastructure investment, securing new sources of capital helps accelerate critical mass and scale
  - New sources of “patient capital” are vital contributors to the success of US clean-tech innovation. Experts at MIT<sup>ii</sup> have pointed out that, compared to the information technology software and medical sectors, “clean-tech clearly does not fit the risk, return or time profiles of traditional venture capital investors. ... As a result, the sector requires a more diverse set of actors and innovation models; in other words, more “patient capital”.”

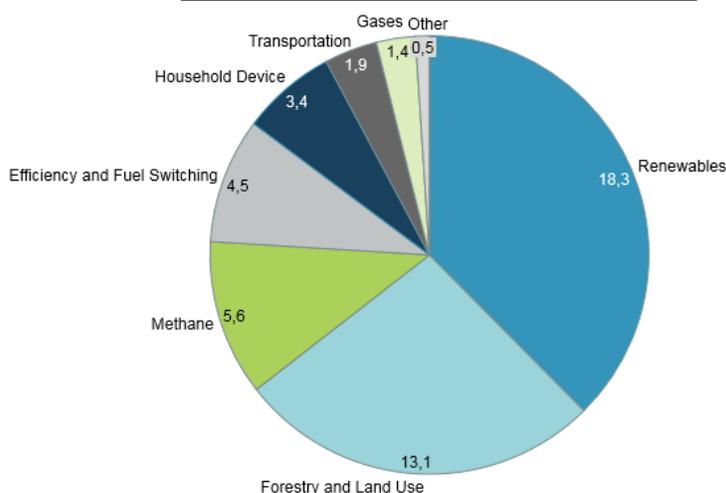
- EV charging systems' access to carbon credit markets represents just such an innovative, new source of "patient capital".



4. How would stronger, expanded EV charging networks benefit other sectors, like utilities?
  - With the carbon credit revenues providing additional financial incentives to expand EV charging infrastructure, other sectors are poised to reap other mission-critical benefits.
  - Take utilities for example: as many regions seek to dramatically ramp up renewables deployment to much higher levels, utilities recognize that additional battery storage capacity is needed to address the resulting "intermittency" challenge, where renewables' electricity must be stored as it's delivered in real-time so that it can be used during later periods of peak electricity demand during the day. Although some stationary battery systems have been installed specifically for this purpose, the growing market of EVs' on-the-road batteries will help utilities secure this essential further storage capacity, as EVs charge, store and discharge power to and from the grid using "vehicle-to-grid" (V2G) services (see # 15 below). Opening up new sources of carbon credit revenues to expand EV charging systems will therefore help accelerate further EV deployment and provide the infrastructure through which utilities can secure these V2G services. The result: expanded access for utilities to the vital further EV battery storage capacity needed to accelerate their renewables investment program.
  
5. Why did EVCCC seek to unlock the voluntary carbon markets? How does the voluntary market relate to a regulated carbon market such as the State of California's cap and trade programs? Or the Low Carbon Fuel Standard Program (LCFS)?

- Voluntary carbon markets can complement and operate alongside regulated carbon markets such as California’s cap/trade market. Most compliance markets are limited to particular regions (such as California or selected east coast states’ Regional Greenhouse Gas Initiative). Voluntary carbon credits, however, can be issued in a broader set of geographical regions beyond those that have specific regulated carbon compliance markets, giving more locales access to the value that carbon markets can contribute.
  - See also insert box in Appendix
6. Who typically purchases carbon credits from the voluntary market? What drives value in the voluntary carbon markets?
- Voluntary credit purchasers span a remarkable range of companies and organizations seeking to go carbon-neutral, including cities, university campuses, utilities, individuals, etc.
  - In 2010, for example, Chevrolet<sup>iii</sup> made a \$40m commitment to purchase 8m tons of carbon credits and retire them on behalf of the planet. Lyft more recently committed to purchasing 1m tons of carbon credits a year to make their ride shares carbon neutral.
  - While the revenue per ton of voluntary carbon credits is currently below compliance market pricing, the volume of credits issued in the US voluntary carbon market is reasonably comparable to the US compliance credit markets and could increase with more awareness. It therefore represents a compelling source of new capital to support successful clean tech deployment
7. What makes EV charging credits distinctive in this voluntary carbon market?
- EV charging credits form part of a less common category of carbon credits arising from the transport-based reductions. According to Ecosystem Marketplace, transportation credits by volume were among the smallest named segments in the 2016 voluntary carbon market (see chart below).
  - Many carbon credit purchasers recognize that transport-based emissions form a large proportion of their GHG “footprint” so the opportunity to purchase credits which reduce emissions in this same sector is very attractive

**Transacted Volume by Project Category (MtCO<sub>2</sub>e), 2016**



\*Source: "Unlocking Potential: State of the Voluntary Carbon Markets 2017" by Ecosystem Marketplace, [https://www.forest-trends.org/wp-content/uploads/2017/07/doc\\_5591.pdf](https://www.forest-trends.org/wp-content/uploads/2017/07/doc_5591.pdf)

8. How can we help unlock the carbon capital market for a new clean technology? What are the steps involved?
  - Carbon credits can only be issued in the voluntary market once certified by an independent third-party auditor such as Verra's Verified Carbon Standard (VCS) program. This provides the credible assurance needed for buyers to have confidence in the market's credits.
  - For the VCS program to certify credits, it must be able to use a set of stringent technical standards, captured for each sector/technology in a carbon methodology, against whose requirements any project put forward seeking credit issuance must be independently validated and verified by VCS.
  - EVCCC therefore invested in the development of such a methodology standard, tailored for EV charging infrastructure, collaborating with dozens of stakeholders whose insights help to shape the methodology's approach. VCS then applied its rigorous assessment procedures, using accredited carbon methodology experts, before accepting the final methodology into its program.
  - As a result, EV charging projects can now request that credits be issued on a VCS-certified basis
  - Once purchased, the transactions and resulting credit ownership is tracked through registry systems that underpin and govern the voluntary carbon market's operations and ensure buyer confidence.
  
9. What does it take for EV charging systems to issue certified carbon credits and make them available for sale?
  - EV charging projects must present their credentials to the VCS program so that their projects can be validated as meeting the methodology's requirements; credits are then verified by VCS, typically annually, in order to be issued. The process begins with the

operator or investor writing up a project description that conforms to the methodology's requirements.

10. Why are EV charging projects' carbon reductions "additional" and credible?

- One key test that is applied during project validation identifies whether the market penetration for EV's in the country or region where the EV charger is located is under 5%. This "additionality" test is designed to examine whether the chargers and the resulting EV miles driven are "beyond business as usual". This ensures that credits are issued while EV charging markets are still at an early stage of development when carbon capital finance is most warranted.

11. What is a carbon methodology and why is it needed?

- Without a carbon methodology, the third-party certification programs such as VCS would not have the "rules of the road" – the requirements against which to ensure that EV charging project credits are issued on a credible basis
- The VCS EV Charging methodology provides the instructions and formulas for EV infrastructure investors to develop precise project descriptions that can become eligible for credible carbon marketplace sales after they are validated and verified. Specifically, the methodology details how measurement of electricity (in kilowatt hours) dispensed at EV chargers corresponds to a reduction of carbon emissions from equivalent fossil fueled vehicles. The methodology adjusts for the carbon content of localized electricity from utilities as well as project emissions consumed by the EV charging equipment to generate transportation fuel.

## **Appendix B: Carbon Voluntary and Compliance Markets**

### **What are the compliance carbon markets?**

Compliance markets, such as those in California, Washington and the eastern seaboard, value carbon based upon a regulatory requirement for certain larger GHG emitters to cap their emissions (on a declining basis), allowing them to trade reductions under the cap between themselves. This enables these emitters to meet the cap's requirements in the most cost-effective manner. Those who can invest in new technologies or encourage reductions among their customers can sell excess allowances to those who cannot. These "cap and trade" compliance markets also allow capped entities to purchase carbon "offset" credits, typically taken from uncapped sectors such as forestry and agriculture, in limited volumes in order to meet their obligations. These carbon credit "offset" projects must meet stringent requirements to demonstrate that their GHG reductions are "beyond business as usual" – that is they are "additional" – and meet other integrity standards which are enforced through third party project certifications. Certifying entities, such as the Climate Action Reserve in California, examine projects' eligibility and the volume of credits generated using accredited methodologies which provide the rules against which such credits are evaluated and issued.

### **What is the voluntary carbon market?**

Voluntary carbon capital markets arise as a result of the voluntary purchasing of credits made by a wide range of organizations spanning companies like Microsoft and Google, utilities like Seattle City Light, cities from the Carbon Neutral Cities Alliance, campuses committed to Second Nature’s American College & University Presidents’ Climate Commitment (ACUPCC) and even individuals – all seeking to achieve carbon neutral goals or other GHG objectives. These project credits are not purchased because these organizations have regulatory compliance requirements; their purchasing is driven largely by sustainability and competitive/business interests which the credits can help to secure. Carbon credit purchases have thus become an integral part of many companies’ sustainable business strategies as they seek to “do well by doing good.” Independent certification of credits in the voluntary market, through organizations such as Verra’s Verified Carbon Standard program, the Gold Standard, and American Carbon Registry, is still the foundational bedrock of credits’ credibility.

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<sup>i</sup> Center for American Progress, <https://www.americanprogress.org/issues/green/reports/2018/07/30/454084/investing-charging-infrastructure-plug-electric-vehicles/>

<sup>ii</sup> <https://energy.mit.edu/wp-content/uploads/2016/07/MITEI-WP-2016-06.pdf>

<sup>iii</sup> <https://www.gm.com/mol/m-2015-nov-1118-carbon.html>

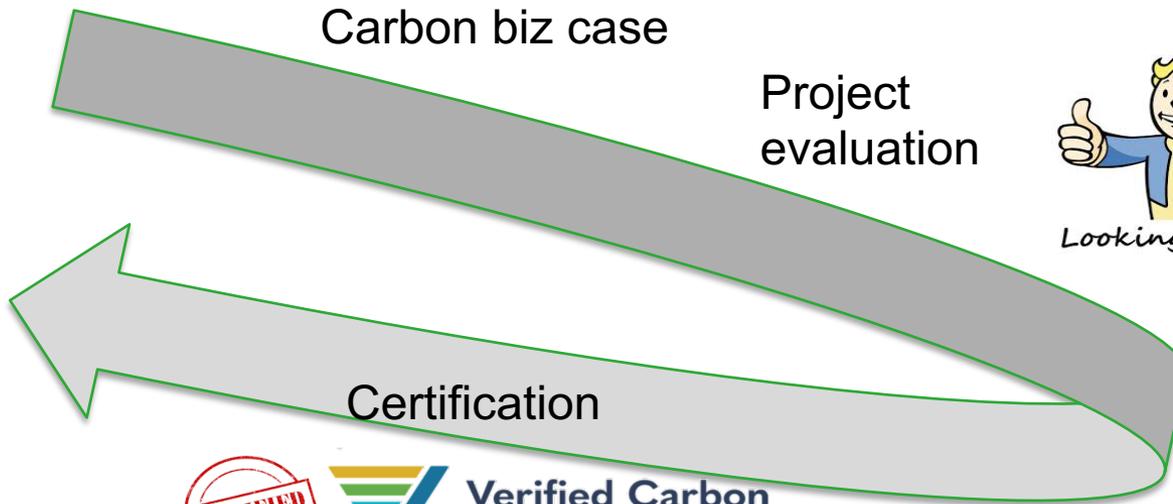
# CT Green Bank welcoming partners to access new carbon capital market



- Streamlined process to access this capital
  - Partners supply kwh data, secure ownership
  - Bank helps certify credits and returns \$ proceeds to partners
- ➔ Overcomes barriers to entry to carbon market



“Do we commit?”



Verified Carbon Standard

# How to capitalize Credits w/CTGB



“Do we want to?”



- Engage community to reduce GHGs?
- Secure new private capital \$?
- Accelerate EV charging deployment?

“Do We Commit?”

Phone convo’s w CTGB to review:

- Tailored carbon business case
- Eligibility check list e.g.,
  - Line of sight on kwh data
  - Access to credit ownership
  - No regional carbon cap conflict

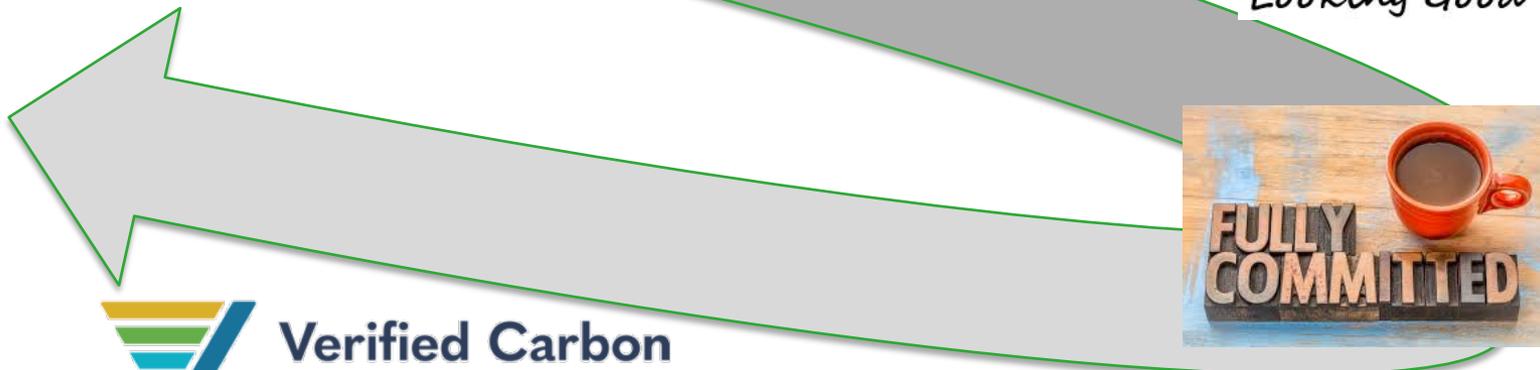


- Non-binding good faith MOU w CTGB
- Optimal project design



• CTGB sells issued credits and returns proceeds

- 25% fee
- As \$ or carbon credit tons



Verified Carbon Standard



- CTGB stewards VCS certification

- Complete certification application w/streamlined “tick box” tools and kwh data w CTGB support
- Formal biz agreement w CTGB

# Contacts



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# Electric Vehicle Charging Station Carbon Offset Credits

## Get more credit for hosting your EV charging station!

Are you helping reduce tailpipe emissions by hosting electric vehicle (EV) charging stations? You deserve credit for that. Consistent with Forth's e-mobility mission, Forth is connecting its charging industry partners to Connecticut Green Bank to help them take advantage of the opportunity to create carbon offset credits from EV charging data.

**Your charger sites could be eligible** for up to 30 years of incremental revenue from carbon offset markets, secured by the Green Bank. With our help you can monetize the environmental value of electric transportation.

### How does it work?

Hosting an electric vehicle charging station helps reduce greenhouse gas emissions. To quantify these emissions reductions, the Green Bank helped develop a methodology that's been accredited by Verified Carbon Standard. This lets EV datasets support the creation of third-party certified carbon offset credits. By accessing difficult-to-reach voluntary carbon trading markets and helping EV charging stations earn carbon credits through this new and innovative approach, the Green Bank is making it easier to get emissions reductions certified.

### To get started:

#### Work with Forth to learn more about this opportunity.

If interested, we'll connect you with the Green Bank to estimate what amount of carbon credits you might expect from your inventory (one ton of CO<sub>2</sub> reduction equals one carbon credit). The Green Bank is working with a third-party certifier to establish carbon credits, which are then marketed to investors seeking carbon offsets, or alternately can be kept by your company to meet environmental goals.

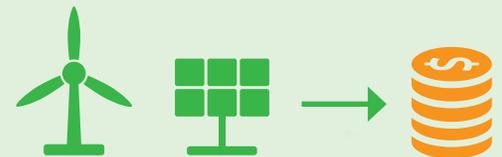


EV charging stations earn carbon credits based on charging activity, and on the carbon intensity of the electricity delivered.

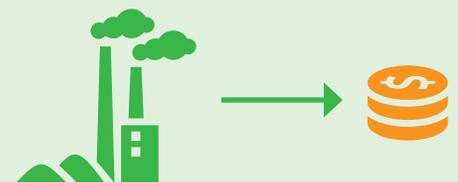
A charging station's performance can differ by location based on the region's electricity profile.

The cleaner your state's electric grid, the more carbon credits an EV charger can generate.

### Renewable and Low-Carbon



### Carbon Heavy



## How much revenue could my charger produce?

Across the United States, an EV charger may generate an average of 4 carbon credits per year. This can be higher or lower depending on the carbon intensity of your state's power grid, and how much electricity is dispensed. The number of credits produced by a typical charging station may increase with time as the use of charging stations increases and the power grid gets cleaner.

### Projected revenue during the first of three potential 10-year crediting periods.

<b>Assumed Credits per Charging Station Annually</b>	4.0	4.0	4.0
<b>Carbon Credit Price</b>	@ \$3/credit	@ \$5/credit	@ \$10/credit
<b>Total Revenue per Charger</b>	\$120	\$200	\$400
<b>Total Revenue @ 20 chargers</b>	\$2,400	\$4,000	\$8,000

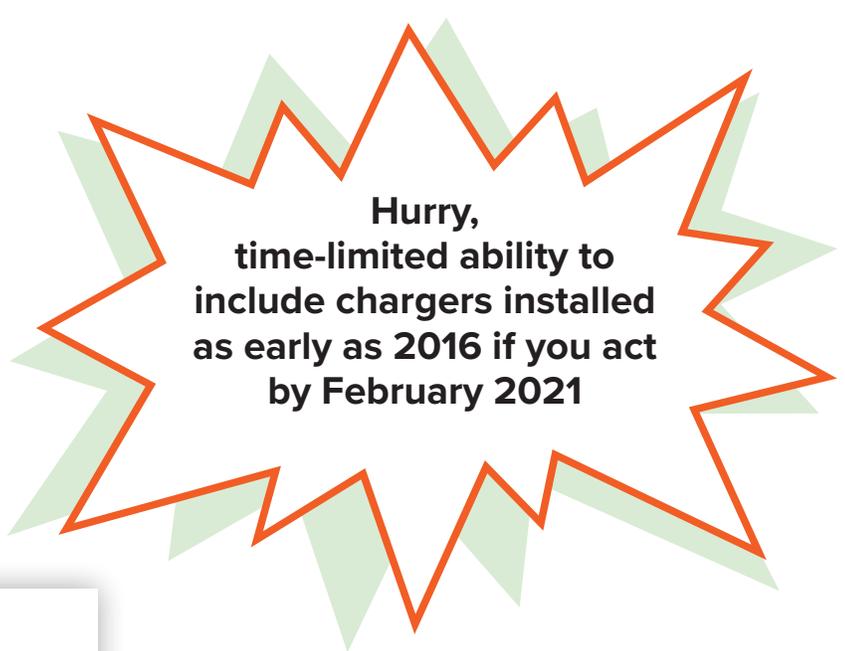
The Green Bank will return 75% of sold credits' value to you, and it will keep 25% to cover its administrative and consultative costs, including a donation to Forth in appreciation of its mission to accelerate e-mobility.

This enhances the business case for deploying EV charging with a new layer of revenue.

### Who is eligible?

Anyone who owns an electric vehicle charger installed in recent years (or the environmental rights to that charger), or who plans to host or deploy chargers moving forward. The more chargers you have in your company's inventory or future pipeline, the more benefit you'll get from investing time on this project with us.

The Green Bank takes the work out of getting your emissions reductions certified and sold.



**Hurry,  
time-limited ability to  
include chargers installed  
as early as 2016 if you act  
by February 2021**

### How do I get started?

If you own or have the rights to a portfolio of EV charging stations, please contact us for more information:

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