

NVCA Climate & Sustainability Policy Presentation

September 14th, 2022

nvca

Agenda

- Welcome
- Morgan Lewis Introduction
- Activate Overview + Presentation
- NVCA Policy Presentation & Discussion
- Additional Questions

Morgan Lewis

ESG CAPABILITIES

September 2022



About Morgan Lewis

We work in collaboration around the world



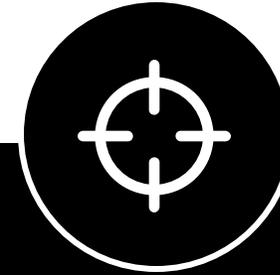
Global

From our more than 30 offices in strategic hubs of commerce, law, and government across North America, Asia, Europe, and the Middle East, we work with clients ranging from established, global Fortune 100 companies to enterprising startups.



Depth

Our team of more than 2,200 lawyers and legal professionals provides comprehensive corporate, transactional, litigation, and regulatory services in major industries, including energy, financial services, healthcare, life sciences, retail and ecommerce, sports, technology, and transportation.



ESG

Drawing upon the talents of our multidisciplinary lawyers in strategic global hubs, Morgan Lewis provides elite legal services and carefully calibrated strategies to bring our clients' ambitious ESG and sustainability goals to life.

Key ESG Contacts

Corporate



Celia Soehner



Carl Valenstein



Karen Abesamis

Employee Benefits



Julie Stapel



Elizabeth Goldberg

Energy



Ken Kulak



Elizabeth Hanigan



Kirstin Gibbs

Private Client



Sara Wells

Finance



Patty Brennan



Georgia Quenby



Andrew Budreika

Regulatory



Lance Dial



Amy McDonald

Labor



Melissa Hill



Larry Turner

Litigation



Jeff Boujoukos



Jason Frank



Erin Martin



Susan Resley



Molly Lane



Kelly Gibson

Tax



Megan Bell



Kim Eney

ESG Services

Morgan Lewis provides elite legal services and carefully calibrated strategies



Corporate, Investment and Finance

Advise on the full range of ESG and sustainable investment matters including fund formation, investment, transactional, regulatory, and compliance



ERISA and the Department of Labor

Counsel clients on the DOL's efforts to regulate ERISA plan fiduciaries' use of ESG factors in plan investment decision-making



Energy and Climate Change

Advise on the full range of ESG and sustainable investment matters including fund formation, investment, transactional, regulatory, and compliance



The "S" in ESG

Trusted advisor to companies advancing diverse, inclusive, and harassment-free workplaces and ethical supply chains free from connections to forced labor and unsustainable practices



Disclosures and Enforcement Actions

Counsel investment advisers, asset managers, and public and private companies on the evolving global ESG-related regulatory framework, helping clients evaluate opportunities, regulatory disclosures, and litigation and enforcement trends



Securing Tax Advantages

Help to optimize tax advantages in transactions achieving ESG, sustainable investing, and impact investing goals

ESG Checkup

1

Strategy Risk Assessment

Provide an assessment of potential ESG regulatory risks, including areas of focus for business compliance development, as well as fiduciary issues

2

Strategy Risk Mitigation

Review the firm's products, policies, procedures, offering documents, and client communications to ensure that its ESG message is consistent across the firm and compliant with regulatory standards

3

Product Support

Provide support to ensure that the firm's compliance systems and processes for ESG products are managed in line with the appropriate disclosures and firm and client expectations

4

Policy and Procedure Review

Review firm policies and procedures to identify potential enhancements that will ensure the firm's ESG strategy is consistently applied, including identifying gaps in existing policy and procedure coverage

5

Disclosure/Marketing Material Review

Review marketing collateral to ensure that the firm's message to clients is consistent with its ESG strategy and regulatory requirements

6

ESG Training

Conduct trainings targeted to relevant business groups, e.g., legal, compliance, portfolio management, or sales

THANK YOU

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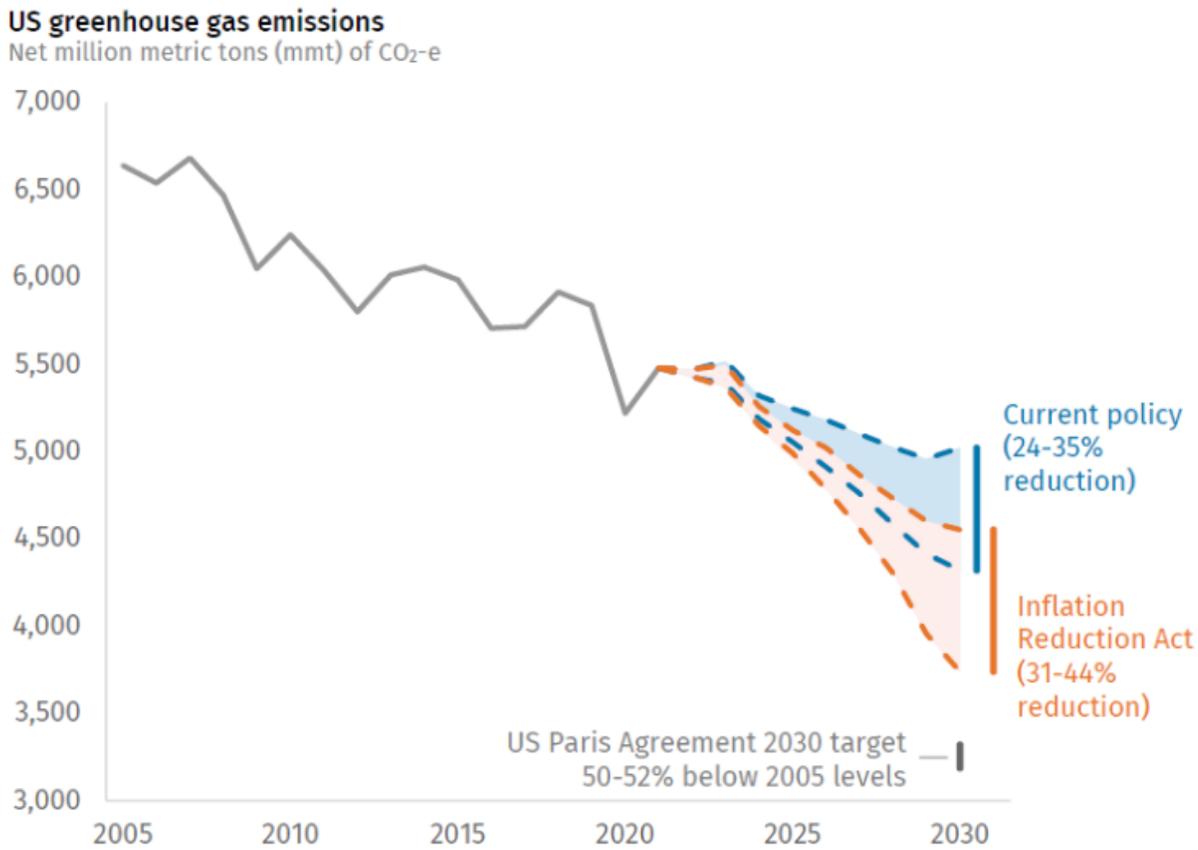
CARBON MARKETS PRIMER

NVCA Climate & Sustainability Working Group

SEPTEMBER 14, 2022 // 4:00PM PT

Why do the carbon markets matter?

The U.S. is not on track to meet its climate goals



Globally, since 1850...

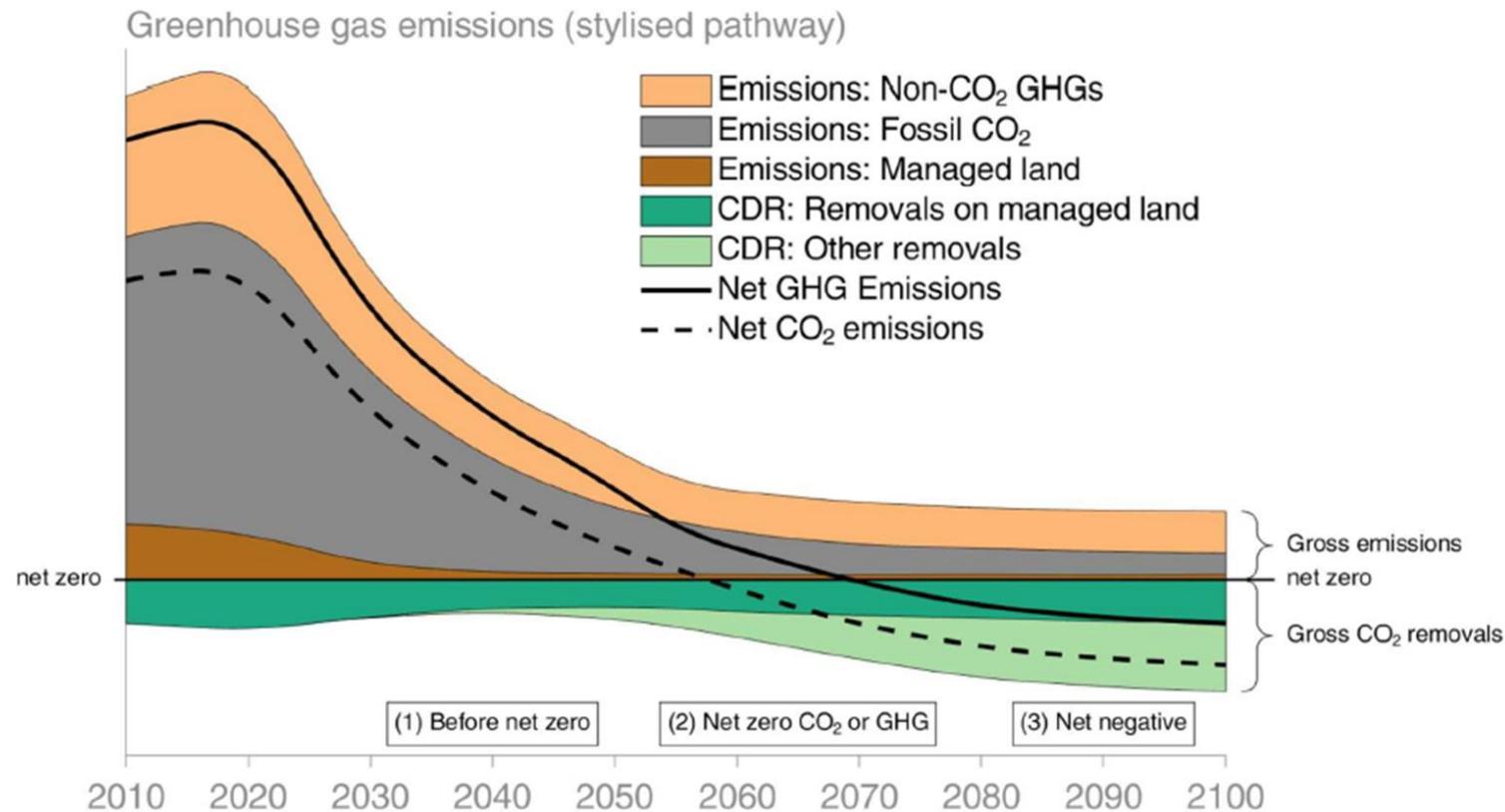
2,500,000,000,000
tons of CO₂

=

86%
of our "carbon budget" to stay below 1.5° of warming

Source: Rhodium Group, Carbon Brief.

We need a deep combination of both mitigation and carbon removal



Two types of carbon markets...



COMPLIANCE MARKETS

- Markets for carbon credit trading for entities which are driven by mandated caps on GHG emissions (also known as “cap-and-trade” programs)
- In these markets, regulated entities buy and sell emissions permits (a.k.a. allowances) or offsets in order to meet pre-determined regulator targets, which decline each year to achieve the climate policy targets of its jurisdiction
- Allowances are freely allocated or auctioned to companies which can then “trade” to comply with their cap after emissions reductions efforts
- Examples include EU ETS (largest), California Cap-and-Trade and Regional Greenhouse Gas Initiative (REGGI)
- Historically garnered a higher price per ton, given government mandated supply and demand dynamics

vs.



VOLUNTARY MARKET

- Market for voluntary participants (individuals, corporations) who want to demonstrate their commitment to reducing GHGs
- Credits are generated by projects that avoid, reduce or remove GHG emissions beyond a minimum business-as-usual scenario (e.g., reforestation, direct air capture, etc.)
- Credits must adhere to certain quality standards, but in general there is no singular regulatory body overseeing the market
- Historically garnered a lower price per ton, as overall demand for carbon credits for retirement has remained at around 50% of supply, resulting in a structural oversupply (however this varies widely based on credit type)

\$850B

Market size

EUR 80.71

Price per ton¹

\$2B

Market size

\$7.50

Price per ton²

...and two types of carbon credits



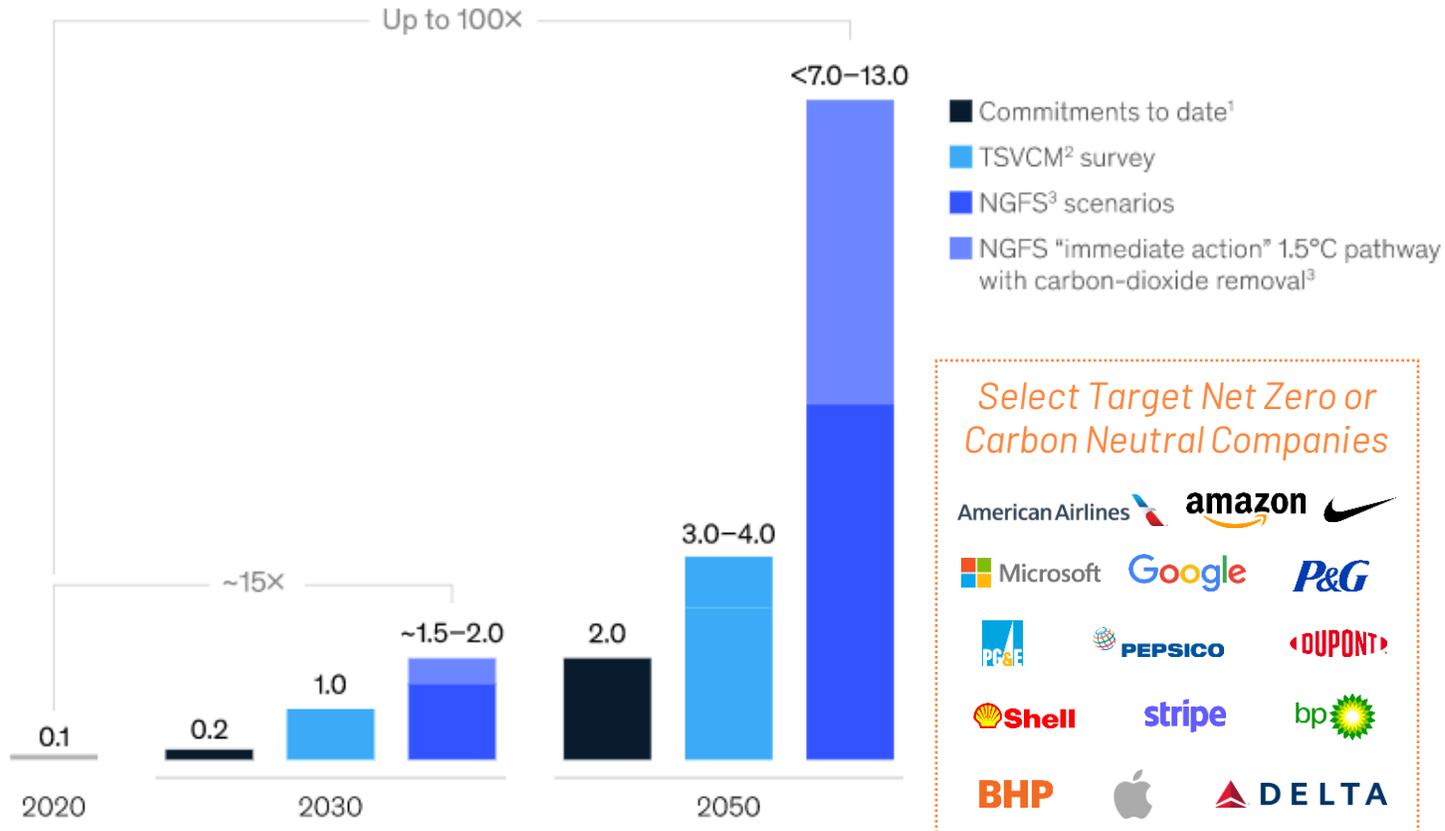
QUALITY FACTORS (PRICE DRIVERS)

- 1 Methodology**
Reforestation vs. DAC vs. biochar, etc. Some methodologies have a premium because of the associated storytelling
- 2 Additionality**
Would this project have occurred had it not been incentivized by a carbon credit?
- 3 Permanence**
How long is carbon avoided or removed for?
- 4 Leakage**
Efforts to remove carbon or avoid emissions in one place simply shift them to another location
- 5 Co-benefits**
How does this project affect external factors such as biodiversity, resilience or the local economy?

The Opportunity

The voluntary market could reach \$10-40B by 2030

Voluntary demand scenarios for carbon credits, gigatons per year



Source: McKinsey, Shell.

Note: Amounts reflect demand established by climate commitments of more than 700 large companies. They are lower bounds because they do not represent likely growth in commitments and do not represent all companies worldwide. TSVCM = Taskforce on Scaling Voluntary Carbon Markets. Amounts reflect demand based on a survey of subject matter experts in the TSVCM. NGFS = Network for Greening the Financial System. Amounts reflect demand based on carbon-dioxide removal and sequestration requirements under the NGFS's 1.5°C and 2°C scenarios.

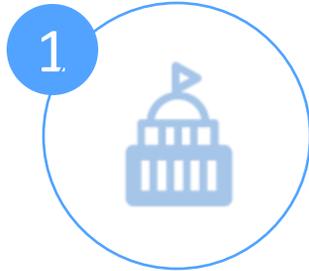
The Great Carbon Debate



80%

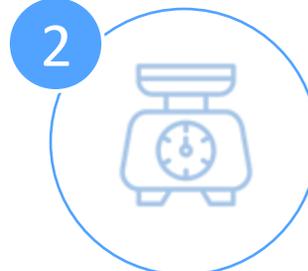
of current offsets do not actually remove CO₂, but rather pay for avoided emissions

The Problem



GOVERNANCE

- No singular governance body or national / international standard
- Carbon standards (Verra, Gold) differ in eligibility requirements
- Absence of governance leads to difficulties around legal qualification of carbon credits and distrust by market participants



MEASURABILITY

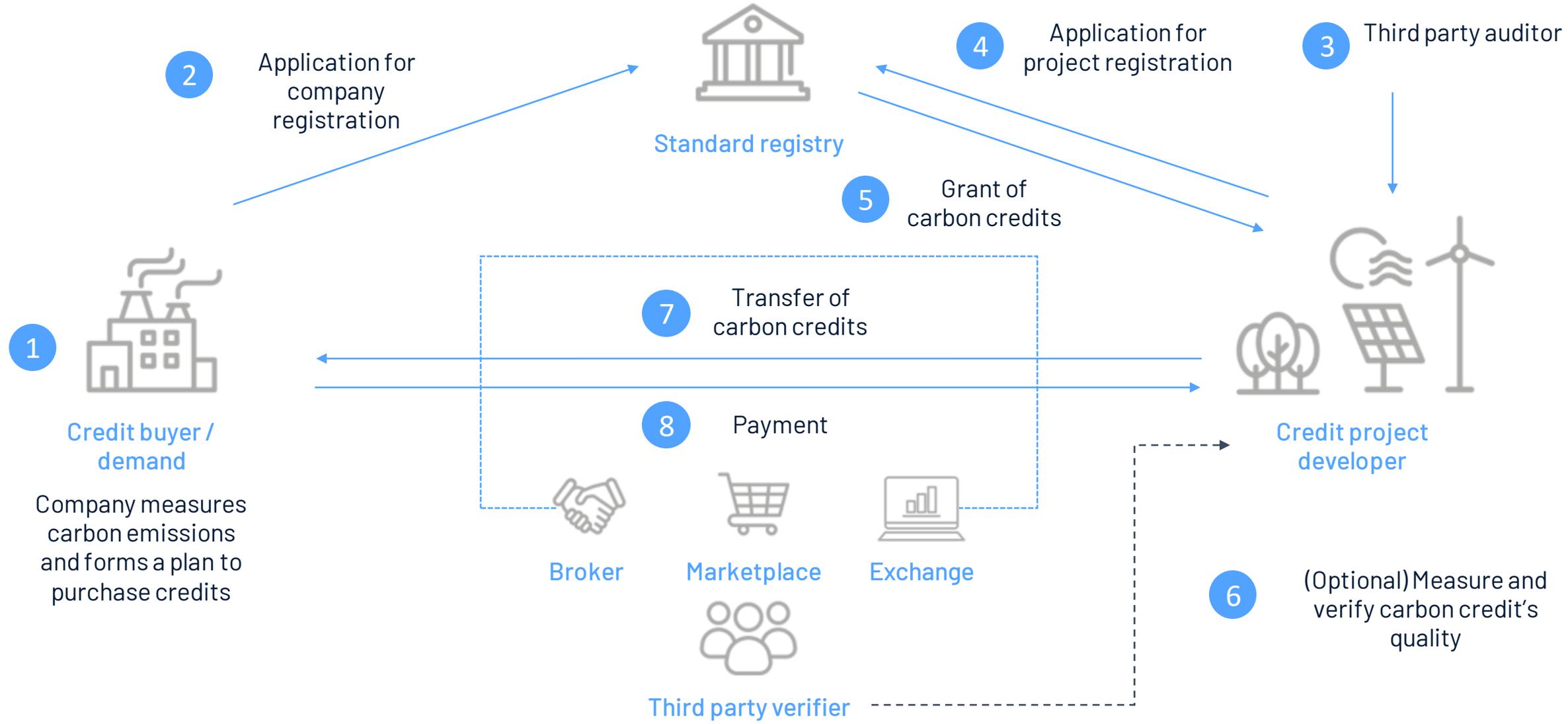
- Considered high-quality based on factors like permanence, additionality, leakage and (increasingly) socioeconomic factors
- Perceived quality can be subjective and process to measure any of the above factors can be time and labor-intensive
- Lack of trust around credit quality from market participants



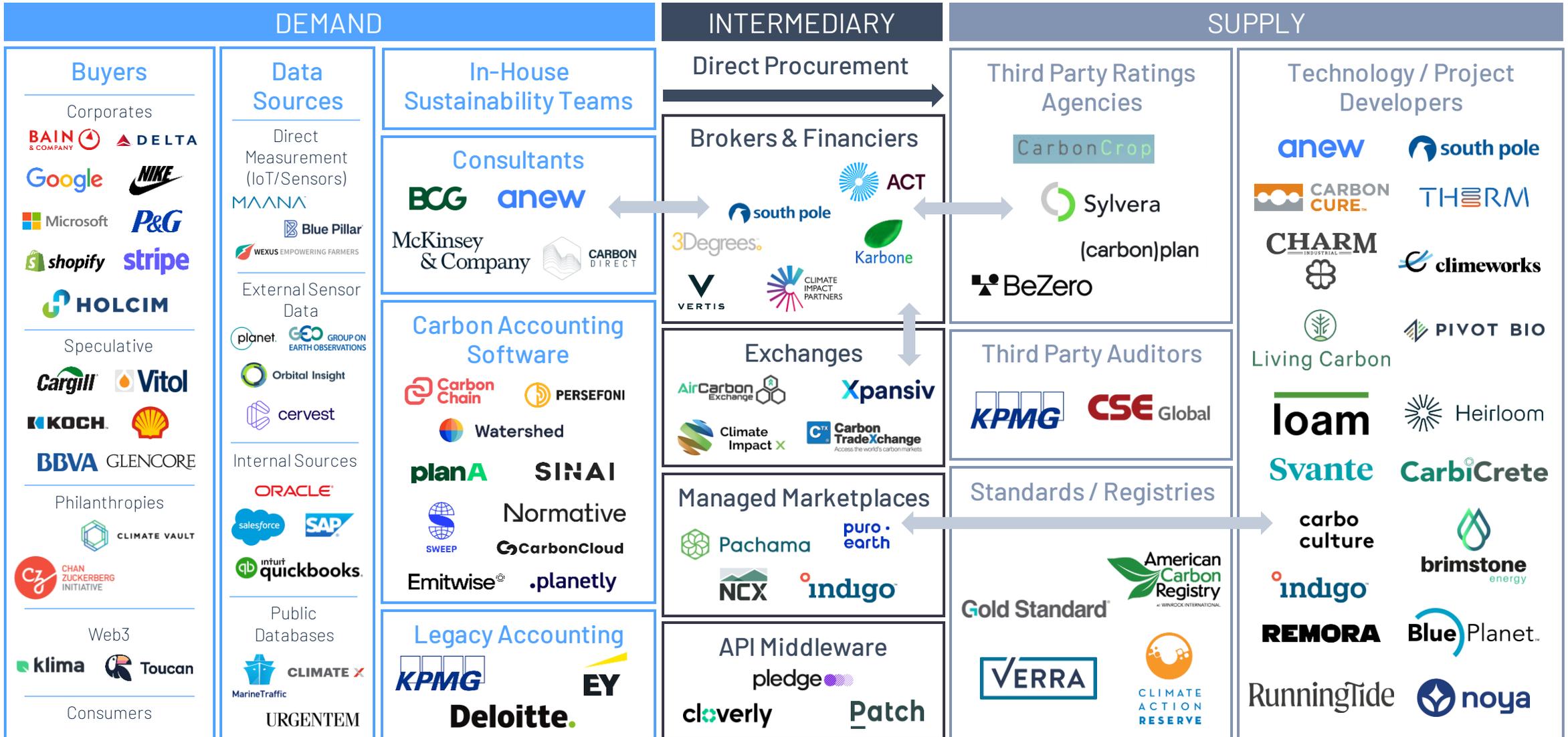
LIQUIDITY

- Lack of pricing transparency and liquidity - leading also to scarce financing solutions for high-cost projects
- Methods to buy and sell credits are still highly fragmented, and many credits are traded over-the-counter
- Inconsistency among project type and quality means that matching a buyer and seller is time-consuming and inefficient

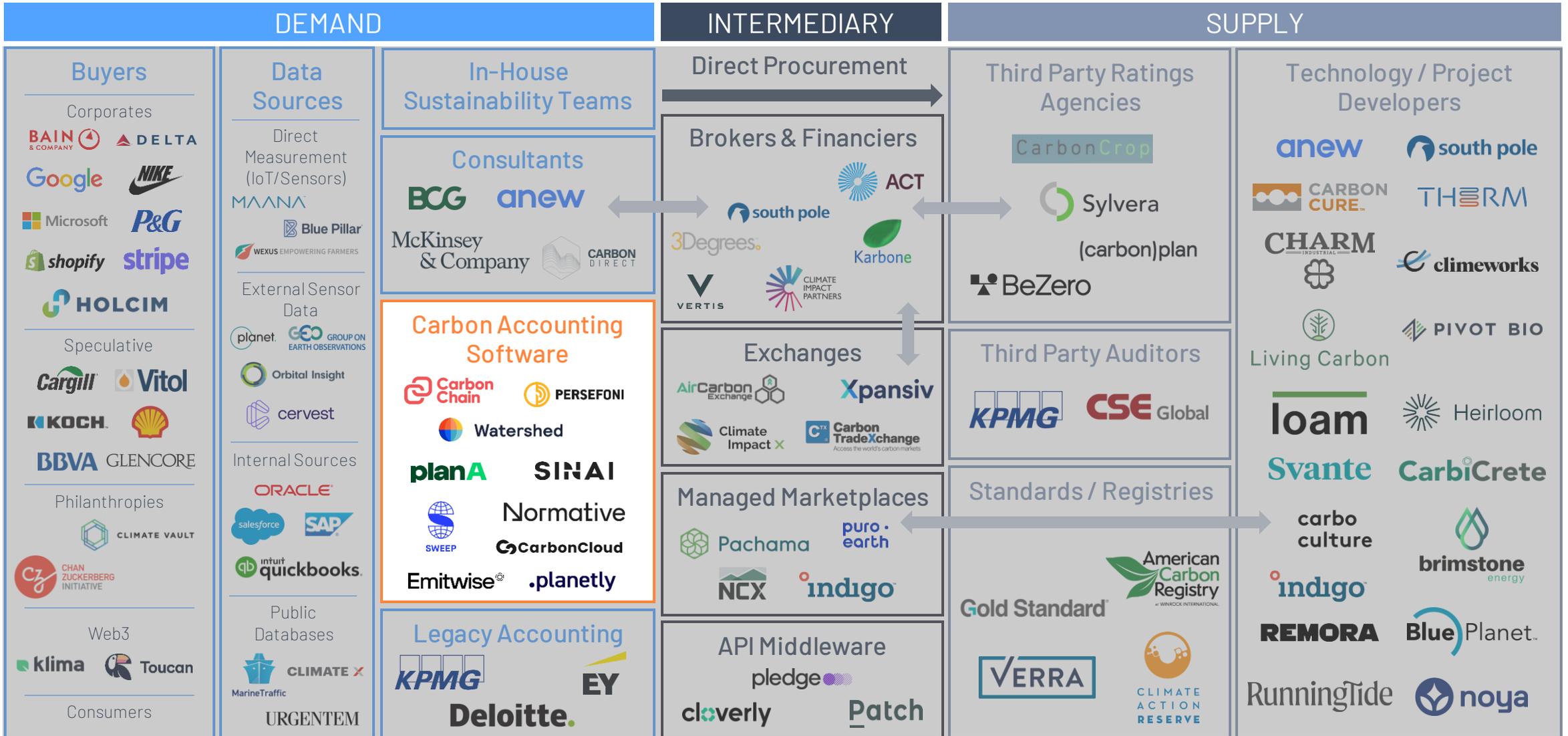
How the voluntary carbon market works today



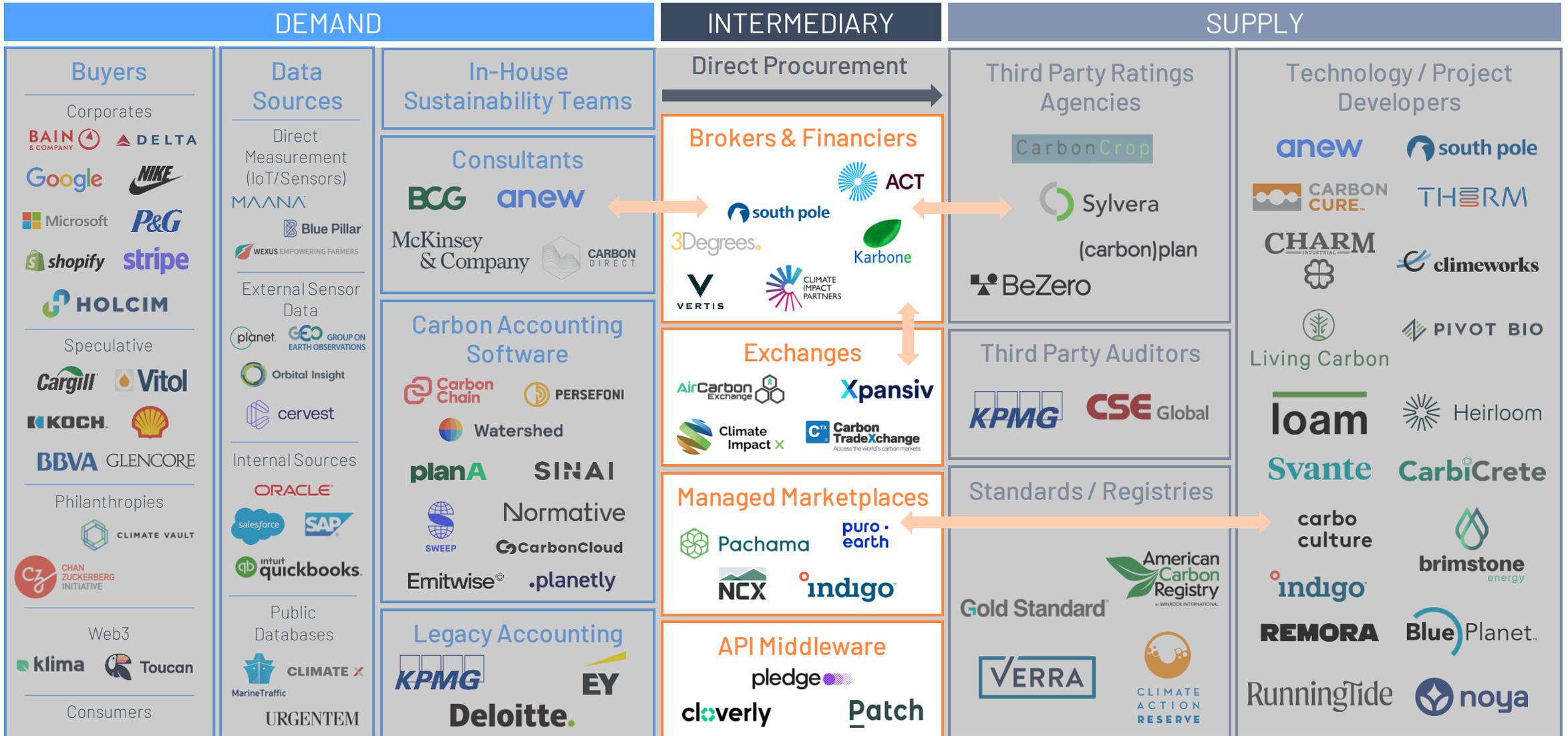
A complex map of players...



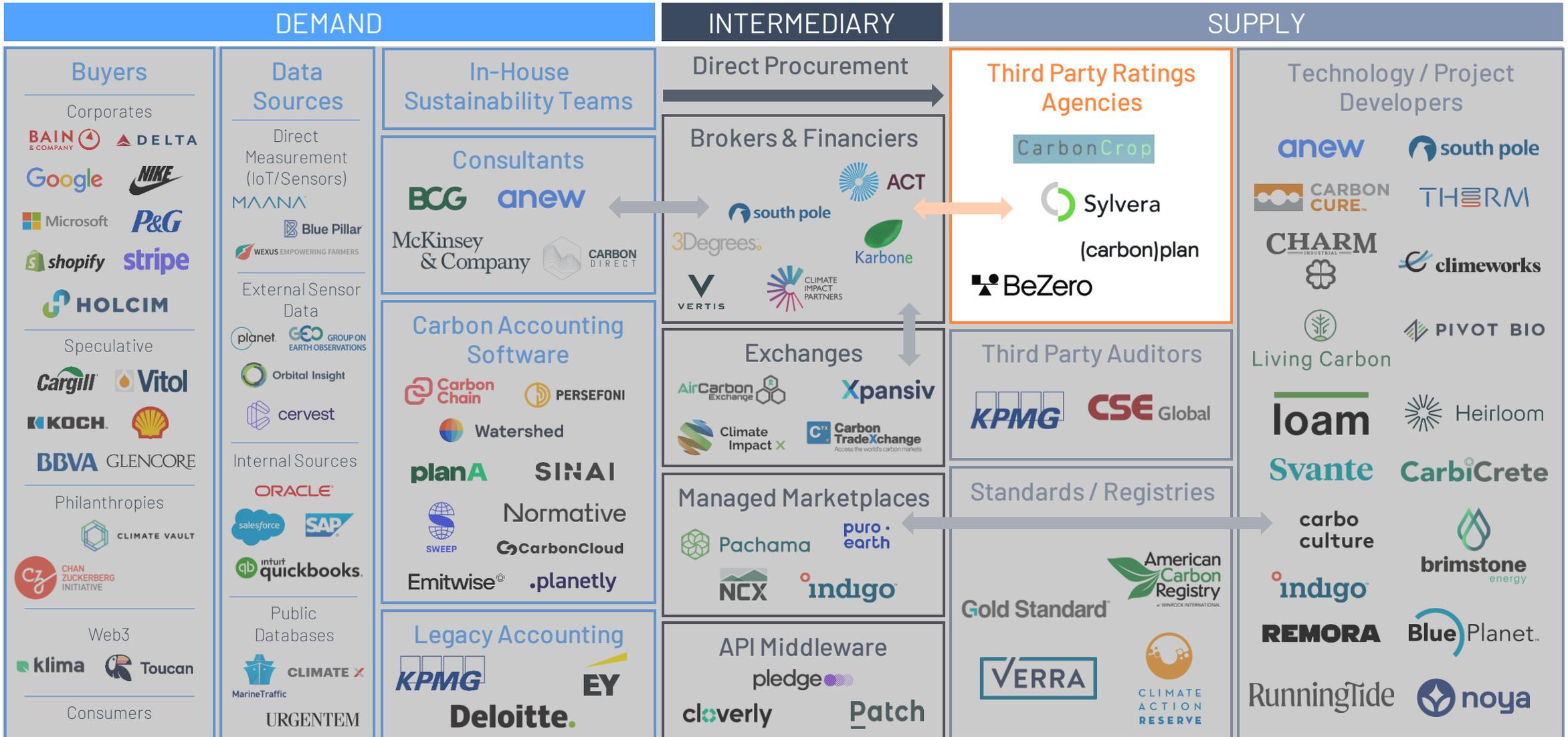
A complex map of players...



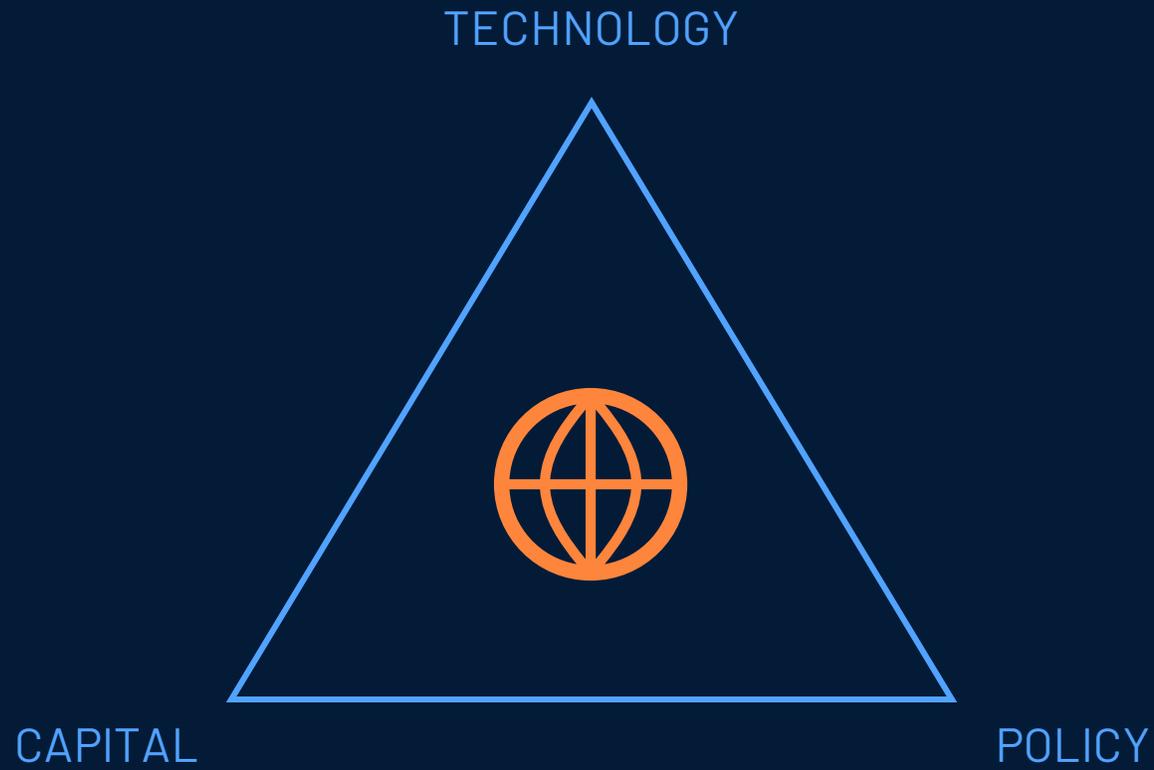
A complex map of players...



A complex map of players...



Where do we go from here?





THANK YOU



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NVCA **Policy Presentation**

Inflation Reduction Act

Top Level Questions

- What is most interesting to you/your companies?
- What is most concerning?
- Given the sheer amount of information, how can we effectively communicate?
- What are priorities for implementation?

Inflation Reduction Act Overview



Raises **\$738 billion** and provides for **climate** programs and **health care**.



Provision	Score
Energy security/climate change*	-\$369B
Affordable Care Act premium credit increases	-\$64B
15% corporate minimum tax	\$222B
1% stock buyback tax	\$73B
Prescription drug pricing	\$288B
IRS tax enforcement	\$124B

Final deal also included pledge to pass **permitting reform legislation in another legislative vehicle before the end of the fiscal year*



Prominent Tax Credits



Production and Investment Tax Credits (PTCs/ITCs)

- Extends PTC and ITC through 2024, expands ITC to include energy storage.
- Beginning in 2025, the bill transitions the electricity tax credits (PTC/ITC) to a technology-neutral, emissions-based structure, allowing any net-zero power generation to take advantage of either program.

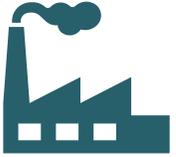
Alternative Fuels Credits:

- Extends current fuels credits through 2024 and moves to tech-neutral structure starting in 2025.

Hydrogen

- New credit for clean hydrogen produced at dedicated facility w/ carbon intensity less than 4 kg/kg of hydrogen produced, based on sliding scale of carbon intensity.

Prominent Tax Credits



Carbon Capture

- Ten-year extension and expansion of carbon capture credit
- Direct air capture (DAC) prioritized, minimum scale requirements reduced to 1K tons annually for a DAC facility.



Manufacturing Credits

- IRA creates a new production tax credit for the domestic production and sale of qualifying solar, wind, and energy storage components.
- Also reinstates 48C, competitive climate manufacturing credit

IRA Tax Credits: Structure



Credit Structure: the credits provide **multiple levels** of value depending on underlying circumstances of the project—

- **Base credit:** This is the **minimum value** of the credit a company can receive if their activity meets the **standards for eligibility** but **none** of the **bonus criteria**.
- **Prevailing wage & apprenticeship bonus:** Facilities that pay prevailing wages during the construction phase and first 10 years of operation and meet registered apprenticeship requirements will be eligible for significantly increased credit values, generally **5x the base amount**.
- **Domestic content bonus:** A **10 percentage point bonus** for projects that meet domestic content guidelines. To claim the bonus, companies must certify that certain **steel, iron, and manufactured products** used in the project are **domestically produced**.
- **Energy communities' bonus:** A **10 percentage point bonus** for projects that are located in locations designated as “**energy communities**.”

IRA Tax Credits: Direct Pay Mechanism



Direct pay (the ability of startups to monetize credits in the year that they are generated) will be available for:

- **Clean hydrogen**
- **Carbon sequestration**
- **Advanced manufacturing production tax credit**

Eligible taxpayers can make a **direct pay election** for the year in which a project is placed in service and the subsequent **4 years**.

IRA Tax Credits: Transferability



For direct pay-ineligible credits, a mechanism is included that will allow companies to **transfer all or a portion of their credits to unrelated taxpayers.**

- **Previously**, a tax investor buying a credit was required to have an ownership interest in the facility receiving the credit. Credits **can only be sold** the **year** in which they are **generated**.
- We believe **this mechanism** will make for a more **liquid tax credit market** for startups to access and will be an **improvement** over the current tax equity financing system.
- **However**, we won't know how much of the value of these credits startups can recoup in the tax credit transfer markets **until credits are generated** and **buying** and **selling** begins at volume.
- **QUESTION for the group:** How effective is the transferability mechanism and how should we consider engaging in the implementation of the program?

Certain IRA Tax Credit Values

	Credit Type	Base Credit Rate	Prevailing Wage/ Apprenticeship Bonus	Energy Communities Bonus	Domestic Content Bonus	Total Potential Value	Direct Pay/ Transferable?	Effective Dates
	Tech-Specific ITC	6% of project cost	30% of project cost	2% for base credit, 10% for labor bonus credit	2% for base credit, 10% for labor bonus credit	50% of project cost	Transferable	2022-2024
	Tech-Neutral ITC	6% for solar, fuel cells, waste energy recovery, combined heat and power, small wind property, geothermal heat pumps, energy storage technology, qualified biogas, electrochromic glass, and microgrid controllers; 2% for microturbine property.	30% of project cost; 10% for microturbine property	2% for base credit, 10% for labor bonus credit	2% for base credit, 10% for labor bonus credit	50% of project cost; 30% for microturbine property*	Transferable	2025-2032
	Direct Air Capture & Utilization	\$26 per metric ton	\$130 per metric ton	N/A	N/A	\$130 per metric ton	5-year direct pay/ transferable	2022-2032
	Advanced Energy Property	6% of project cost	30% of project cost	N/A	N/A	30% of project cost	Transferable	Until \$10 billion in allocations have been used
	Clean Fuel Production	Up to 20 cents per gallon of nonaviation transportation fuel/ up to 35 cents per gallon of aviation fuel	Up to \$1 per gallon of nonaviation transportation fuel/ up to \$1.75 per gallon of aviation fuel	N/A	N/A	\$1 per gallon of non-aviation transportation fuel/ \$1.75 per gallon of aviation fuel	Transferable	2025-2027

IRA: Climate Spending Programs



DOE Loan Programs Office

Existing loan authority increased by \$100B



Agriculture Programs

\$20B+ for climate-smart ag practices



Clean Vehicle Production Programs

\$20B in loans to build new facilities



Advanced Industrial Facilities Deployment Program

\$5.8B in grants, rebates, loans, and cooperative agreements



Federal Procurement of Clean Technologies

\$9B+ to stimulate markets for clean technologies



Greenhouse Gas Reduction Fund

\$27B for competitive grants to nat'l and local "green banks"



Environmental Justice Programs

\$60B for various EJ initiatives

IRA: DOE Loan Programs Office



50141: \$11.7B in funds to **increase existing loan authority** by approx. **\$100B**, including \$40B for Title 17 loan program authority.

- Eligible projects under Title 17 loan program authority include:
 - **Utilize** a new or significantly improved technology;
 - **Avoid, reduce or sequester** greenhouse gases;
 - Located in the **United States**; and,
 - Have a **reasonable prospect** of repayment.

50161: Appropriates **\$5B** for a new **Energy Infrastructure Reinvestment Financing program** to make up to \$250B in loan guarantees, including refinancing, for projects that:

- **Retool, repower, repurpose, or replace** energy infrastructure that has **ceased operation** (including environmental remediation and carbon management on fossil fuel projects), or
- **Enable** operating energy infrastructure to **avoid, reduce, utilize, or sequester** greenhouse gas emissions.

IRA: Greenhouse Gas Reduction Fund



Greenhouse Gas Reduction Fund (60104): \$27B EPA-administered competitive grants to national and local green banks. Eligible recipients include:

- **State, local, and Tribal** governments
- Certain **non-profit organizations** that are designed to **provide capital**, leverage **private capital**, and provide other forms of **financial assistance** for **rapid development** of **renewable** energy projects.

Three funding streams:

- **\$12B** that can be used to **support direct** and **indirect investments** in renewable energy projects nationally
- **\$8B** for **direct** and **indirect investments** in renewable energy projects that would otherwise **lack access** to financing in **low income** and **disadvantaged communities**
- **\$7B** for **zero-emission** technology deployment projects in **low income** and **disadvantaged communities**

Qualified projects:

- Projects that **reduce** or **avoid GHG emissions** and other forms of **air pollution** in partnership with, and by leveraging investment from, the **private sector**; or
- Projects that **assist communities** in their efforts to **reduce** or **avoid** GHG emissions and other forms of pollution

IRA: Select Agriculture Programs



Department of Agriculture receives funding for a range of programs, including:

- 21001: **\$20B** for Environmental Quality Incentives Program (EQIP), including to finance plans to **improve** soil carbon, **reduce** nitrogen losses, or reduce, **capture, avoid,** or **sequester** carbon dioxide, methane, or nitrous oxide emissions, associated with agricultural production.
- 22001: **\$1B** for partially forgivable loans to finance clean electricity generation and energy storage projects.
- 22002: **\$6.75B** for Rural Energy for America Program to **provide loan financing** and **grant funding** to agricultural producers and **rural small businesses** for renewable energy systems or to make **energy efficiency improvements**.
- 22004: **\$9.7B** for financial assistance to **rural electric cooperatives** to **upgrade** rural electric systems and **reduce** GHG emissions.

IRA: Other Programs of Interest



Environmental Protection Agency

- **60113:** \$1.55B for **methane emissions reduction** program.
- **60114:** \$5B grant program for **state/local gov'ts** to **develop** and **implement** plans to reduce GHGs.
- **60102:** \$2.3 for **competitive grant** and **rebate** program for purchase/installation of **zero-emission** port equipment and technology.
- **60201:** \$2.8B for **environmental** and **climate justice** block grants for **community-led air** and other pollution **monitoring, prevention** and **remediation** projects.



Department of Transportation

- **40007:** \$250M for competitive grant program to **support low-emission** aviation technologies.



Department of Energy

- **50143:** \$2B for grants to produce **EVs domestically**.

QUESTION for the group: Which programs are *priorities*?

CHIPS & Science

CHIPS & Science: Overview



Authorizes **\$250 billion** over 5 years for investments in **early research, education/workforce** development, **training, facilities, climate change,** and **entrepreneurship** to support the U.S. leadership position in key emerging technologies.



Includes:

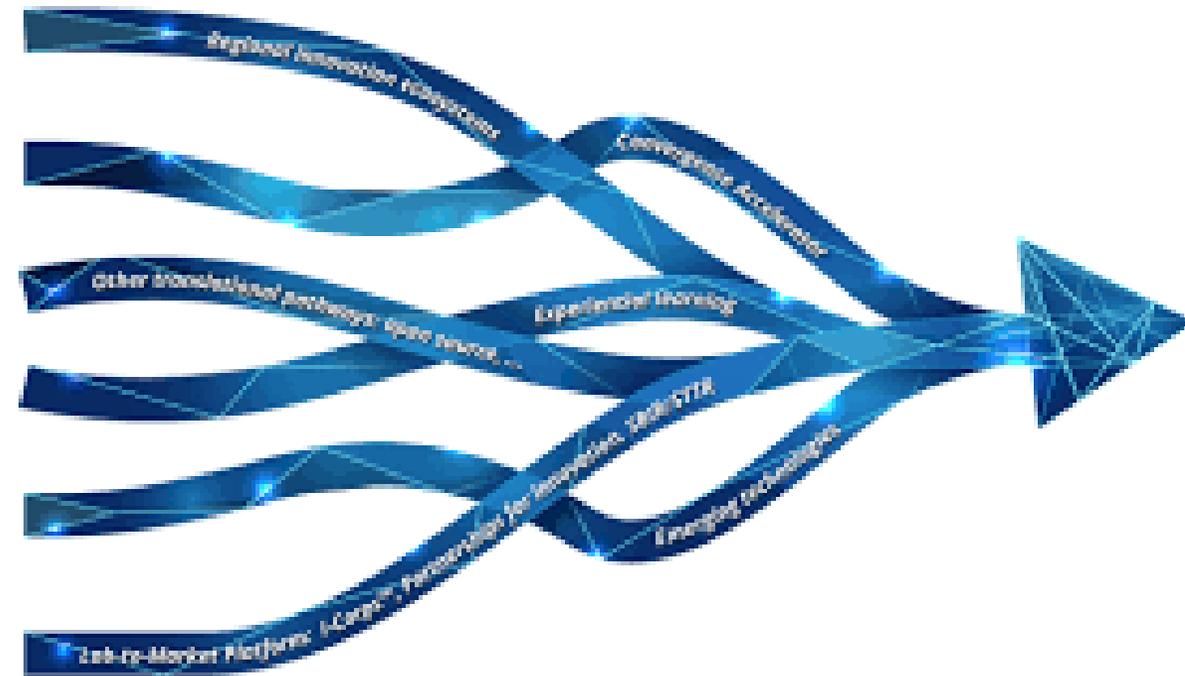
- **\$52B** for semiconductor research and manufacturing
- **\$61B** for NSF research
- **\$20B** for tech commercialization office
- **\$10B** for regional innovation hubs



CHIPS & Science: TIP Directorate

TIP Directorate

- **\$20B** for newly established NSF Directorate of Technology, Innovation, and Partnerships (TIP)
 - Advance critical and **emerging technologies**
 - Address pressing **societal** and **economic challenges**
 - Accelerate the translation of **research results** from lab to **market**
- **Public-private partnership** model in new programs
- **Core NSF** programs shifted under TIP directorate (SBIR/STTR, I Corps)



Key Tech Areas and Challenges

Initial List of Societal, National, and Geostrategic challenges:

- US national security
- US manufacturing and industrial productivity
- US workforce development and skills gaps
- Climate change and environmental sustainability
- Inequitable access to education, opportunity, or other services

Initial List of Key Technology Areas:

- Artificial intelligence, machine learning, autonomy, and related advances.
- High performance computing, semiconductors, and advanced computer hardware and software.
- Quantum information science and technology.
- Robotics, automation, and advanced manufacturing.
- Natural and anthropogenic disaster prevention or mitigation.
- Advanced communications technology and immersive technology.
- Biotechnology, medical technology, genomics, and synthetic biology.
- Data storage, data management, distributed ledger technologies, and cybersecurity, including biometrics.
- Advanced energy and industrial efficiency technologies, such as batteries and advanced nuclear technologies, including but not limited to for the purposes of electric generation
- Advanced materials science, including composites 2D materials, other next-generation materials, and related manufacturing technologies.

CHIPS & Science: TIP Directorate Programs

Regional Innovation Engines

- Up to **\$160M per engine** to catalyze and accelerate regional-scale, **R&D based innovation** ecosystems.
- Concept outlines have been submitted; full proposal **deadlines upcoming**.

Test Beds

- Grants to build/operate facilities for initial **production & demonstration of critical frontier technologies**.

Planning and Capacity Building Awards

- Grants to advance development, adoption, and commercialization of technologies
- Priority to promote regional tech commercialization.

R&D Grants

- \$1B in grants to accelerate tech advances and adoption in key tech focus areas.

Translation Accelerator

- \$6.5B for public-private partnerships to further R&D and commercialization of innovations.

CHIPS & Science: Other Programs

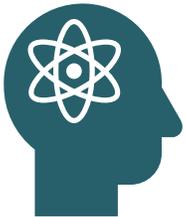


Regional Technology Hubs



Workforce Development

- Key priority area of directorate/regional tech hubs
- Microelectronics/quantum workforce development programs



Climate:

- Dept. of Energy, Office of Science
- Regional Clean Energy Innovation Program
- Clean energy tech transfer programs
- National Clean Energy Incubator Program

Next Steps...

Implementation



Climate Tax Credits

- Next steps: Treasury/IRS must **write implementing** regulations. Will likely release **shorter-term/retroactive credit** regs first, then move to **tech-neutral credit programs**.
- Transferability regs should be among first tranche.



IRA Spending Programs Timeline

- DOE/EPA/DOT/Agriculture must **begin implementation** process for programs.
- **Major programs** will likely coming online **mid-2023**, into **2024**.



CHIPS and Science Timeline

- NSF/DOE/DOC must **begin implementation** process for programs.
- **Congress** must **appropriate funds** for the programs.
- **Major programs** will likely coming online **mid-2023**, into **2024**, starting with Regional Innovation Engines.

Questions