



# The Role of Forest Carbon Credits in Alaska's Forest Management and Carbon Reduction Strategies

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American Carbon Registry

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# American Carbon Registry



- Founded in 1996 as first private voluntary GHG registry
  - Subsidiary of Winrock International
- Operates in compliance and voluntary carbon markets
  - 2012 - Approved California Offset Project Registry
  - 2020 – Approved by ICAO to supply offsets for airline industry
  - 2023 – Approved Washington State Offset Project Registry
- >250 years of collective market experience
  - Forestry team consisting of six (3 PhD and 3 MS) technical and policy experts
  - 70+ Compliance forestry and >130 Voluntary forestry projects registered

# The carbon market



- Rapid decarbonization and offsetting of residual emissions
- Voluntary – 2,000+ companies have engaged & \$2 billion industry
  - Paris Agreement commitments
  - Corporate action and environmental consciousness
- Compliance
  - Cap & Trade – “Cap” sources, “trade” allowances and offsets
    - e.g., State of California; State of Washington
  - Industry regulation
    - e.g., ICAO (International civil aviation organization)



# Nature-Based Solutions



## Improved Forest Management

- Extended rotation lengths
- Commitment to increase C stocks

## Afforestation / Reforestation

- Planting of marginal or degraded lands
- Credits for forest accrual

## Avoided Conversion

- Avoided conversion of forest to non-forest (e.g., Ag., mining, residential, etc.)
- Conservation easement & appraisal HBU

\*\*Carbon credits incentivize climate action, and attach a monetary value to forest conservation, ecosystem benefits, and amenity values. Provide important contributions to climate change\*\*

# ACR land sector portfolio



## Methodologies (16)

- 3 IFM methodologies
- Afforestation/Reforestation
- Avoided conversion of grass/shrubland
- 2 wetland methodologies
- In development*
- Avoided conversion of forestland

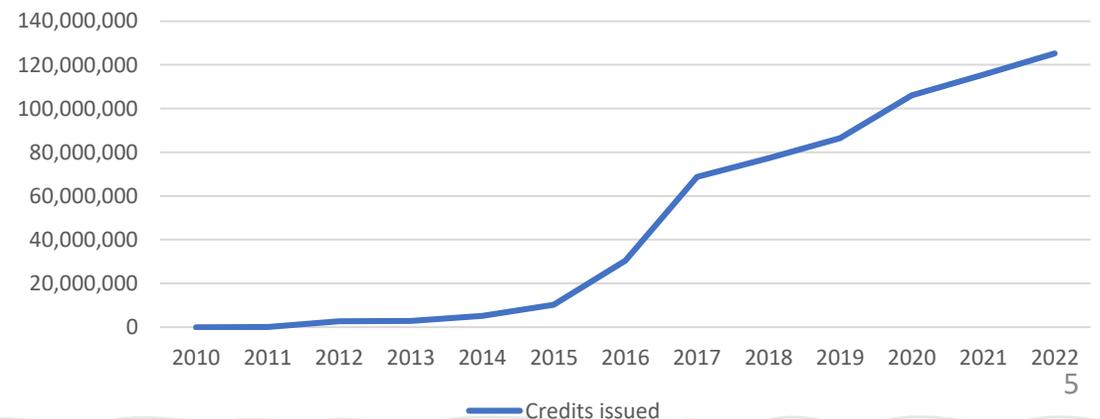
## Land ownership classes

- Industrial (TIMO, private)
- Land trusts/conservation orgs
- Clubs
- Universities
- Municipal and state land
- NIPFs
- Tribes

## Projects

IFM: 180+  
Reforestation: 6  
ACoGs: 1  
CA wetlands: 2  
SE wetlands (pocosins): 1

## Forest Credits Issued



# Project Development Process



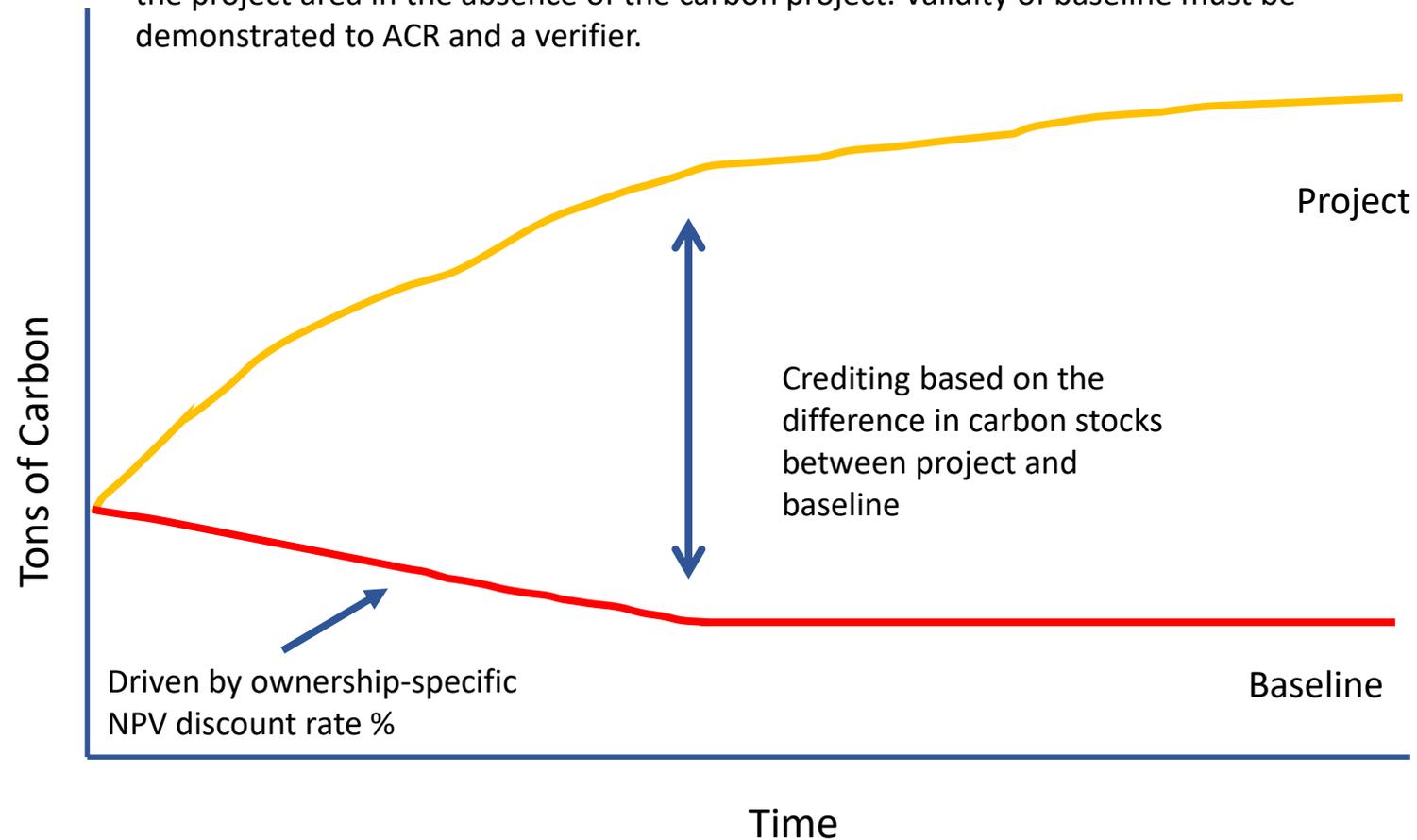
Phase	Considerations
Project Feasibility	<ul style="list-style-type: none"><li>• Eligibility &amp; costs</li><li>• Commitment period</li><li>• Potential buyers</li></ul>
Monitoring / Reporting	<ul style="list-style-type: none"><li>• Establish / maintaining inventory</li><li>• Quantifying &amp; reporting</li></ul>
Validation / Verification	<ul style="list-style-type: none"><li>• Validation = Confirmation of eligibility</li><li>• Verification = Confirmation of C claims (site and desk-based)</li></ul>
Credit Issuance	<ul style="list-style-type: none"><li>• Serialized carbon offsets</li><li>• Tracked and retired in ACR's secure registry platform</li></ul>

# Additionality

- What would happen in the absence of the project?
- 3-pronged additionality test:
  - Regulatory surplus
  - Common practice
  - Faces implementation barriers (typically financial, but could be technological or institutional)

# IFM project example

Baseline: the counterfactual or business as usual scenario that could have occurred within the project area in the absence of the carbon project. Validity of baseline must be demonstrated to ACR and a verifier.



# Permanence



	ACR requirements
<b><i>Permanence</i></b>	<ul style="list-style-type: none"><li>• 40-year commitment to retain and increase C stocks</li><li>• Must monitor, report, and verify periodically</li></ul>
<b><i>Risk mitigation</i></b>	<ul style="list-style-type: none"><li>• Buffer contribution of ERTs</li><li>• Wildfire, flood, insect/disease, wind events, acts of god</li></ul>
<b><i>Unintentional reversals</i></b>	<ul style="list-style-type: none"><li>• Buffer contributions &amp; retirement (if needed)</li></ul>
<b><i>Intentional reversals</i></b>	<ul style="list-style-type: none"><li>• Project Proponent to replace issued ERTs</li></ul>

# Quantification



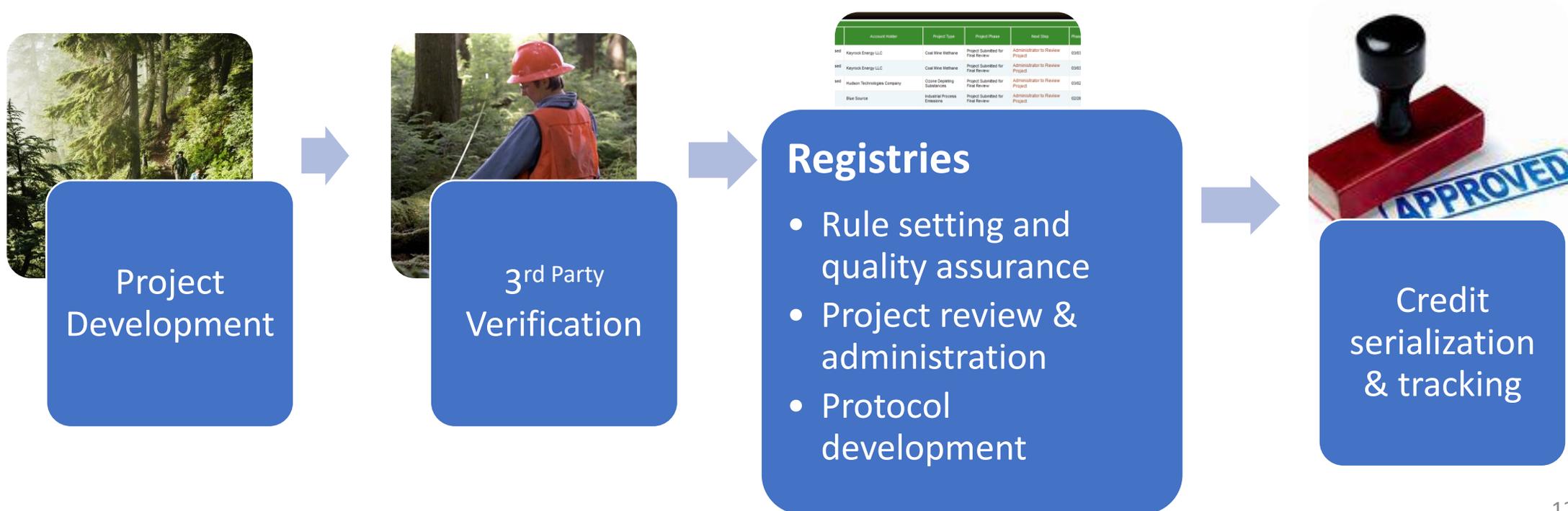
	ACR requirements
<b><i>Quantified carbon benefit (QCB)</i></b>	<ul style="list-style-type: none"><li>• CO2 stock difference between 'project' and 'baseline'</li></ul>
<b><i>Gross ERT's</i></b>	<ul style="list-style-type: none"><li>• QCB - minus uncertainty, minus leakage</li></ul>
<b><i>Buffer contribution</i></b>	<ul style="list-style-type: none"><li>• Gross ERT's * buffer contribution (%)</li><li>• Typically ~ 18%</li></ul>
<b><i>Net ERT's</i></b>	<ul style="list-style-type: none"><li>• Gross – buffer = Credits issued to project</li></ul>

# 3rd party verification

- Key step for reputable carbon offsets
- Site-visit verifications at least every 5 years
  - May verify more frequently with desk-based verifications
- Quantification checks & materiality
- Successful verification and ACR review leads to serialized offset issuance
  - Registry tracks through retirement

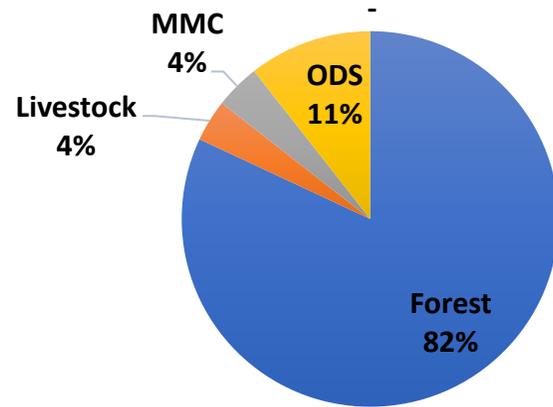
# The role of registries

*To safeguard the environmental and financial integrity of the carbon market*

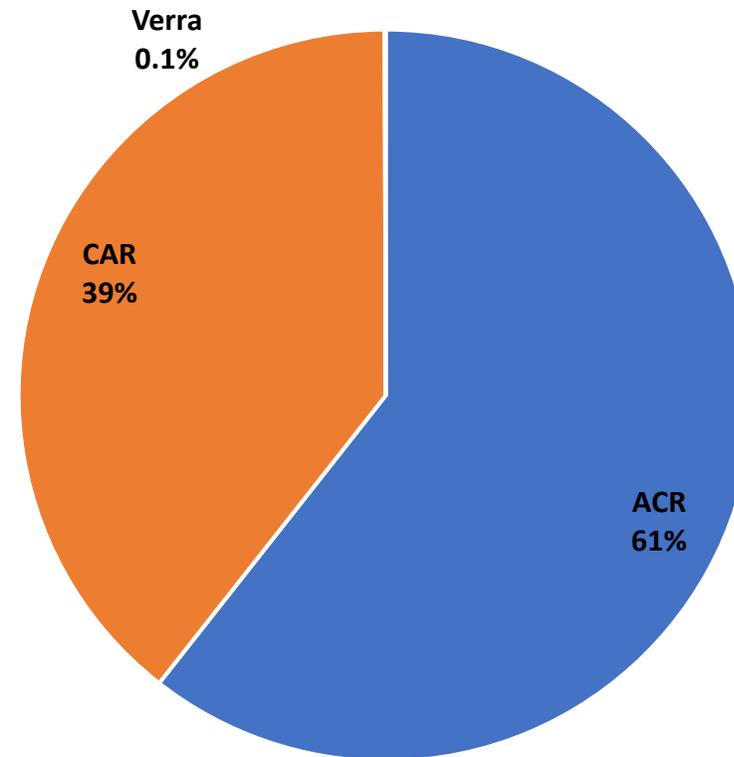


# California Cap & Trade

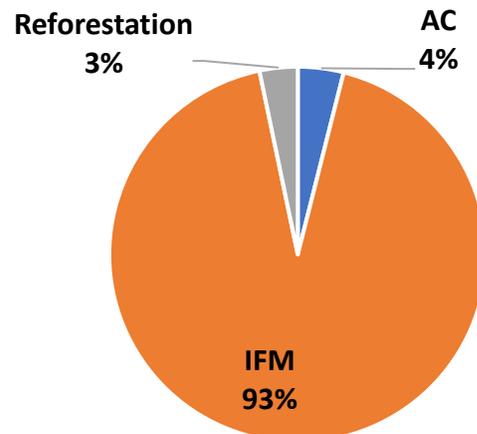
Issuance by protocol type



Forestry issuance by registry

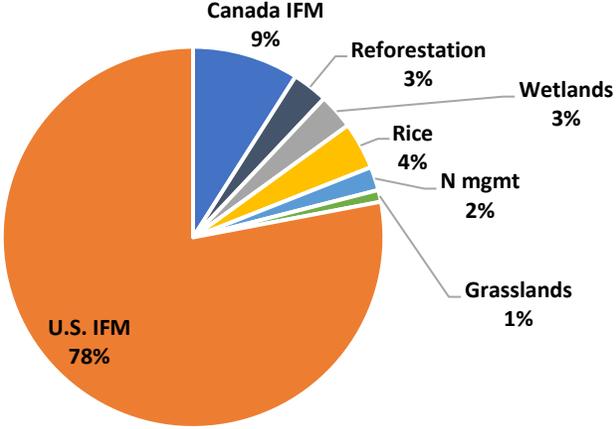


Forest project type distribution

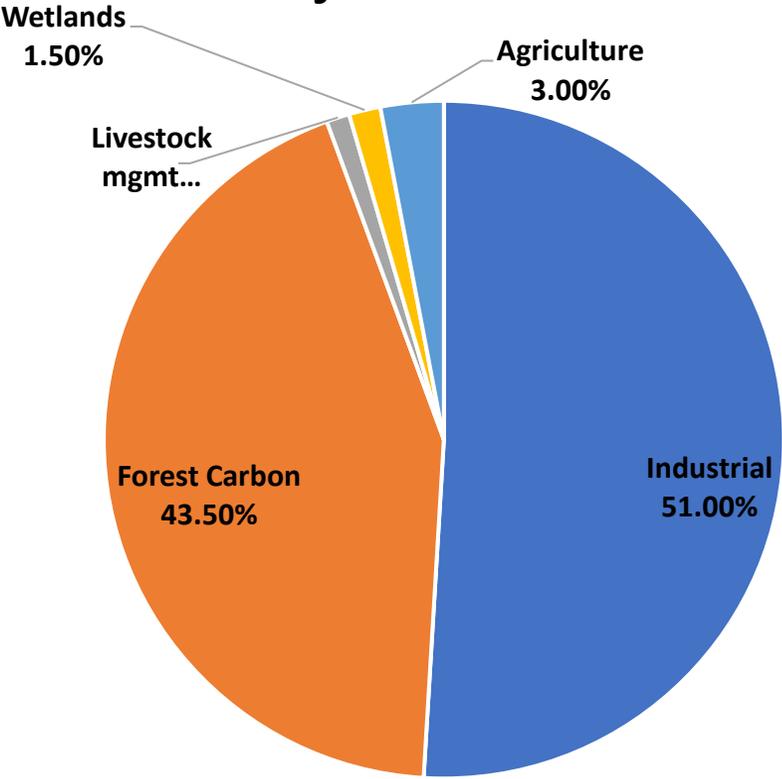


# ACR Voluntary portfolio

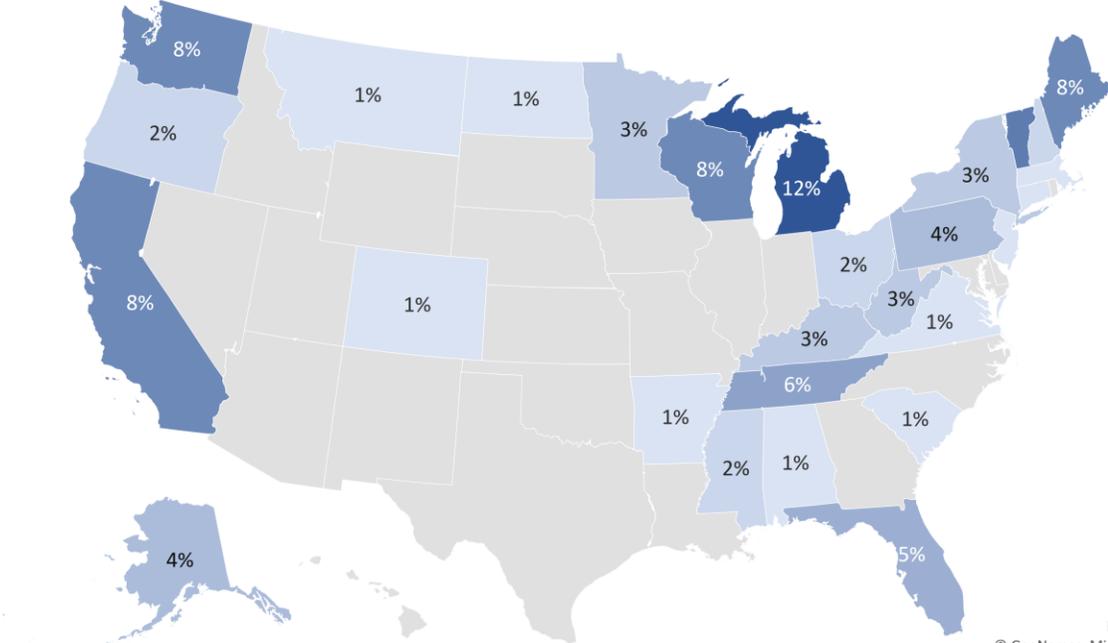
ACR AFOLU project distribution



ACR Project Distribution



ACR forestry project distribution



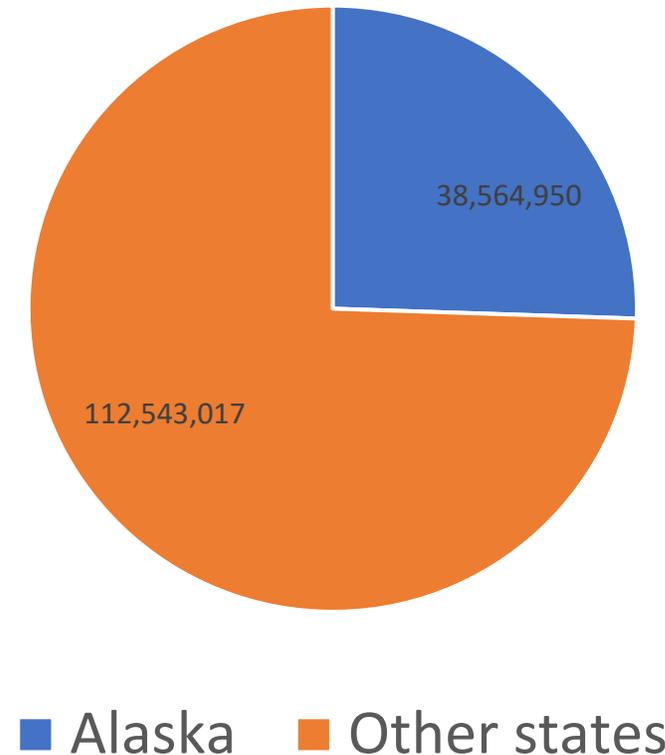
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# Other relevant stats



- 12 State/County/Municipal projects
- 16 Alaskan projects
- 27 Tribal/ANC projects

## Alaska issuance volumes (34% of total; ACR & ARB)



# Thank you!!

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