The role of carbon credits in corporate climate action and quality from a buyer’s perspective

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Climate change is a crisis we will only be able to address if we all work together on a global scale and Facebook is committed to playing its part and helping to inspire real action in our community. We are taking steps to reduce our emissions and setting the goal to reach net zero for our company’s value chain by 2030.

— Mark Zuckerberg, 2020
Net Zero in 2030

Facebook’s goal is to reach net zero emissions for our value chain in 2030.
94% reduction in operational GHG emissions

Facebook achieved a 94% reduction in operational GHG emissions in 2020, exceeding our goal of reducing emissions by 75% compared to 2017 levels.
100% renewable energy supporting our operations

Facebook achieved 100% renewable energy for our operations in 2020 and now has over 7.5 GW of new wind and solar projects under contract.
Meta’s 2021 Carbon Footprint

1% Scope 1: 55,000 mt CO₂e
<1% Scope 2: 2,000 mt CO₂e
99% Scope 3: 5,655,000 mt CO₂e
42% Capital Goods: 2,410,000 mt CO₂e
42% Purchased Goods & Services: 2,371,000 mt CO₂e
10% Use of Sold Products: 558,000 mt CO₂e
3% Upstream Transportation & Distribution: 180,000 mt CO₂e
1% Fuel & Energy Related Activities: 75,000 mt CO₂e
1% Other: 29,000 mt CO₂e
<1% Employee Commuting: 22,000 mt CO₂e
<1% Business Travel: 5,000 mt CO₂e

These market-based emissions were **43% smaller** than our location-based emissions (9.9 M mt CO₂e). Our market-based emissions adjust for emissions reductions from purchasing decisions we have made. This includes our contracting of over 7,500 MW of renewable energy and purchase of over 700,000 gallons of sustainable aviation fuel for business travel, which has an up to 80% lower carbon footprint than traditional jet fuel.

We removed **90,000 tons of CO₂** through carbon removal projects to cover our Scope 1 and 2 emissions.
There will always be difficult to abate emissions

- Business Travel
- Data Center Construction
- Infra Hardware
Types of Carbon Credits

Avoided Emissions
Generated by activities that prevent the release of emissions that would have occurred

*E.g., Projects that reduce deforestation, supporting transitions to clean cookstoves*

Removal
Generated by activities that pull carbon out of the atmosphere

*E.g., Planting new trees, Direct Air Capture*
**Natural Climate Solutions**

The IPCC clearly identified the need for natural climate solutions in reaching a future where temperature rise is limited to 1.5°C — there is no mitigation pathway that does not rely on nature to reduce and remove carbon emissions.

**Afforestation/Reforestation**
- 3.5 GT*

**Peatland Restoration**
- 1 GT

**Coastal Restoration**
- Mangroves, seagrasses, etc.
- 1 GT

**Improved Forest Management**
- 2 GT

- Extended harvest rotation, conservation set-asides, etc.

**Agriculture and Grasslands/Soil Carbon**
- 3 GT

- Grazing management, agroforestry, cover cropping, biochar, etc.

*mitigation potential by 2030
Technological Removal
And engineered hybrid approaches

Direct Air Capture
Carbon Mineralization
Bioenergy with Carbon Capture and Storage

Ocean Alkalinity Enhancement
Biomass Carbon Removal and Storage
Mass Timber
Carbon removal project criteria

- Designed for Durable Storage and Impact
- Local Social and Environmental Impacts
- Enables Climate Justice and Equity
- Demonstrates Additionality
- Quantified using Existing Standards
- Assured by a Third Party
The voluntary carbon market has grown significantly in recent years.
Yet, the market needs to grow 15-fold in the next 10 years, and 100-fold by 2050.

Source: Taskforce on Scaling Voluntary Carbon Markets
~1% of 2020 carbon market was removals

Source: Ecosystem Marketplace & Carbon Direct
Assessing quality: our due diligence and purchasing process

1. Annual RfP  → Rolling assessment and long-term contracting
2. Registries and 3rd party verification ← New MRV and methodology development for tech removal
3. Methodologies - understand and address gaps
4. Due diligence process based on priorities:
   a. Multi-week process of assessing:
      i. Ghg impacts
      ii. Methodology used
      iii. Community engagement and local social impacts
      iv. Environmental impacts - water, biodiversity, soil quality, ecosystem function/services
As demand increases, so does the price
What will we pay more for?

- Community/local leadership
- BIPOC engagement/leadership
- Strong positive local impacts - economic, biodiversity, ecological
  - Additional verification to demonstrate
    - CCB
    - SDVista
- Addresses climate justice/equity
- Tech removal with high mitigation potential
- Links to our business operations/platform users
- Important to our internal community
Steering the future of carbon markets as a buyer:

Signaling credit demand is important, but we can influence how the market grows through additional engagement:

- **Address key barriers to market growth**
  - Science and technology barriers — *R&D, piloting new approaches*
  - Access barriers (ex. finance, technical capacity) — *project type/up-front payments*
  - Information/education barriers — *promote new approaches*
  - Methodology/standards barriers — *develop and test new methodologies*
  - Transparency/market confidence barriers — *share what we learn, invest in new transparency tools*

- **Focus on barriers that inhibit the kinds of projects we value most**
  - BIPOC leadership
  - Sustainable Development Goals (SDGs) priorities
  - Local social and environmental benefits
Opportunities for innovation

- Technology
  - Blockchain
  - MRV - remote sensing - high-res data
  - Tech removal needs new approaches

- Community engagement and leadership
  - Aggregating smaller projects
  - Reducing barriers to entry - information, technology, communication, power structure
  - Move from stakeholder engagement to community leadership

- Stacking benefits
  - Water, environmental outcomes
  - Using corporate commitments on water, biodiversity in concert with climate commitments

- Technological carbon removal
  - Whole new fields, take your pick!

- Understanding and managing environmental/climate risk
  - Reversal risk - better climate and financial models and approaches for management
  - Philosophy of corporate climate finance - where it’s safer or where it’s most needed?
THANK YOU!