



Covering New Ground

State of the Forest Carbon Markets 2013

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Ecosystem Marketplace

A FOREST TRENDS INITIATIVE

Support from sponsors, stakeholders and survey respondents enabled our most comprehensive report to date

Most countries ever represented (58), and widest array of variables ever tracked and reported

162 agriculture, forest or land use (AFOLU) projects reported to our global annual survey

Ecosystem Marketplace has tracked 513 unique AFOLU projects over time; 62 reported for the first time this year

Surveyed exchanges, all major registries; surveys in 3 languages

Agnostic on credit quality, but do conduct extensive due diligence and peer review of preliminary findings

All findings volume-weighted for significance

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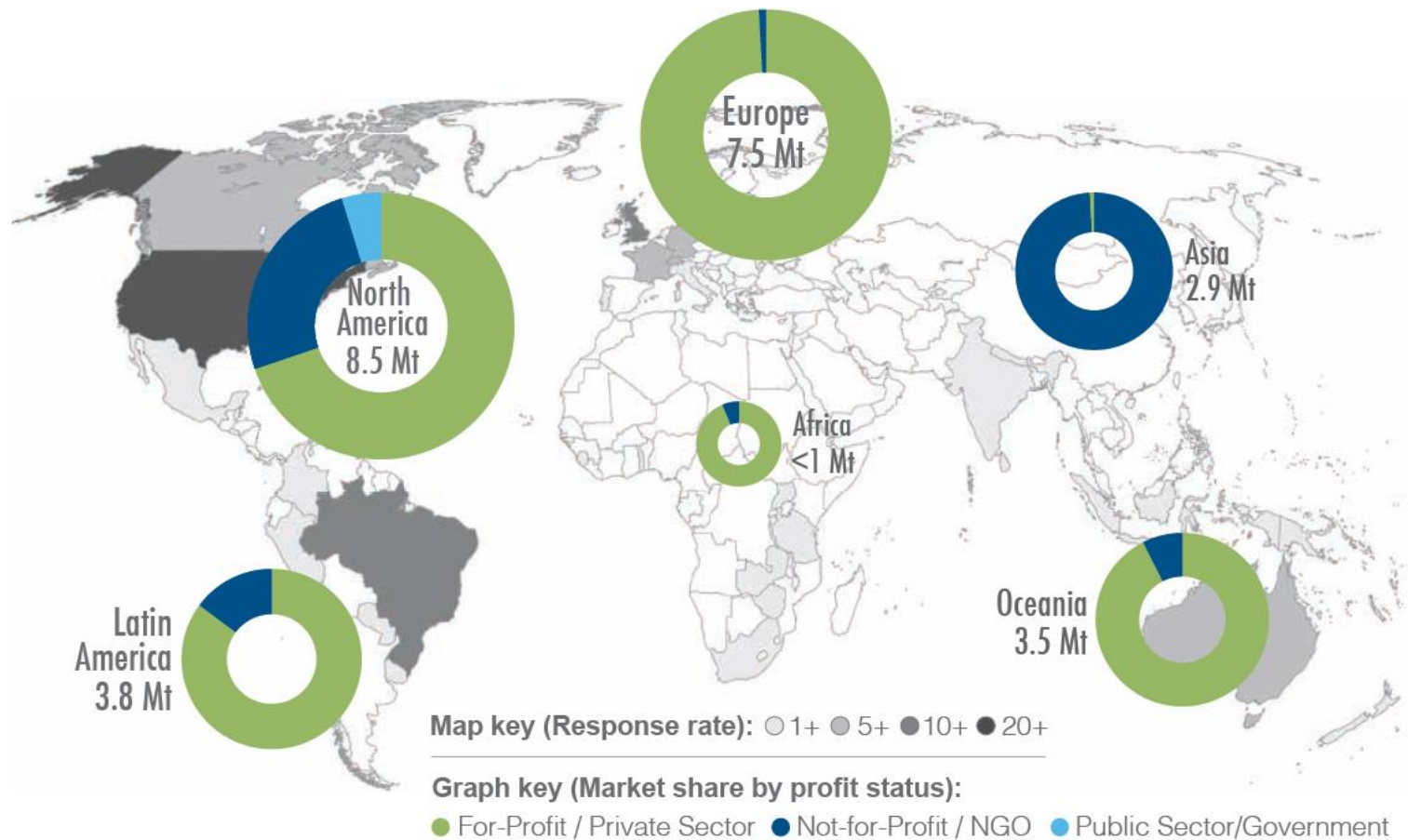


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RESPONSE RATE: 162 agriculture, forest or land use (AFOLU) projects reported to our survey; one-third were from developing countries

RESPONSE RATE (BY COUNTRY); TRANSACTION VOLUME AND MARKET SHARE BY PROFIT STATUS AND REGION, 2013 SURVEY



SOURCE: Forest Trends' Ecosystem Marketplace. State of the Voluntary Carbon Markets 2013.



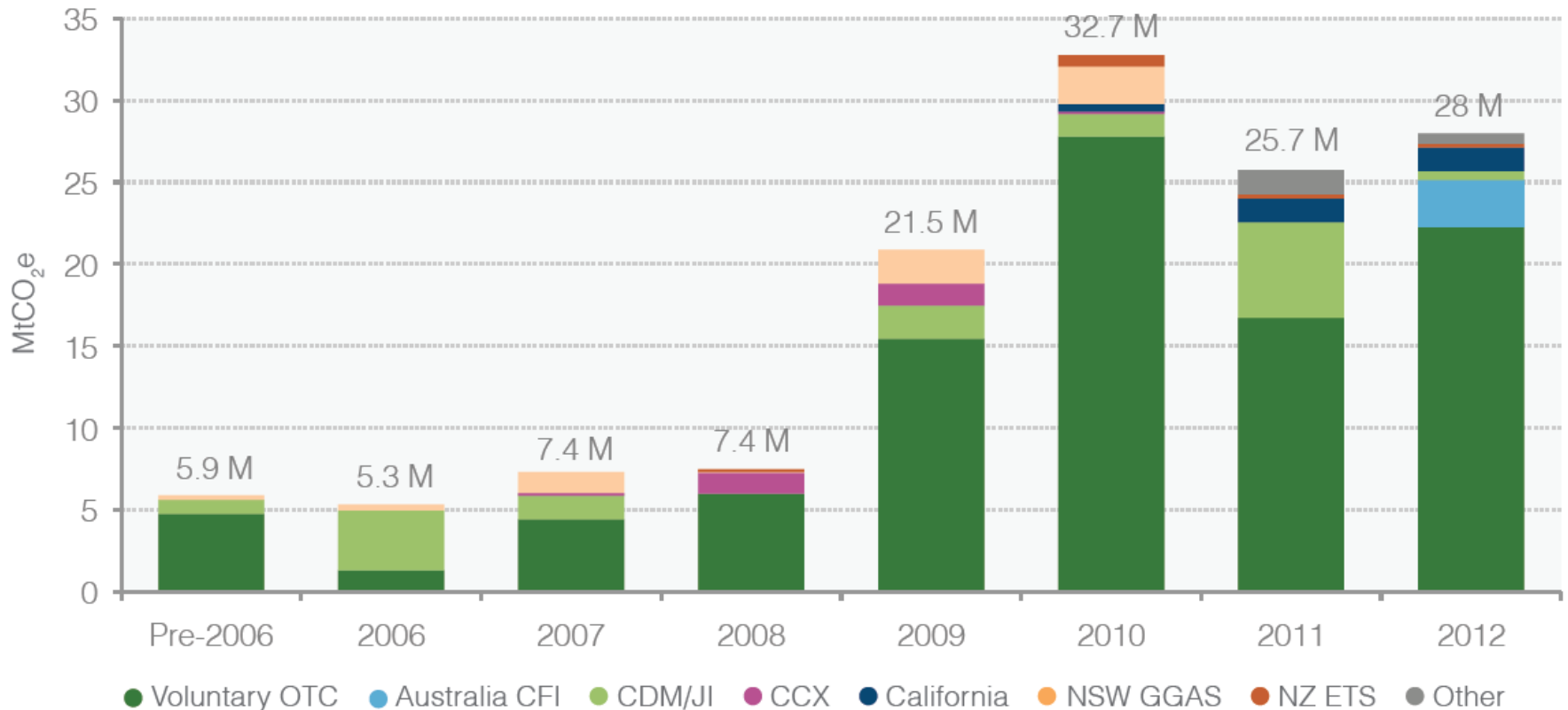
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MARKET SIZE: 28 MtCO₂e contracted in 2012, a 9% increase in volume from 2011 though value dropped 8%, to \$216M, from last year's record

HISTORICAL FOREST CARBON OFFSET TRANSACTION VOLUMES, ALL MARKETS

MtCO₂e



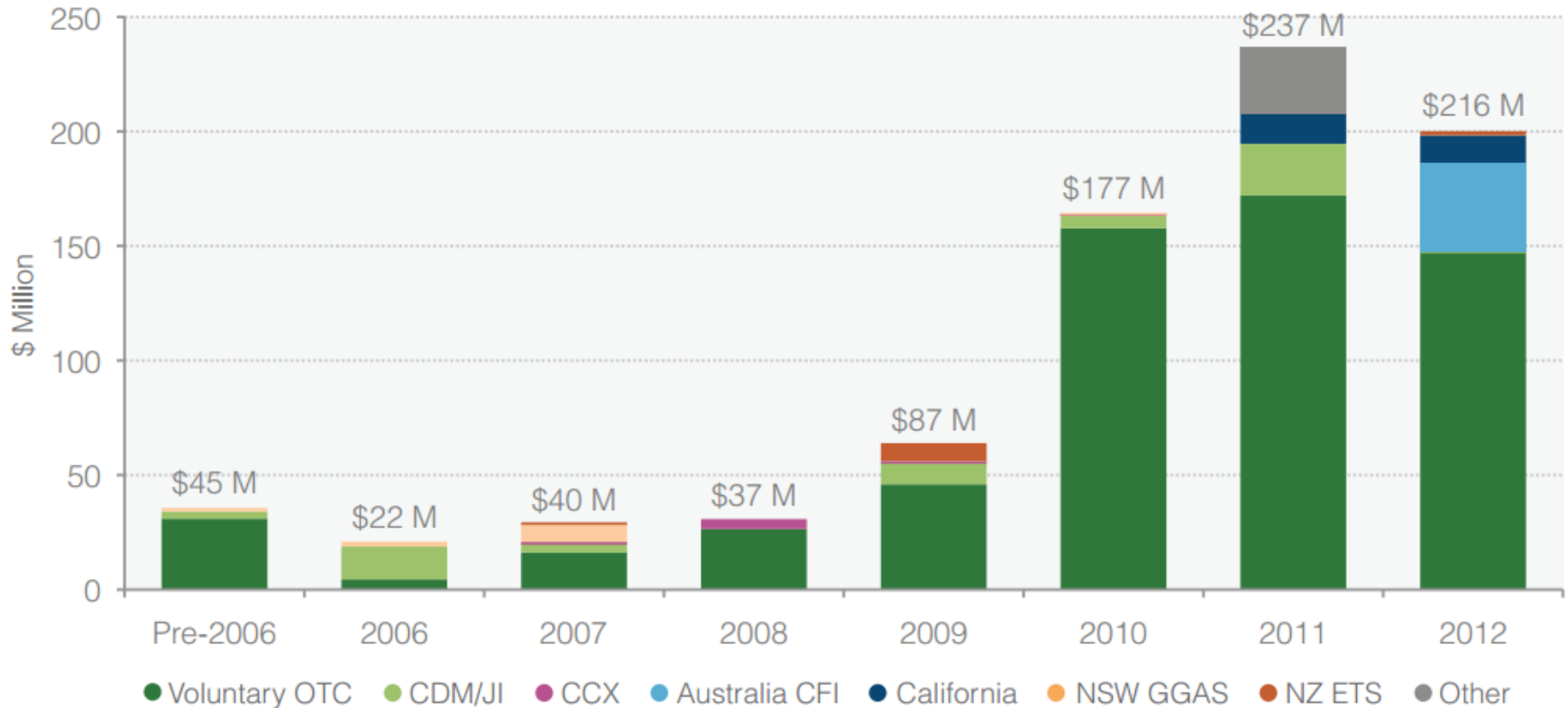
SOURCE: Forest Trends' Ecosystem Marketplace. State of the Forest Carbon Markets 2013.



MARKET VALUE: Voluntary buyers, buoyed by pre-compliance activities in Australia and California, contracted \$198M of the \$216M market

HISTORICAL FOREST CARBON OFFSET TRANSACTION VALUE, ALL MARKETS

US\$ Millions

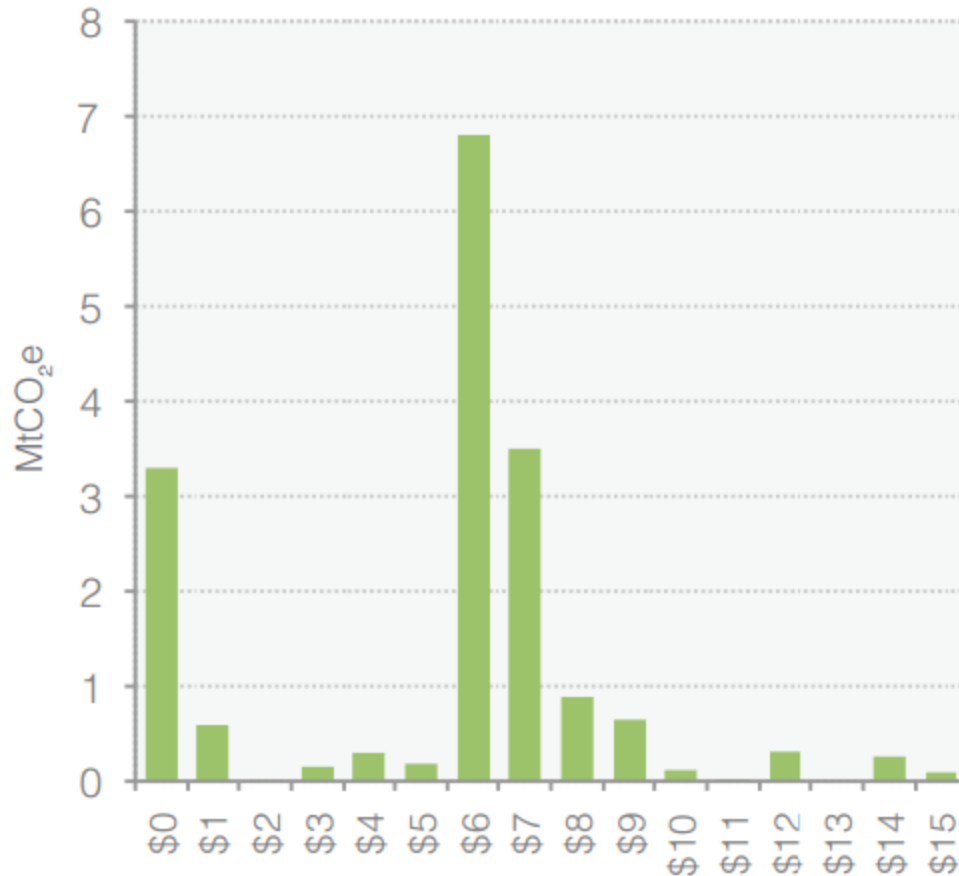




PRICE: Most forest offsets transacted at between \$6-\$7/tCO₂e; average price was \$7.8/tCO₂e in 2012, down from \$9.2/tCO₂e last year

VOLUME TRANSACTED BY OFFSET PRICE

MtCO₂e and US\$

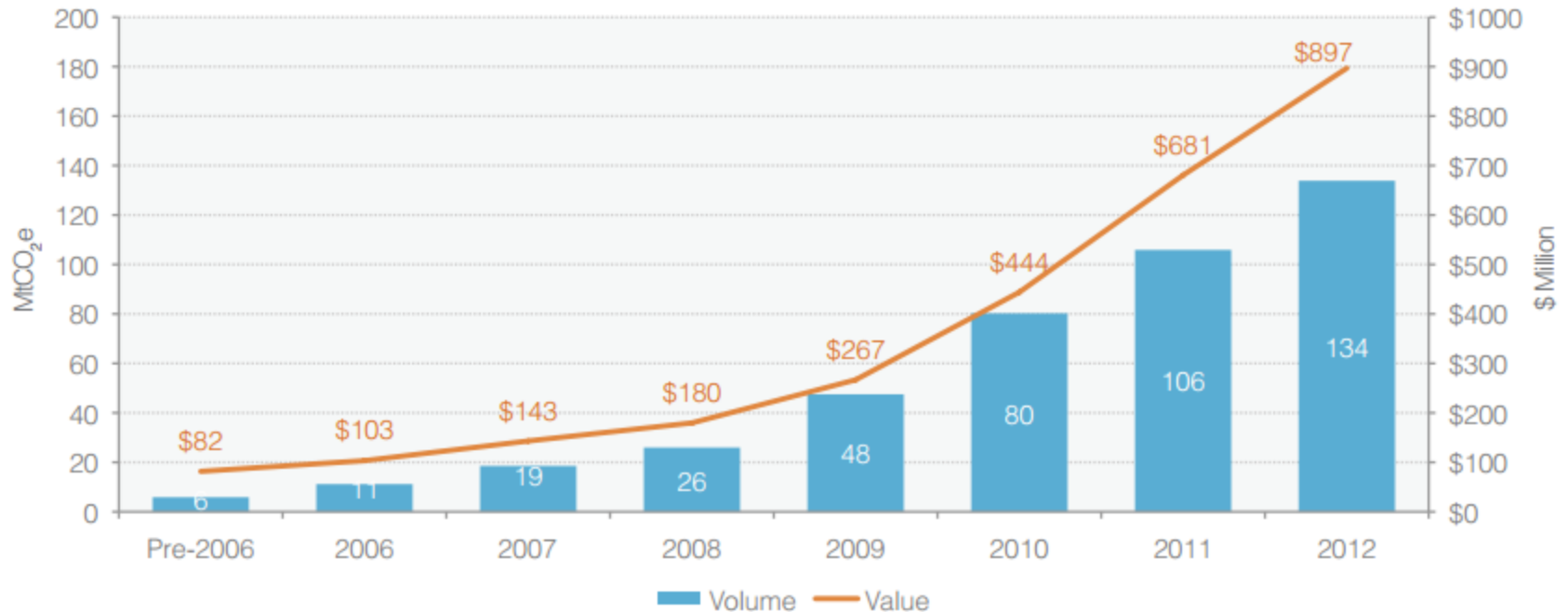




OVER TIME: The forest carbon markets have contributed \$0.9 B to forest carbon management, from the transaction of at least 134 MtCO₂e

CUMULATIVE FORESTRY OFFSET TRANSACTION VOLUME AND VALUE, ALL MARKETS

MtCO₂e and US\$ Millions

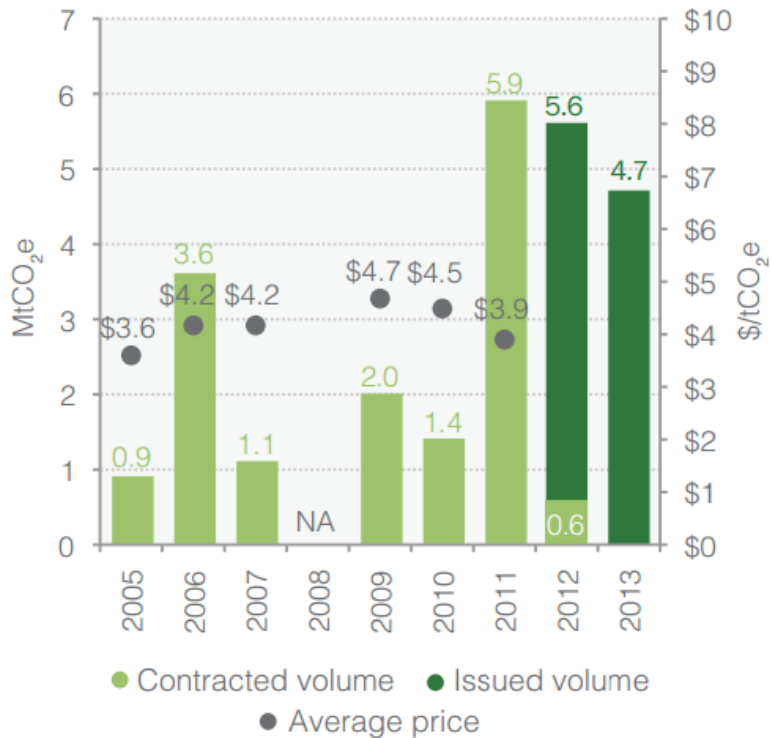




TRENDS IN OFFSETTING: CDM market plummets in volume and value in 2012, but forestry is most popular offset category in the VCM

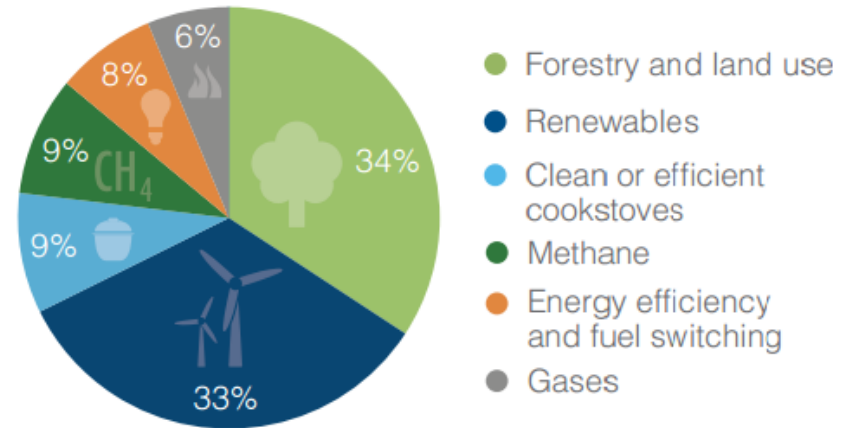
HISTORICAL TRANSACTED AND ISSUED VOLUME, AND AVERAGE PRICE, TCERS

MtCO₂e and US\$



MARKET SHARE BY PROJECT CATEGORY, VOLUNTARY CARBON OFFSET MARKETS, 2012

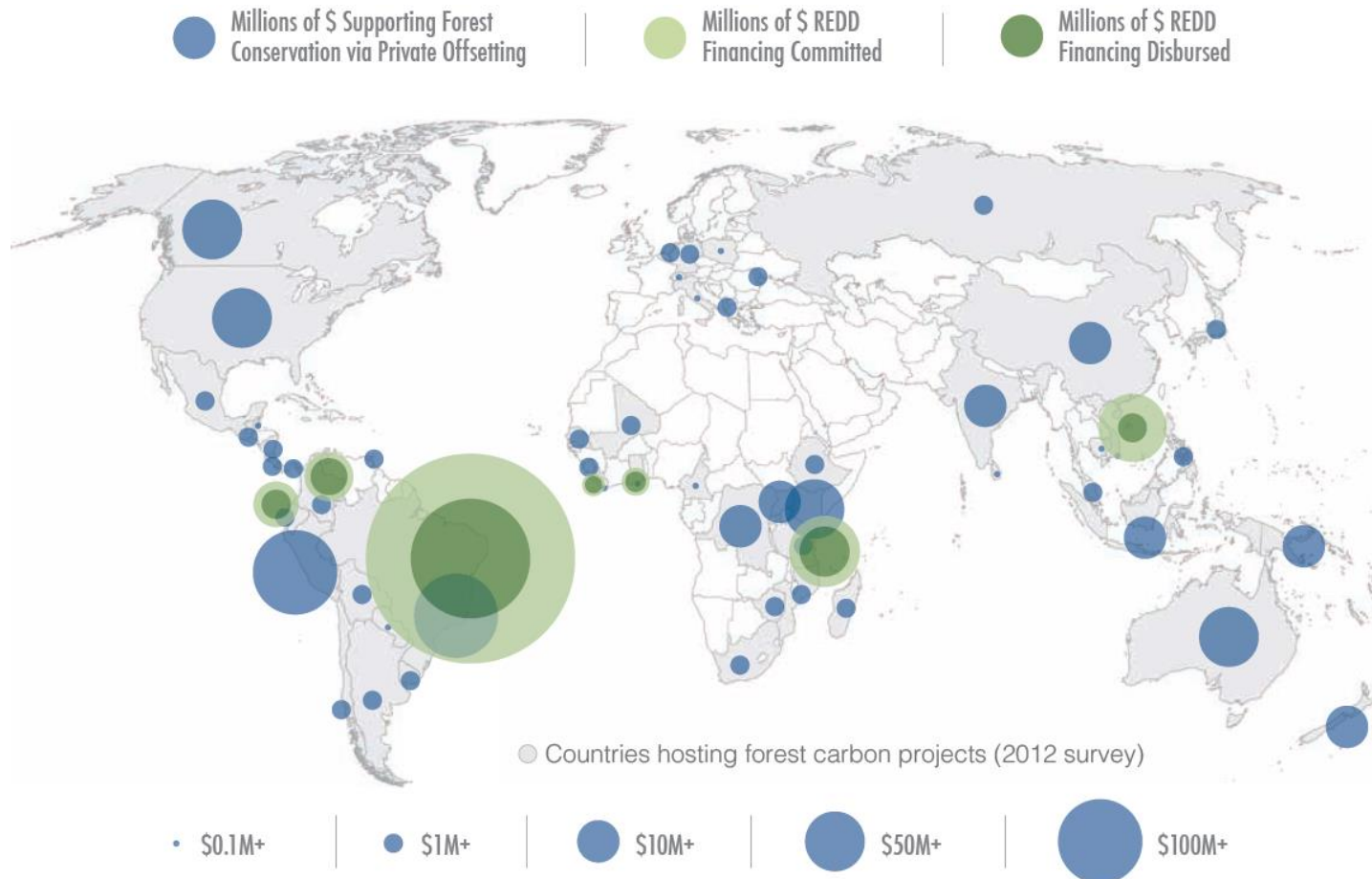
% Share





FOREST FINANCE: Private carbon finance has funneled \$0.9 B to forests, while REDD donor countries have so far committed >\$1 B to 7 countries

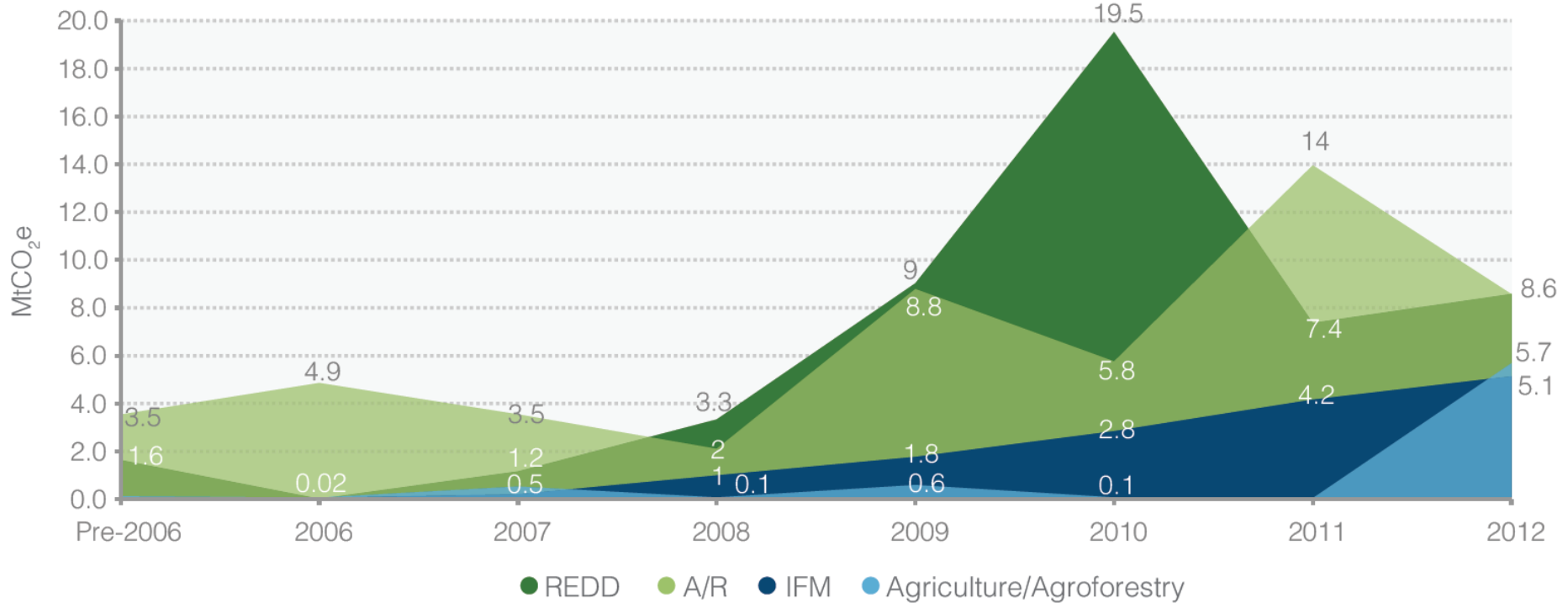
COMPARISON OF PROJECT- AND COUNTRY-LEVEL FOREST FINANCE, ALL YEARS





PROJECT TYPES: REDD and A/R projects both transacted 8.6 MtCO₂e while IFM and SALM/Agro-forestry transactions climbed

TRANSACTIONED VOLUME BY PROJECT TYPE, ALL MARKETS, HISTORICAL
MtCO₂e

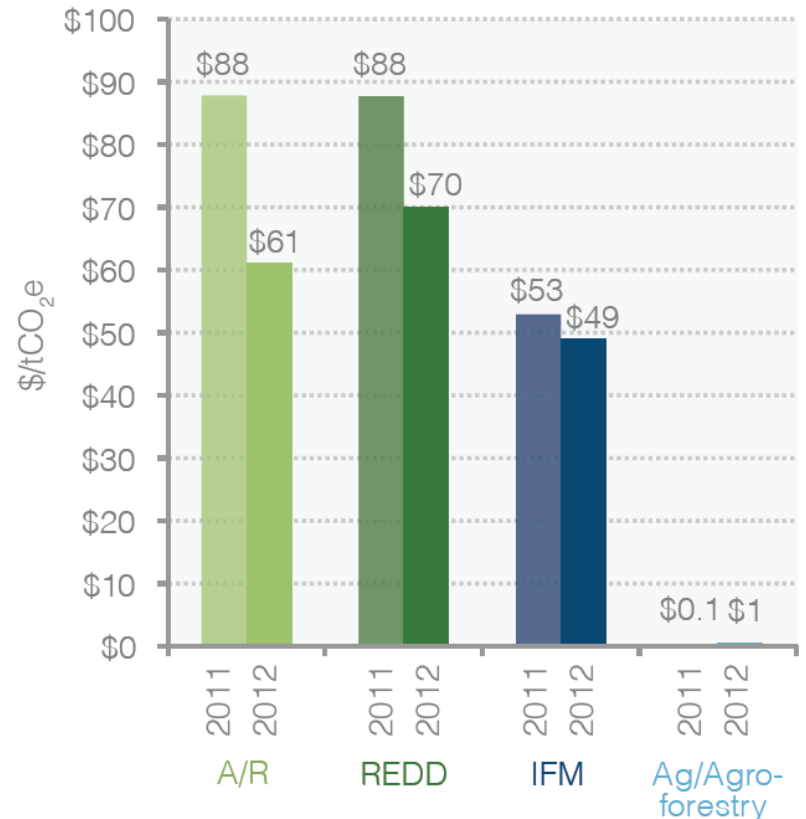
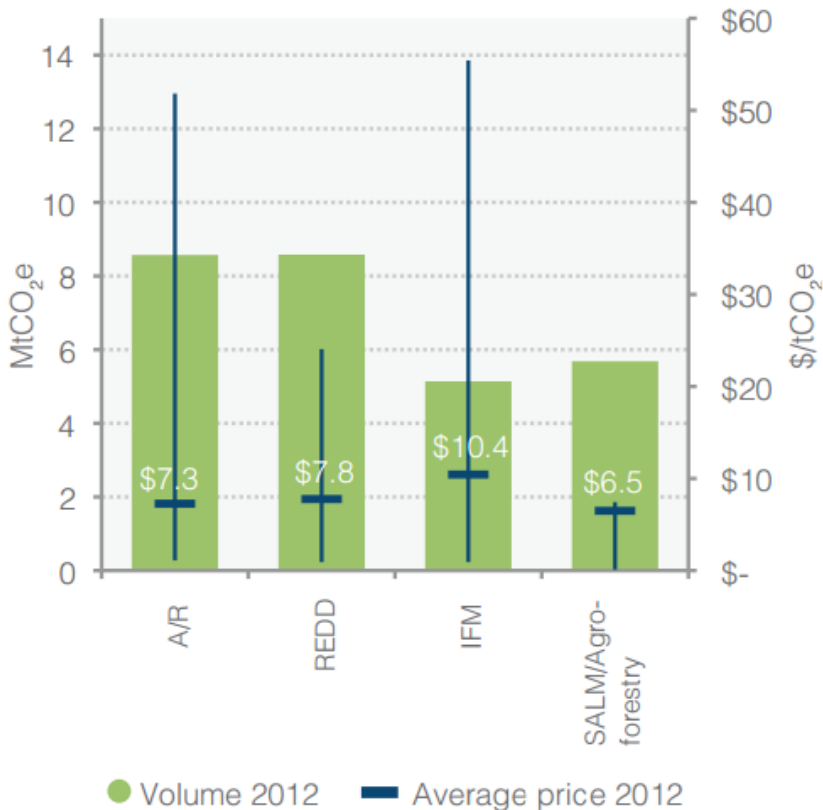




PRICING PROJECT TYPES: Consistent pricing across A/R, REDD, and SALM/agro-forestry; value falls across project types

TRANSACTIONED VOLUME, AVERAGE PRICE AND RANGE, AND VALUE BY PROJECT TYPE, 2011 & 2012

MtCO₂e, \$/tCO₂e and \$ Million

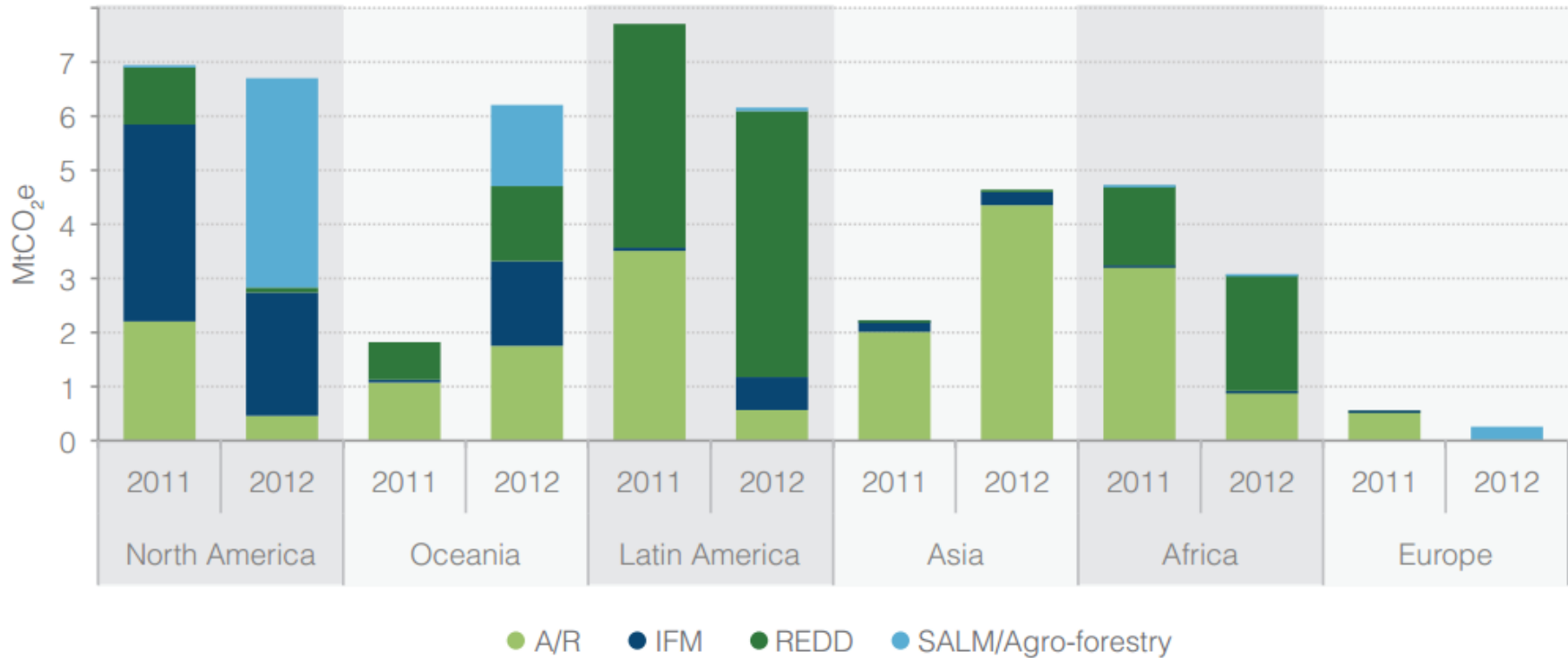




PROJECT LOCATION: Our survey tracked projects in a record 58 countries in 2012 – 4 more than 2011

TRANSACTION VOLUME BY REGION AND PROJECT TYPE, 2011-2012

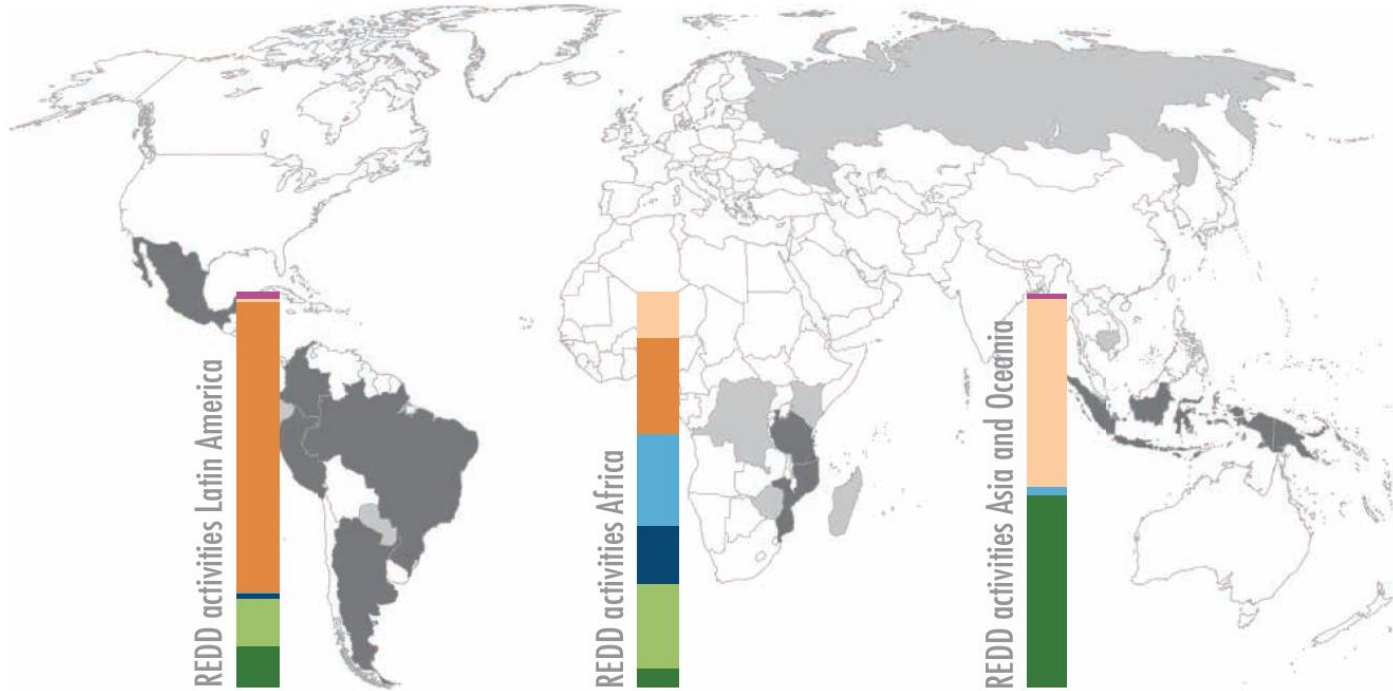
MtCO₂e





REDD ACTIVITIES: Around half of all REDD offsets were sourced from projects that engaged in sustainable forest management

REDD PROJECT COUNTRY LOCATIONS; REGIONAL DISTRIBUTION OF REDD ACTIVITIES



Map key: ● REDD countries ● REDD countries with projects actively engaged in nesting

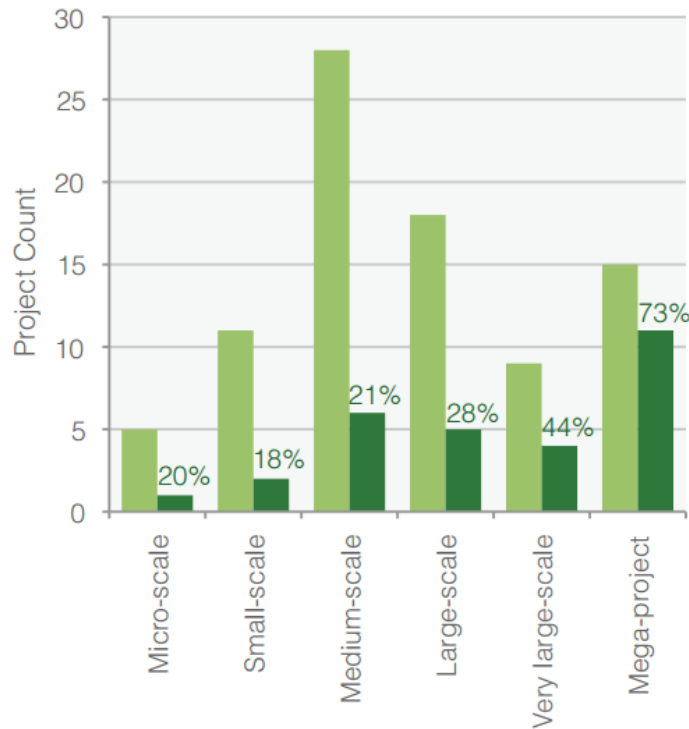
Graph key (% transactions tied to these activities):

- Smallholder agriculture
- Afforestation / Reforestation
- Commercial agriculture
- Sustainable energy
- Sustainable forest management
- Ecotourism
- Other

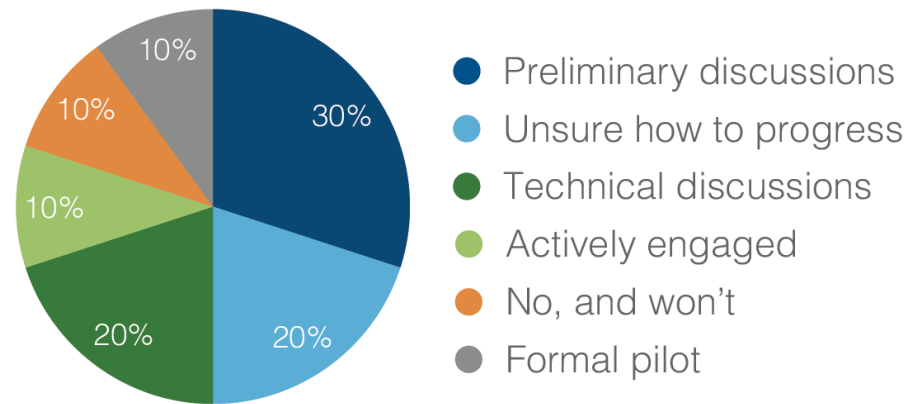


REDD NESTING: VCS, ACR, CAR, and CCB developed jurisdictional REDD approaches, a few pilot programs/projects tracked (all VCS, mostly large)

COUNT, ALL REDD PROJECTS VS. PROJECTS “ACTIVELY ENGAGED” IN NESTING, BY PROJECT SIZE



PROPORTION OF REDD PROJECTS BY PROJECT NESTING PROGRESS





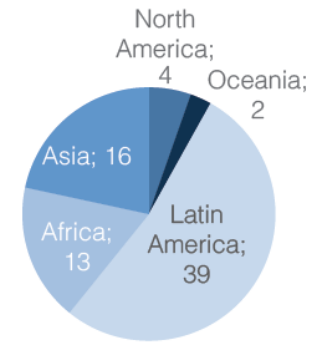
COMMUNITY ENGAGEMENT: 74 projects engage forest communities; 32 projects have formal FPIC process, 19 of which transacted offsets

PROJECT ENGAGEMENT WITH COMMUNITIES, REGION AND PROJECT TYPE, 2012

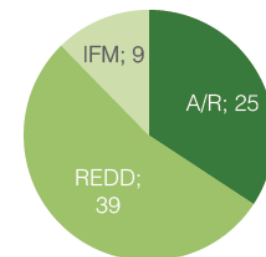
Project information disseminated to local stakeholders	12 trees
Capacity building for community participation	10 trees
Social impacts and risk assessment and monitoring	10 trees
Direct employment	10 trees
In-kind livelihood benefits	9 trees
Direct payments to community	7 trees
Formal Free, Prior and Informed Consent process	6 trees
Community-led project	6 trees
Formal grievance redress mechanism	5 trees
Targeted benefits to women and vulnerable/marginalized groups	5 trees
Direct political advocacy	3 trees

One tree represents 5 projects

% Share and Count of Projects Engaging with Communities, by Region



% Share and Count of Projects Engaging with Communities, by Project Type

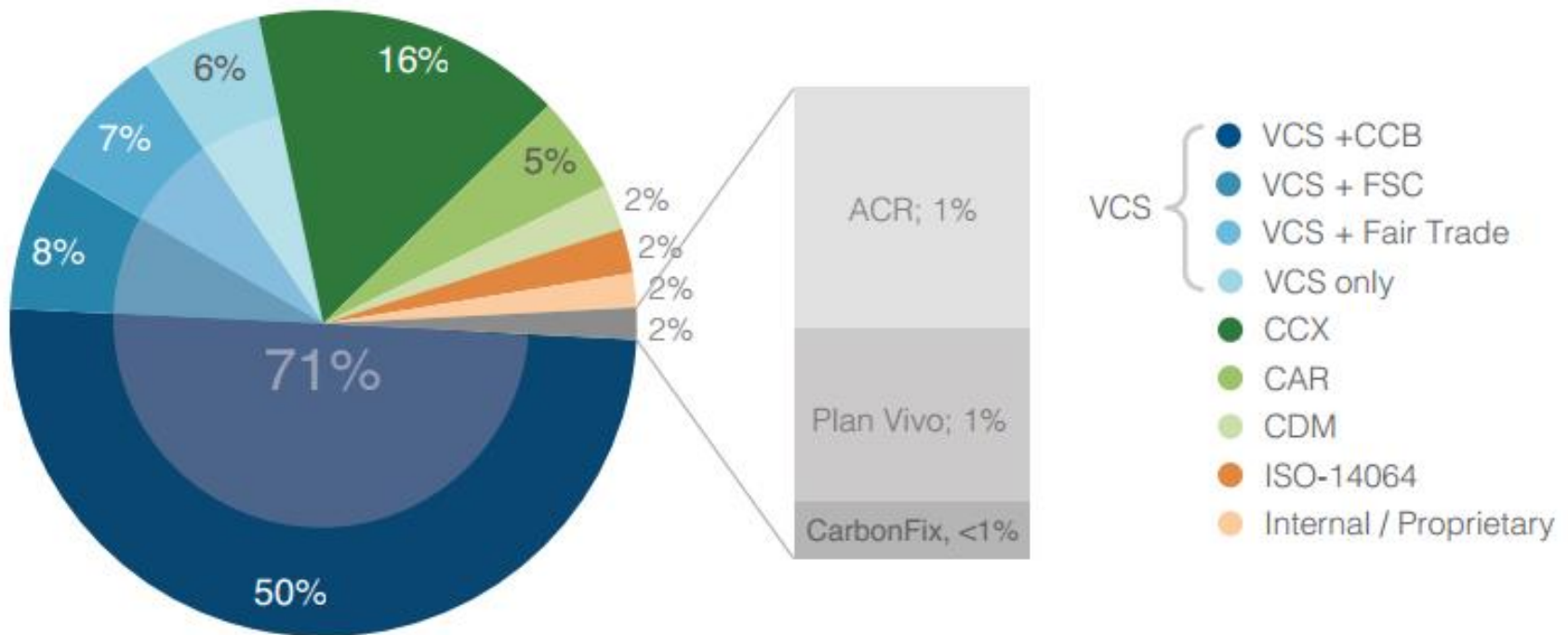




INDEPENDENT STANDARDS: VCS share more than doubled; offsets developed according to CDM methodology fell to 2% of transactions

MARKET SHARE BY INDEPENDENT STANDARD, ALL MARKETS

% Share

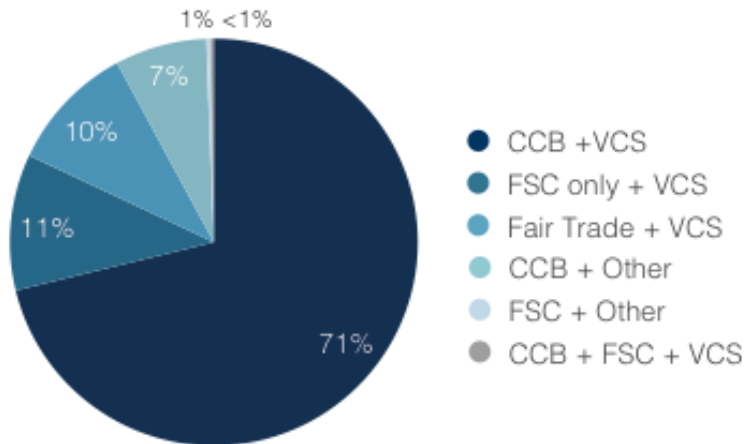




CO-BENEFITS AND DOMESTIC STANDARDS: 12.2 MtCO₂e transacted pursued CCB+VCS; domestic standards held 28% of market share

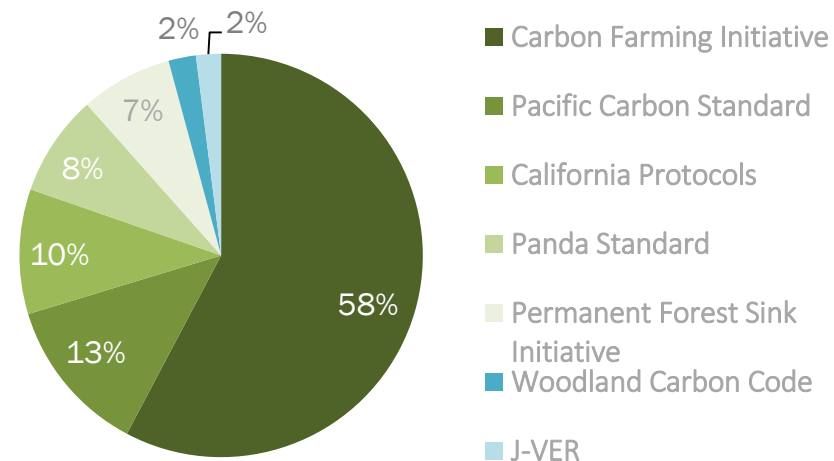
MARKET SHARE OF STANDARD USE BY CO-BENEFITS OR PROJECT AREA CERTIFICATION, 2012

% Share



MARKET SHARE BY DOMESTIC STANDARD, ALL MARKETS, 2012

% Share

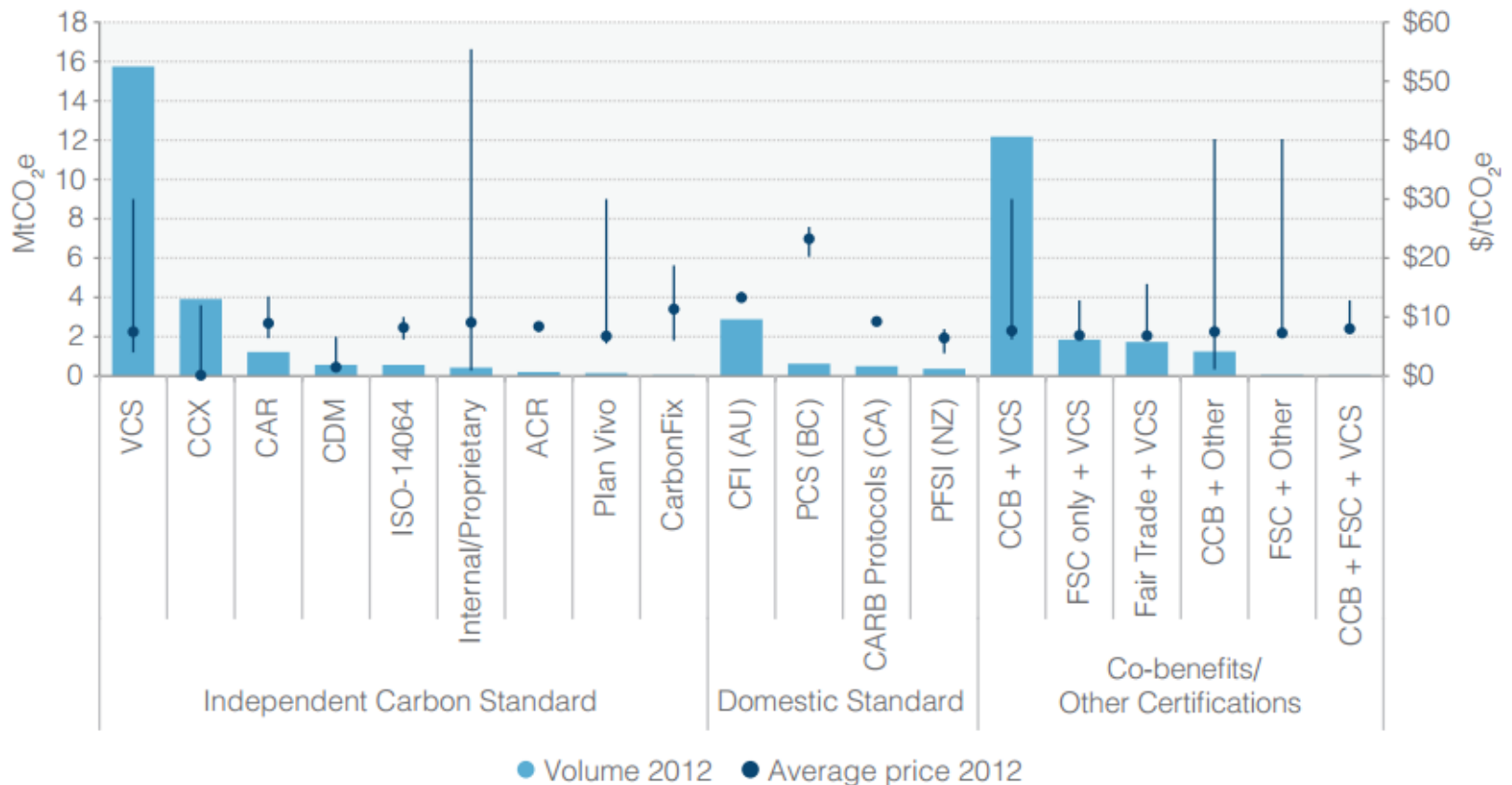




VOLUME AND PRICE BY STANDARD: CCB certification priced \$0.2 to \$0.5 above average VCS forestry offsets; wide range of prices across stds

TRANSACTIONED VOLUME AND AVERAGE PRICE BY STANDARD AND STANDARD/CERTIFICATION TYPE, 2012

MtCO₂e and \$/tCO₂e

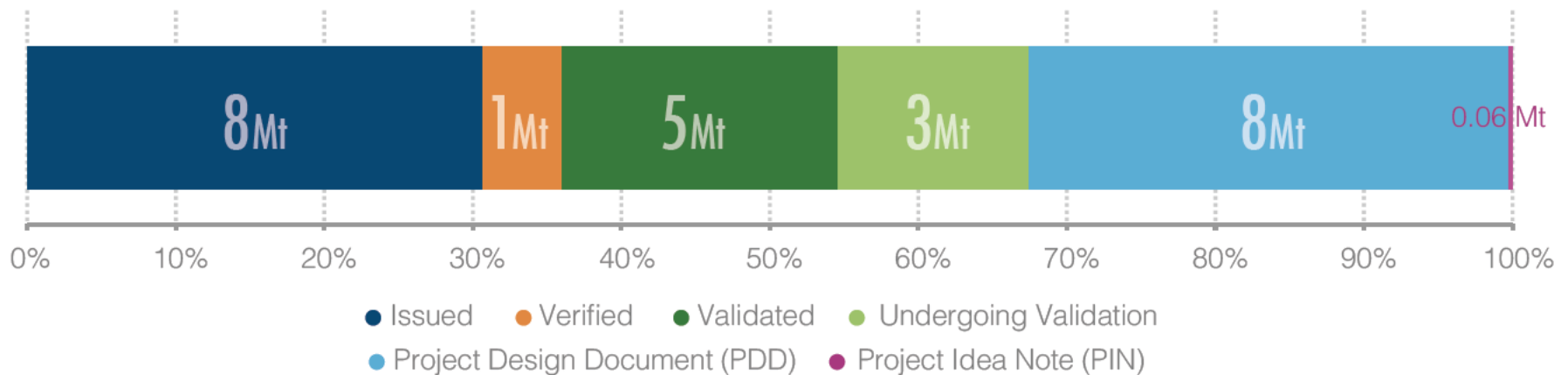




PROJECT STAGE: Registries reported the largest-ever volume of offsets issued – 8 MtCO₂e – and/or retired – 2.6 MtCO₂e – in 2012

MARKET SHARE, STAGE AT TIME OF TRANSACTION, 2012

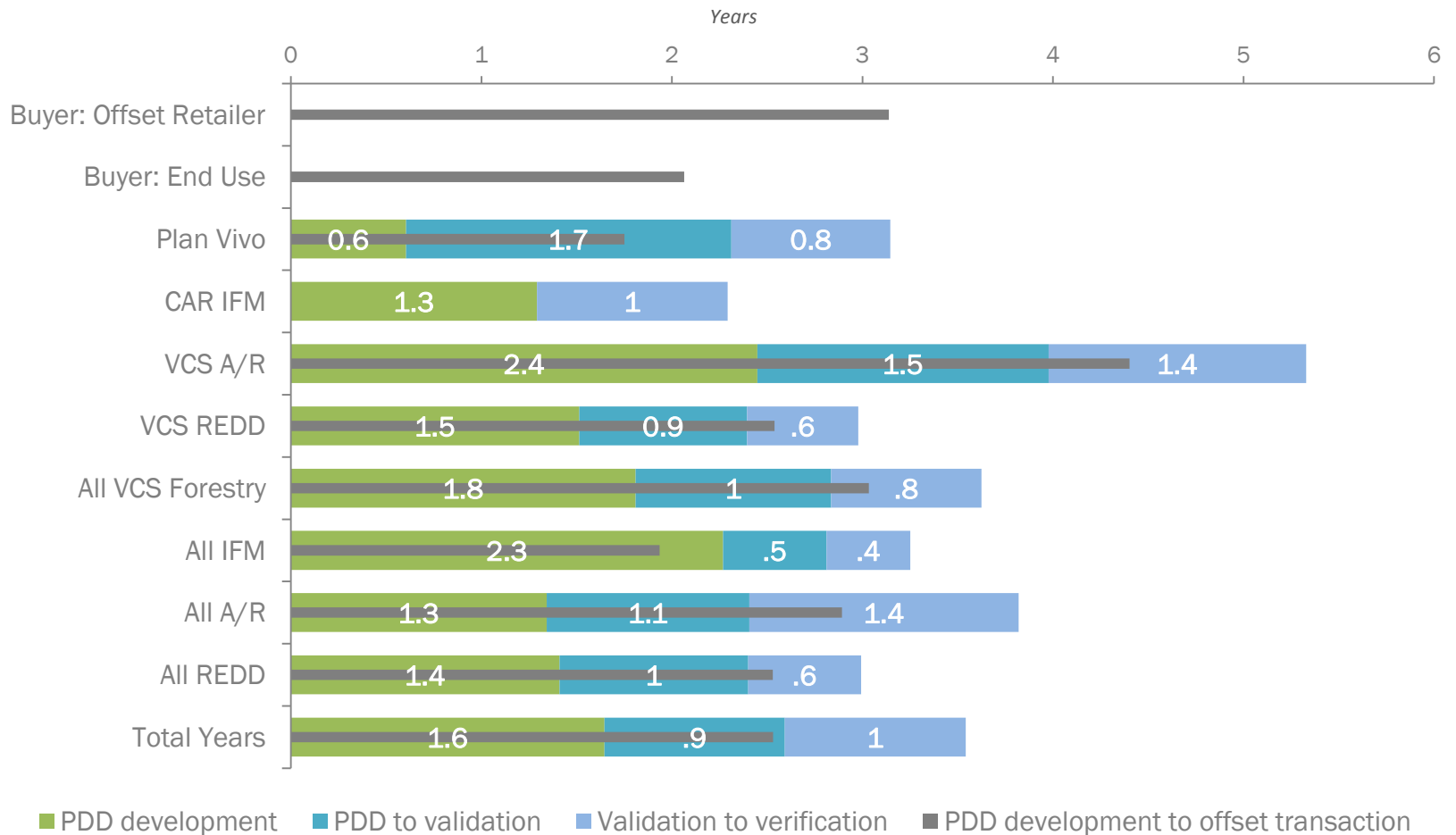
% Share and MtCO₂e





PROJECT MILESTONES: Average time from PDD development to offset verification is 3.5 years, with first contract signed 2.5 years in

SUPPLIER-ESTIMATED AVERAGE YEARS TO ACHIEVE PROJECT MILESTONES, BY PROJECT TYPE, STANDARD AND BUYER TYPE

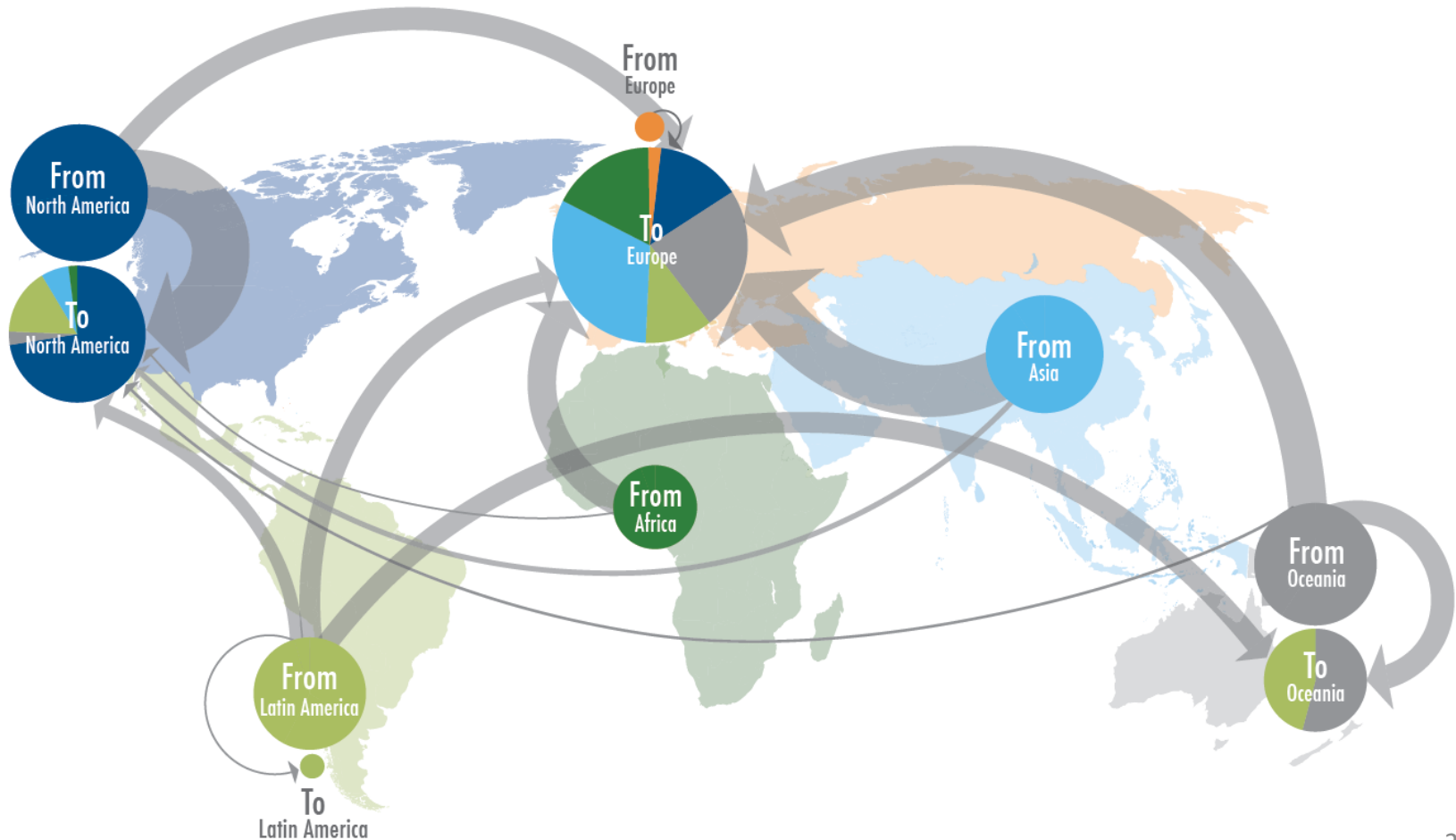




TRANSACTION FLOWS: EU buyers were the largest source of demand, followed by North American buyers, who preferred to offset locally(ish)

FLOW OF TRANSACTED VOLUME FROM PROJECT REGION TO BUYER REGION, 2012

% Share





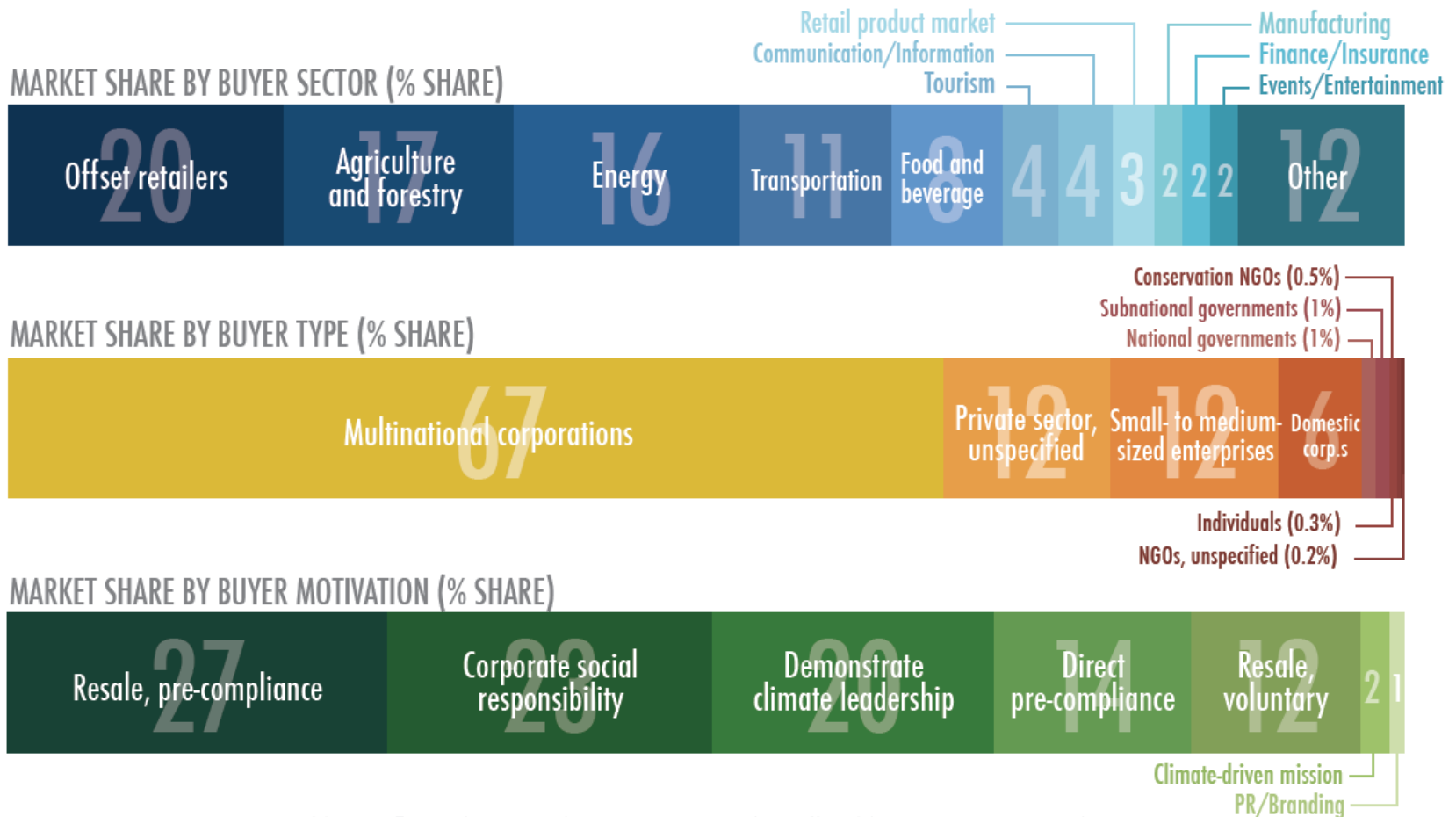
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BUYERS: Multinational corporations transacted two out of every three offsets; land-dependent sectors demanded 9.7 MtCO₂e

MARKET SHARE BY BUYER SECTOR, TYPE AND MOTIVATION, 2012

% share



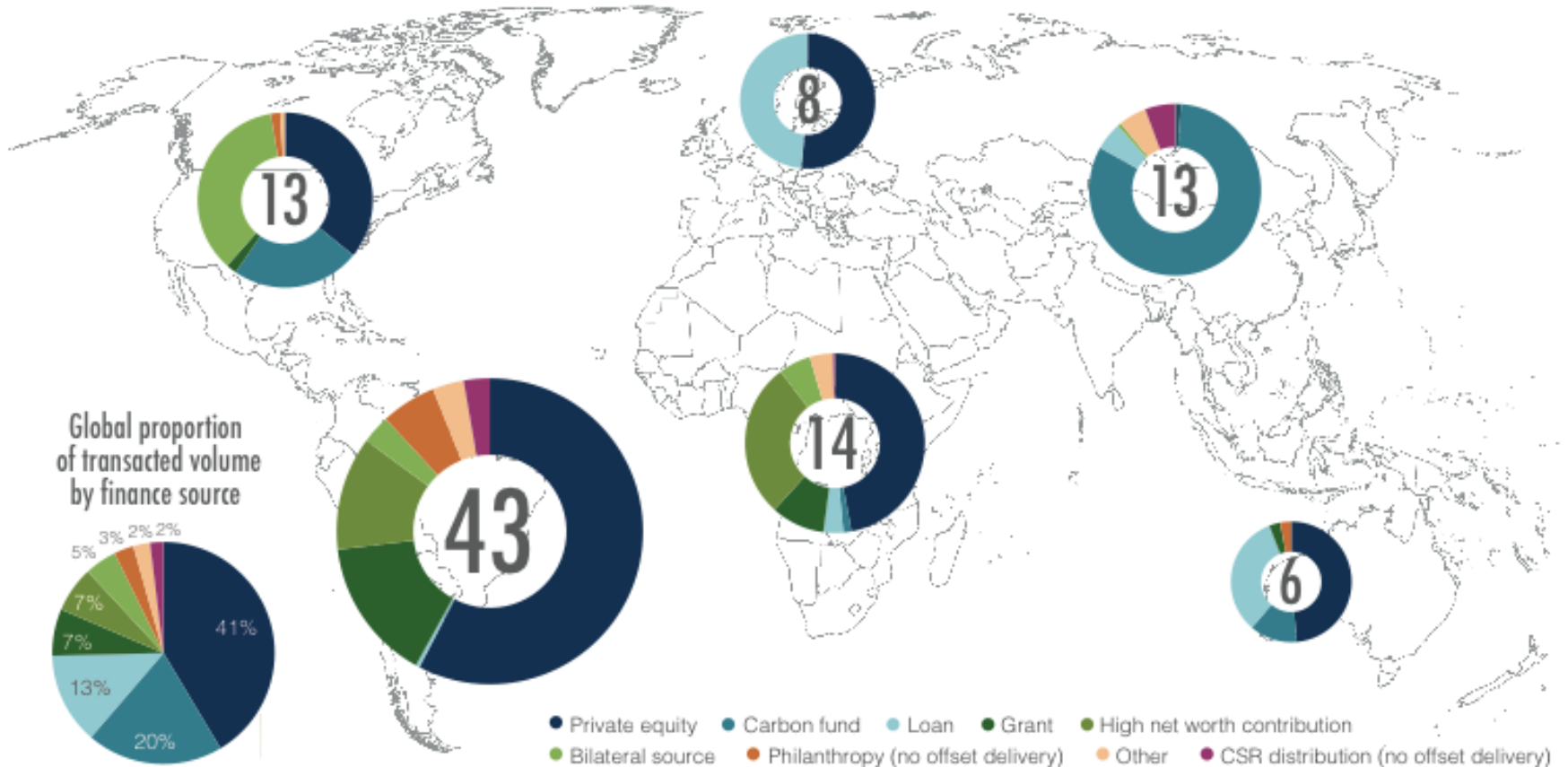
SOURCE: Forest Trends' Ecosystem Marketplace. State of the Forest Carbon Markets 2013.



OUTSIDE FINANCE: Private equity supported 38 carbon projects, predominantly supportive of REDD; Grant \$ plays significant role

PROPORTION OF TRANSACTED VOLUME AND COUNT OF PROJECTS UTILIZING OTHER FINANCE SOURCES: BY PROJECT AND REGION GLOBALLY

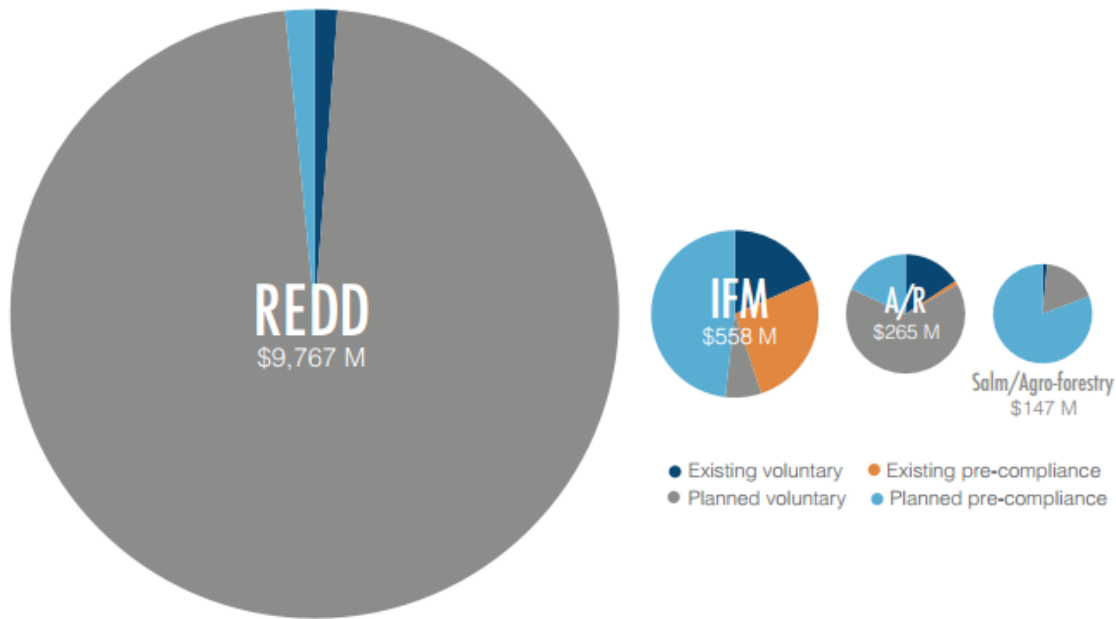
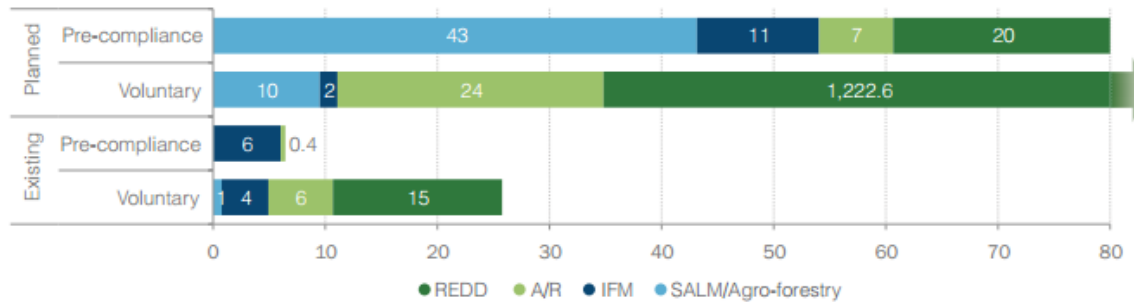
% Share and Project Count (inside donuts)





IN THE PIPELINE: Market requires significant growth in order to support 1.4 billion offsets in the 5-year pipeline, 93% of which are REDD

DEVELOPER ESTIMATED PORTFOLIO AND PIPELINE, ALL MARKETS

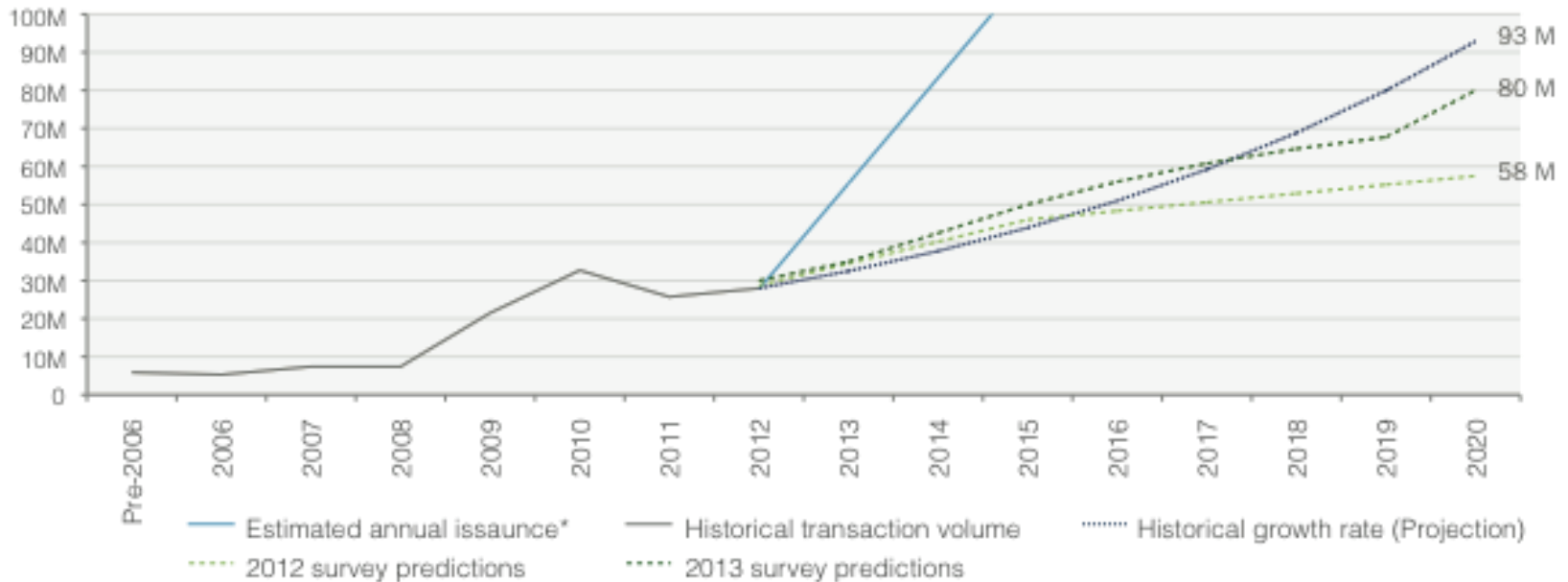




PREDICTIONS: Respondents predict 9% market growth, report 5-year supply pipeline of 1.4 BtCO₂e

HISTORICAL GROWTH AND PROJECT DEVELOPER PREDICTIONS ON ESTIMATED ANNUAL ISSUANCE

MtCO₂e



\$ 216 M	\$ 236 M	\$ 280 M	\$ 1.1 - 2.3 B	\$ 10.7 B
2012 market value: ACTUAL	Value of unsold offset portfolio	2012 value if developers had received desired price	Developer estimates to fully support existing projects	Value of developers' 5-year pipeline

SOURCE: Forest Trends' Ecosystem Marketplace. State of the Forest Carbon Markets 2013.