



Ecosystem Marketplace
A FOREST TRENDS INITIATIVE



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March 19, 2018

“Enhancing Rural Economies through Agroforestry: Assessing Emerging Opportunities”

Payments for Ecosystem Services: Carbon

ABOUT ECOSYSTEM MARKETPLACE

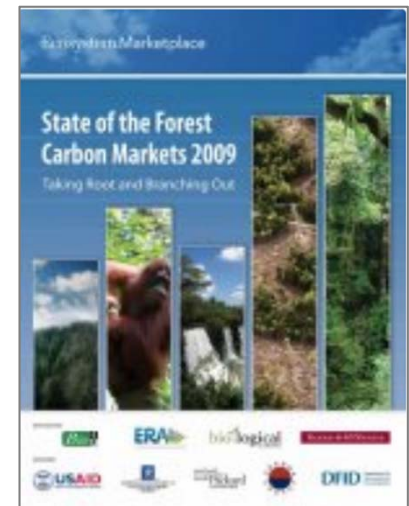
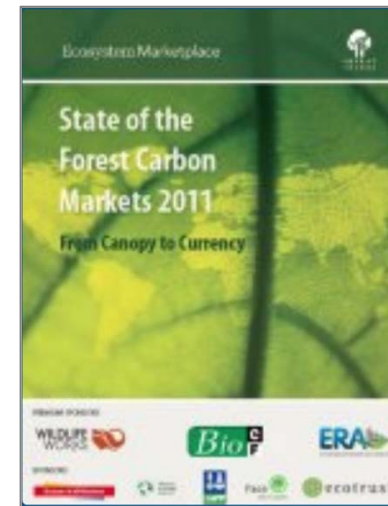
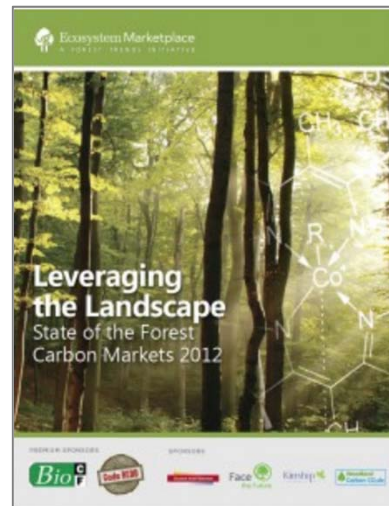
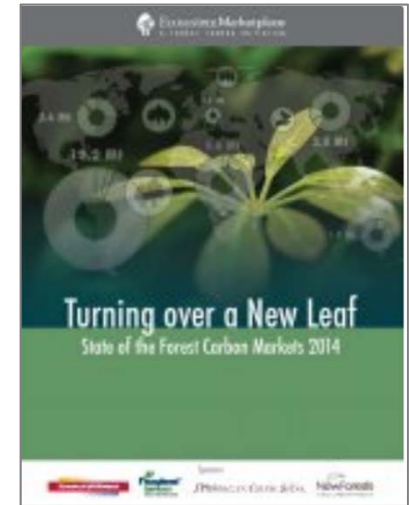
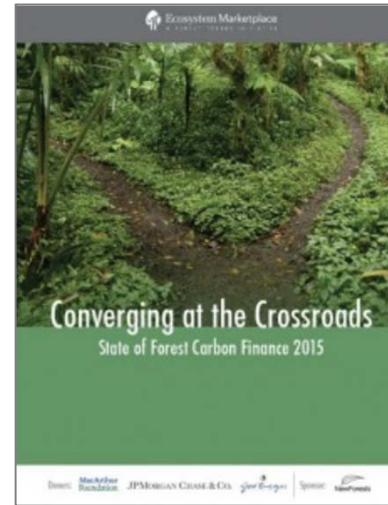
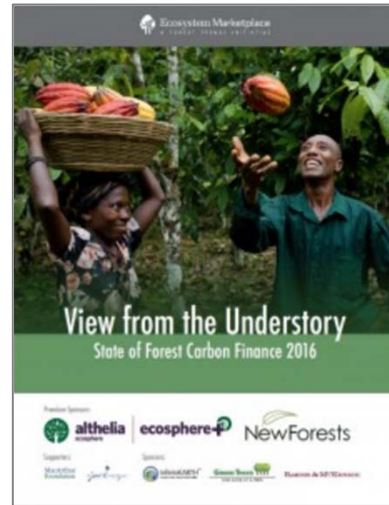
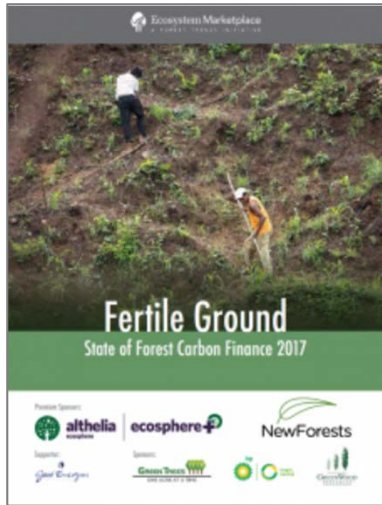


Forest Trends' Ecosystem Marketplace initiative is the leading global source of information on environmental finance, markets, and payments for ecosystem services.

www.ecosystemmarketplace.com



STATE OF FOREST CARBON FINANCE – REPORT SERIES



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WHAT KINDS OF FOREST AND LAND-USE OFFSETS ARE THERE?

PROJECT TYPES:



**SUSTAINABLE AGRICULTURE /
AGROFORESTRY**



FOREST MANAGEMENT



TREE PLANTING



REDD+



OTHER

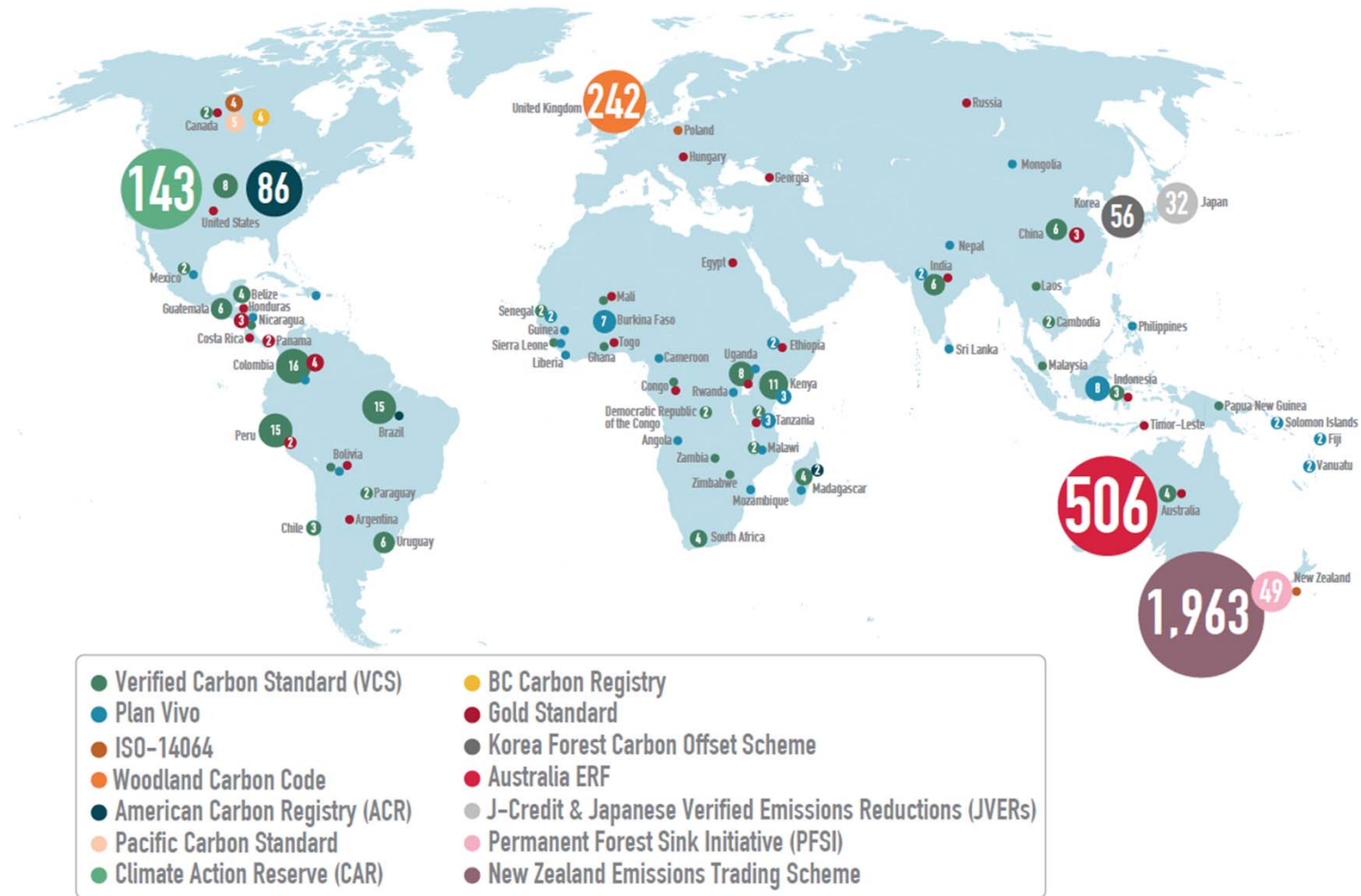
STANDARDS (FOREST AND LAND-USE METHODOLOGIES)

- **VERIFIED CARBON STANDARD (25)**
- **AMERICAN CARBON REGISTRY (11)**
- **CLIMATE ACTION RESERVE (6)**
- **PLAN VIVO (6)**
- **GOLD STANDARD (2)**
- **...AND MORE**



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WHERE ARE FOREST AND LAND-USE CARBON PROJECTS?

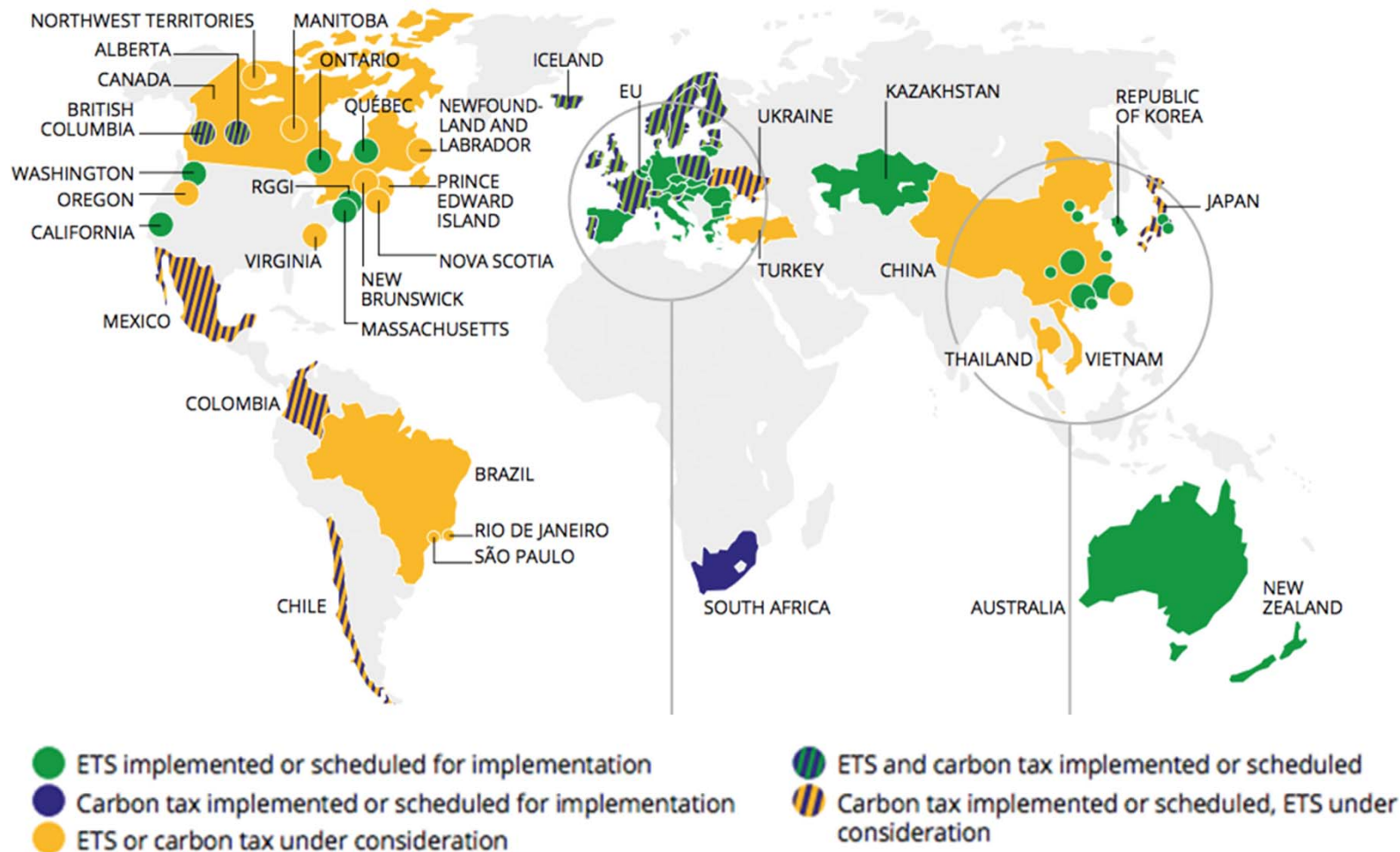


Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2017.



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WHERE ARE COMPLIANCE CARBON TAXES AND MARKETS?

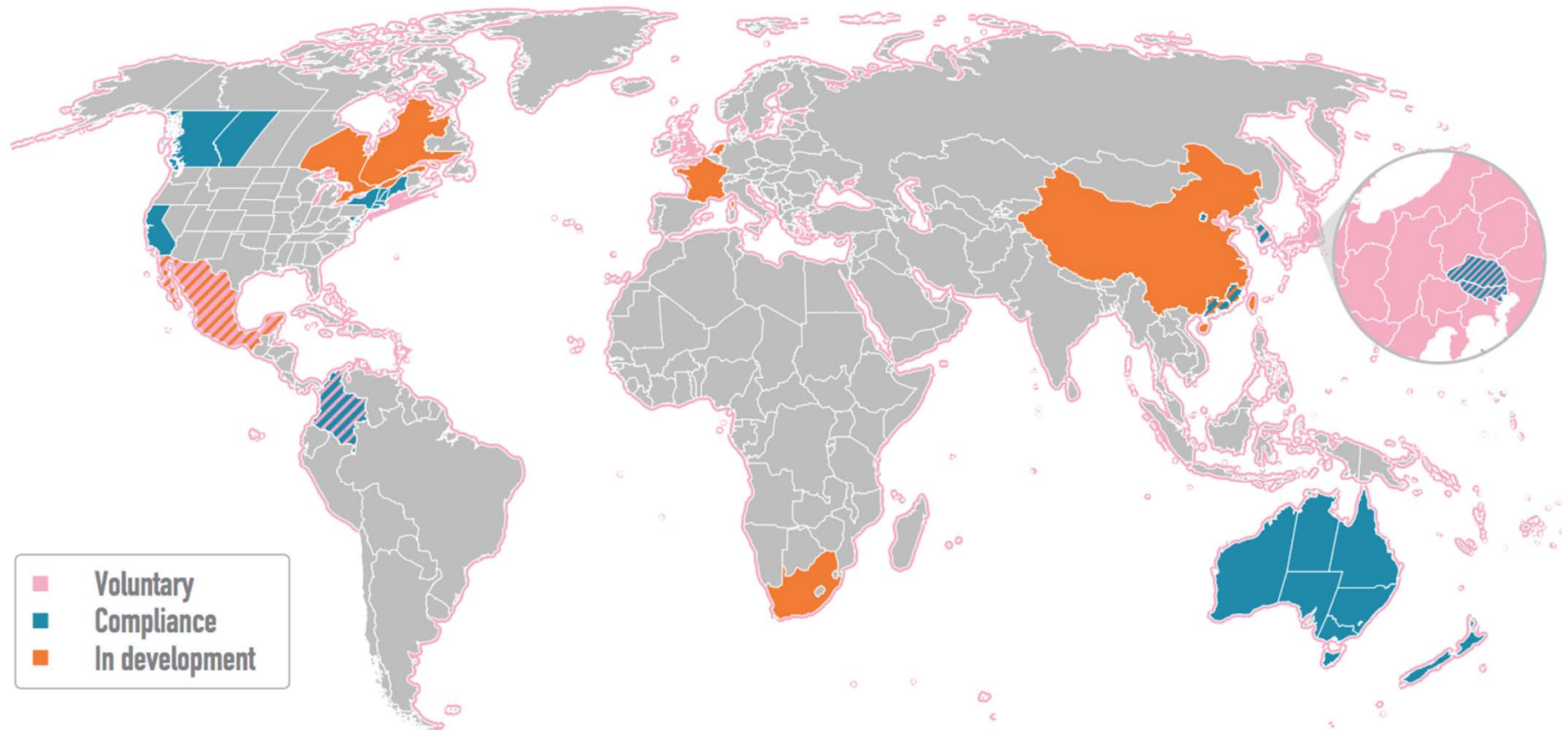


Source: World Bank. State and Trends of Carbon Pricing 2017



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WHERE ARE FORESTRY AND LAND-USE COMPLIANCE CARBON TAXES AND MARKETS?



Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2017.



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CHALLENGES FOR AGROFORESTRY CARBON PROJECTS:

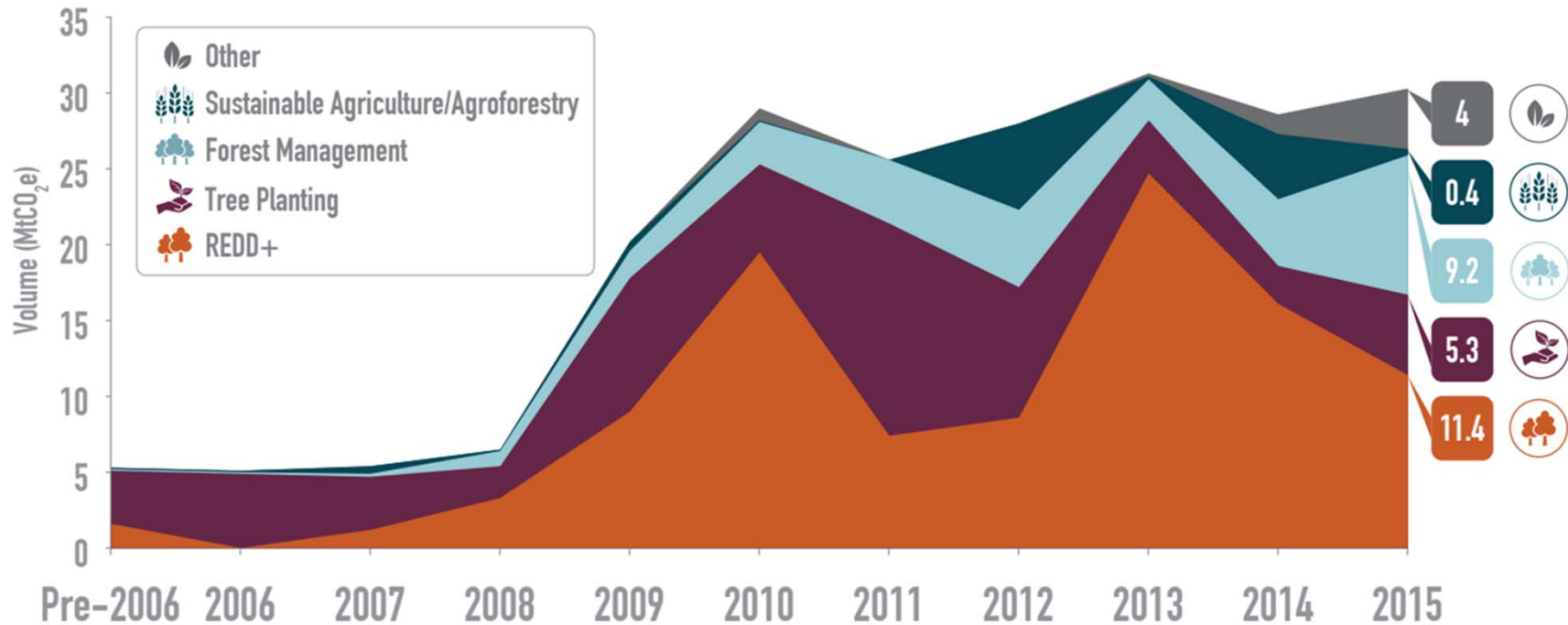
Challenges:

- Tracking agroforestry activities within other sustainable agriculture and forestry methodologies is difficult.
- Few methodologies for agroforestry activities alone.
- Most agroforestry activities currently occur in developing countries, not in developed countries.



WHICH FOREST CARBON OFFSETS HAVE BEEN TRADED, 2006-2015?

VOLUME OF DEMAND FOR FOREST CARBON OFFSETS BY PROJECT TYPE, ALL MARKETS, HISTORICAL



Notes: Based on 26.3 MtCO₂e in 2015 transaction volume associated with a project type, alongside historical data. This figure excludes offsets transacted by Australia's Emissions Reduction Fund in 2015, which were all either vegetation or savanna burning projects.

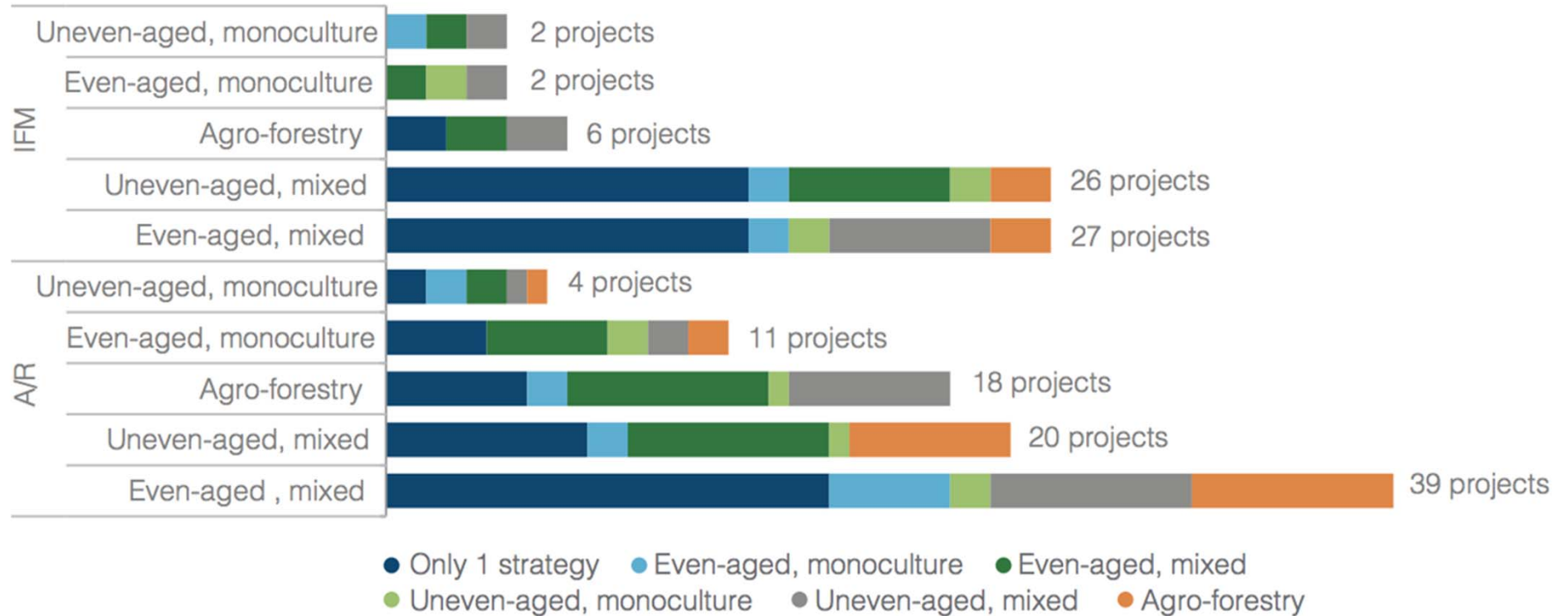
Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2016.



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NOT ALL PROJECTS ARE EASILY CATEGORIZED.

PROJECT COUNT: FOREST TYPE BY PROJECT TYPE, PRIMARY AND OTHER PLANTING APPROACHES



Notes: Based on responses representing 76 projects.

Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2013.



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AGROFORESTRY HELPS DIVERSIFY FUNDING STREAMS.

SOURCES OF PROJECT REVENUE

		Total projects receiving revenue from...				
		Carbon offset sales	Eco-tourism/ Eco-Products	Investment (Private)	Loans or grants	NGO/ Foundation funding
Percentage of Total Project Revenue Received	0–25%	9	5	1	2	1
	26–50%	6	-	2	4	2
	51–75%	4	-	3	1	2
	76–99%	5	-	3	3	1
	100%	36	1	5	1	-
		60	6	14	11	6

Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2017.



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KENYA AGRICULTURE CARBON PROJECT, KENYA



Ignatius Sifuna Nabutola feeds his dairy cow with silage from his farm |
Photo Credit: Steve Zwick



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TAMBOPATA REDD PROJECT, PERU



Victor Cordoba displays a cocoa fruit. | Photo credit: Ecotierra Inc.



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OPPORTUNITIES:

- Not as many agroforestry projects around the world as other project types = more methodologies needed?
- Most agroforestry projects are in developing, not developed countries = untapped market in the US?
- More companies are making climate and forestry commitments = potential new buyers or investors?
- Nobel Research Institute is creating a Voluntary Ecosystem Services Market, and wants to create new soil carbon methodologies:
<https://www.noble.org/ag/market/>

RISKS:

- Any methodologies for agroforestry would need to be cost-effective and scalable.
- Voluntary carbon offset prices are variable.
- Demand is uncertain.



THANK YOU!

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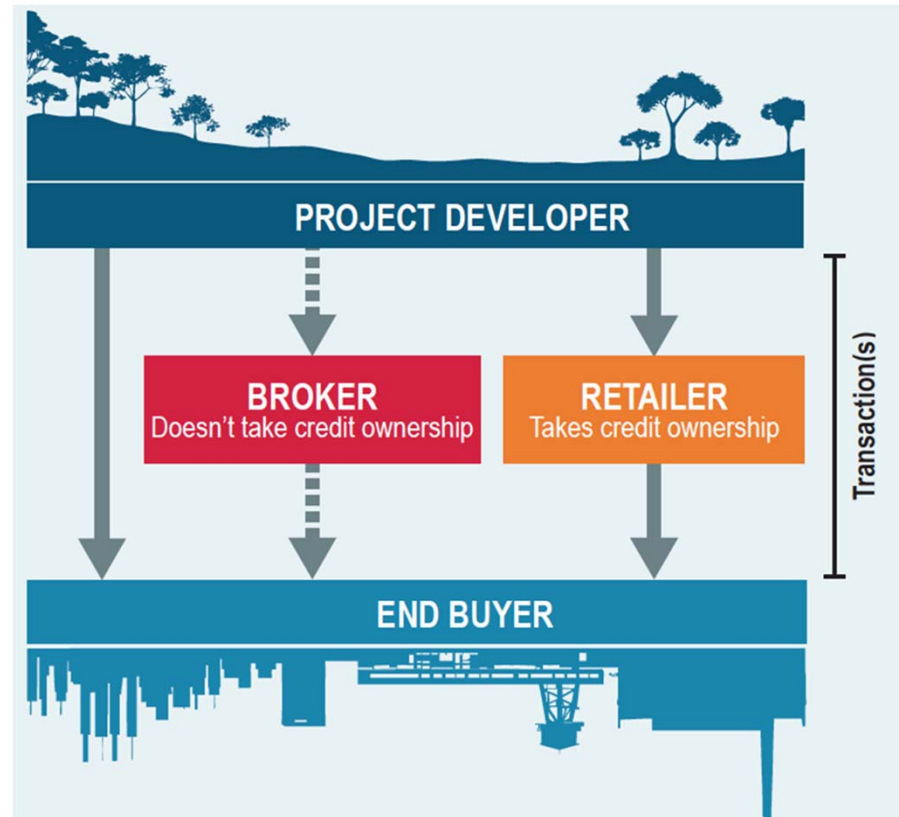


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HOW ARE CARBON OFFSETS CREATED AND TRADED?

Possible Stages of an Offset:

- Project Idea Note
- Project Design Document
- Validation
- Verification
- Issuance
- Transaction(s)
- Retirement

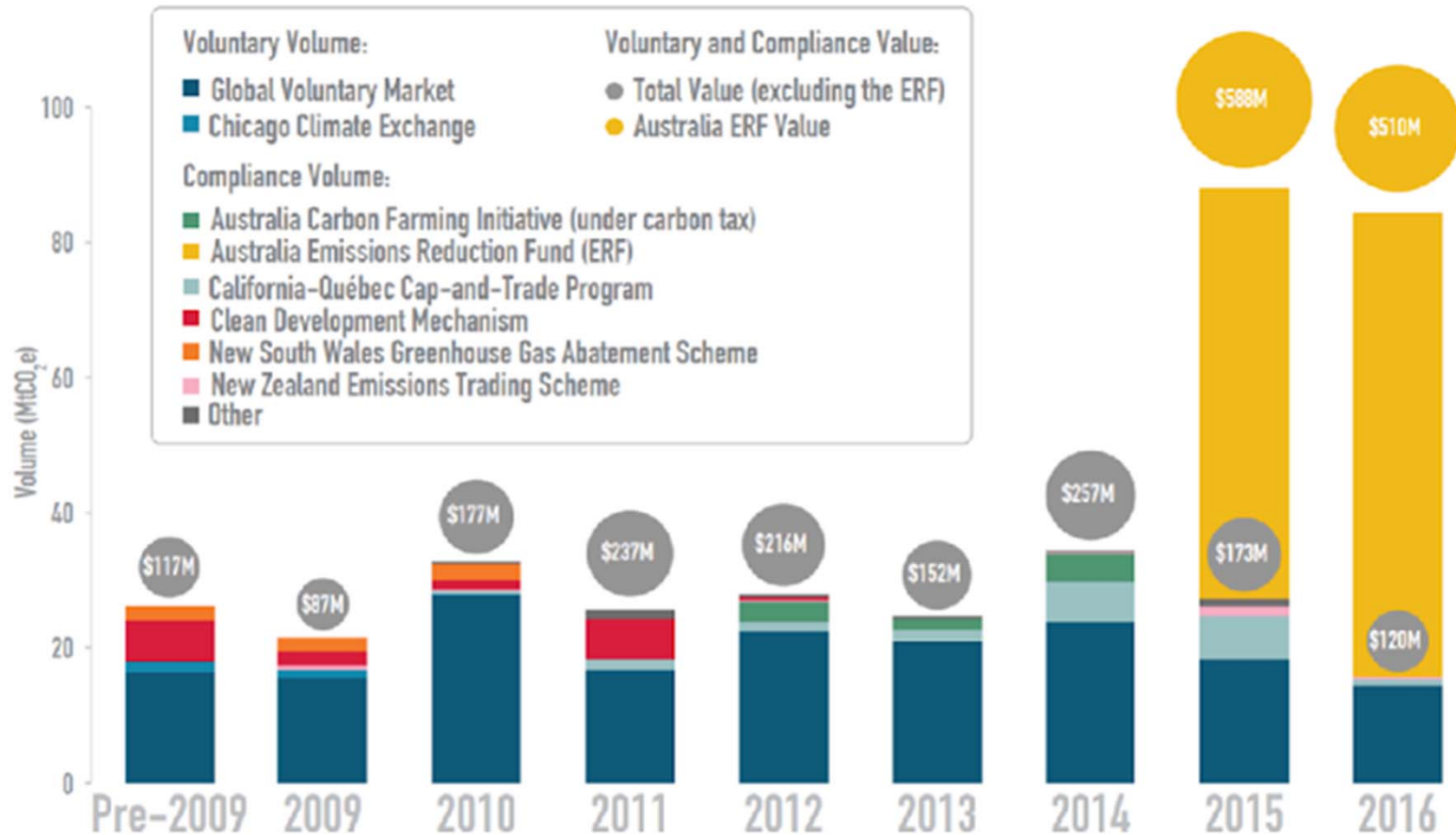


Source: Forest Trends' Ecosystem Marketplace. State of the Voluntary Carbon Markets 2017.



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VOLUME AND VALUE OF FOREST CARBON MARKET



Notes: Based on 365.3 MtCO₂e in market-based transaction volume over time.

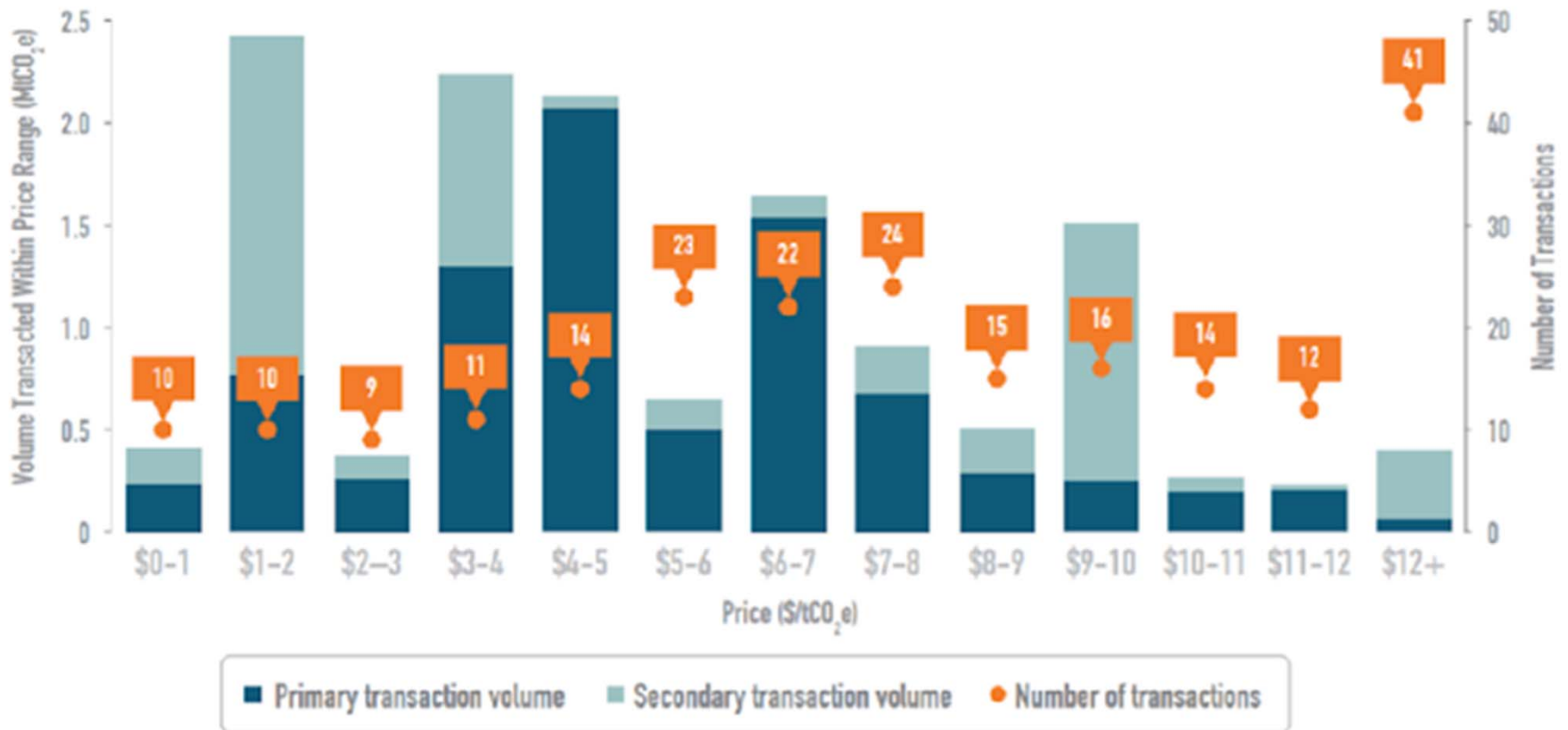
Bars represent volume and bubbles represent value.

Figure includes voluntary and compliance market data.



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Figure 5. Voluntary Forest Carbon Offsets: Volume Transacted and Number of Transactions by Price and Market, 2016



Notes: Based on 221 transactions representing 13.7 MtCO₂e in 2016.
Figure includes voluntary market data only.

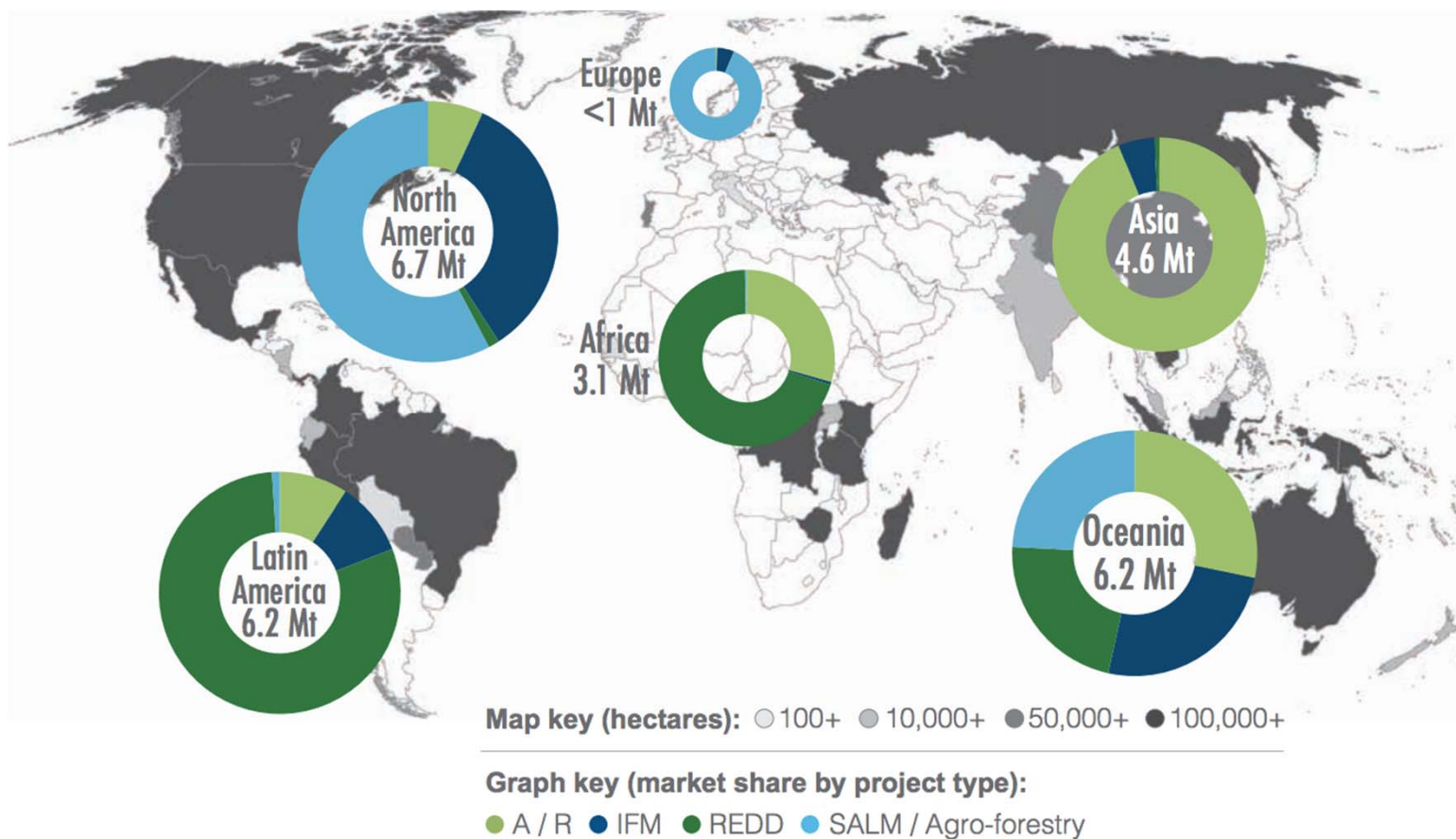
Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2017.



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WHERE ARE PURE AND MIXED SALM/AGROFORESTRY PROJECTS?

HECTARES IMPACTED BY COUNTRY LOCATION: TOTAL REGIONAL TRANSACTION



Notes: Based on responses associated with 26.5 million hectares of carbon project area and 27 MtCO₂e transacted.

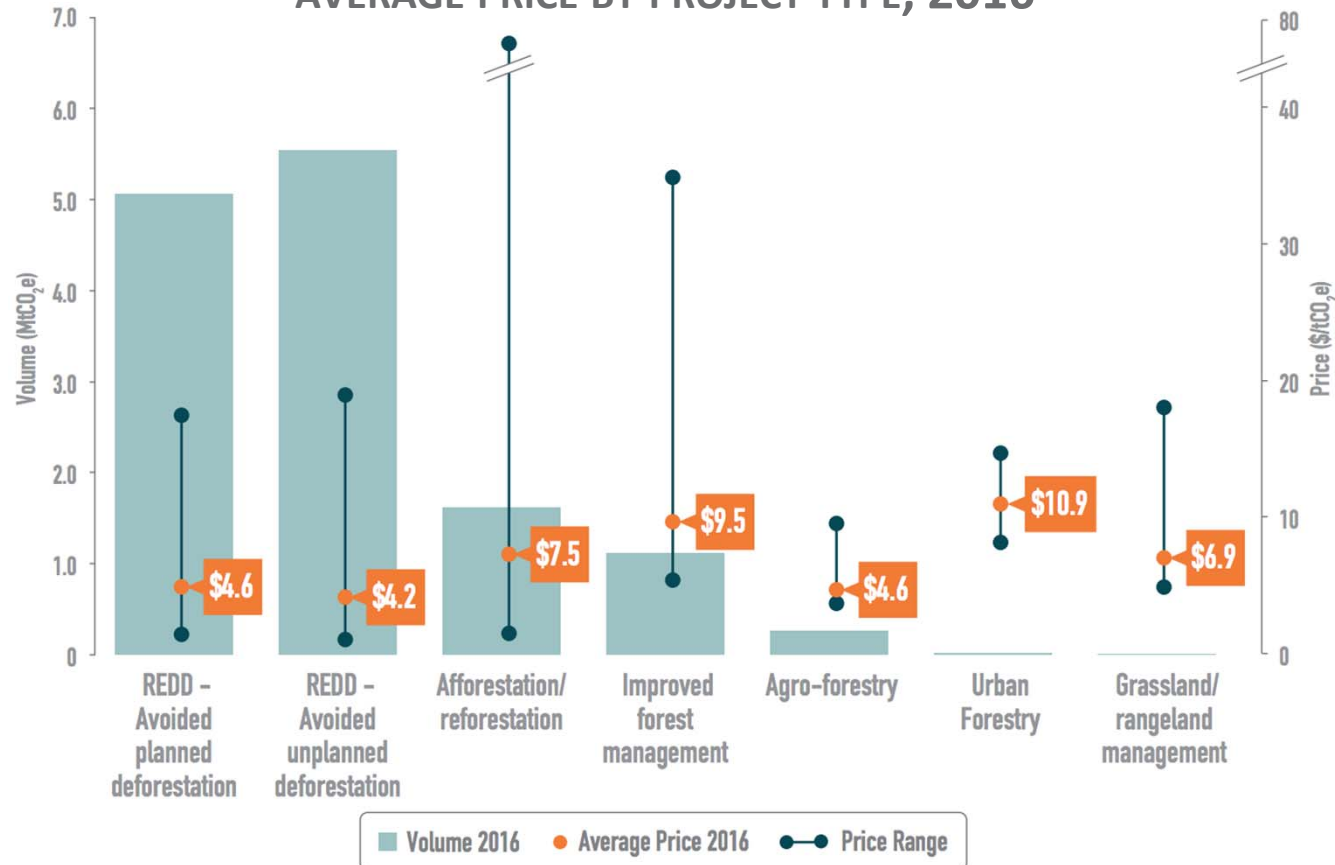
Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2013.



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WHICH FOREST CARBON OFFSETS HAVE BEEN TRADED, 2016?

VOLUNTARY FOREST CARBON OFFSETS: MARKET TRANSACTED VOLUME AND AVERAGE PRICE BY PROJECT TYPE, 2016



Notes: Based on 219 transactions representing 14.1 MtCO₂e in 2016.

Source: Forest Trends' Ecosystem Marketplace. State of Forest Carbon Finance 2017.



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