

Environmental Markets 101

***SB 1383 Subgroup #1: Fostering Markets for Non-Digester Projects
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What are Environmental Markets?

- Transactions for environmental credits
 - a.k.a. environmental commodities, environmental attributes, environmental assets
- What do environmental credits represent?
 - Claim to the environmental benefit
 - Permit/license?
 - Property right?



Examples of Environmental Markets

- Carbon
- Renewable energy credits/certificates (RECs)
- Renewable fuels (RINs, LCFS)
- Water quality
- Zero-emission vehicle credits (ZEVs)
- Wetlands banking

Cost vs. Subsidy

- Charging for environmental impact
 - Cap-and-trade allowances and offsets
 - Watershed-based pollution limits
 - Wetlands banking
- Subsidizing a desired outcome
 - RECs
 - RINs, LCFS
 - ZEVs

How are credits created?

- Create an environmental benefit, typically using
 - Rules or a standard
 - Third-party verification and/or regulatory oversight
 - Common platform for housing credits, i.e. registry

How are credits transacted?

- Direct transactions
- Brokers
- Exchanges (limited to certain credit types)

How are credits used?

- Retired for voluntary purposes
 - Party retiring credits entitled to claim environmental benefit
- Surrendered to regulatory agency
 - Party retiring credits entitled to claim environmental benefit
 - Compliance obligation met

How long can credits be used?

- Compliance programs have varying requirements, e.g.
 - CA carbon cap-and-trade: credits can be used for the year of issuance or any later year (banking)
 - Water quality: usable in same year as water quality benefit underlying the credit (year credit generated)

Agricultural examples

- Carbon
 - Livestock digesters (compliance & voluntary)
 - Rice cultivation (compliance & voluntary)
 - Compost application to rangeland (voluntary)
- REC's
 - Livestock digesters generating power (compliance & voluntary)
- LCFS
 - Livestock digesters producing CNG



Thank You!

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