

# International Carbon Trading & the Voluntary Market

ARECOP PIN workshop, Phnom Penh 3<sup>rd</sup> -7<sup>th</sup> September

# International Carbon Markets



International trade in greenhouse gas reductions is now a large and rapidly growing market.

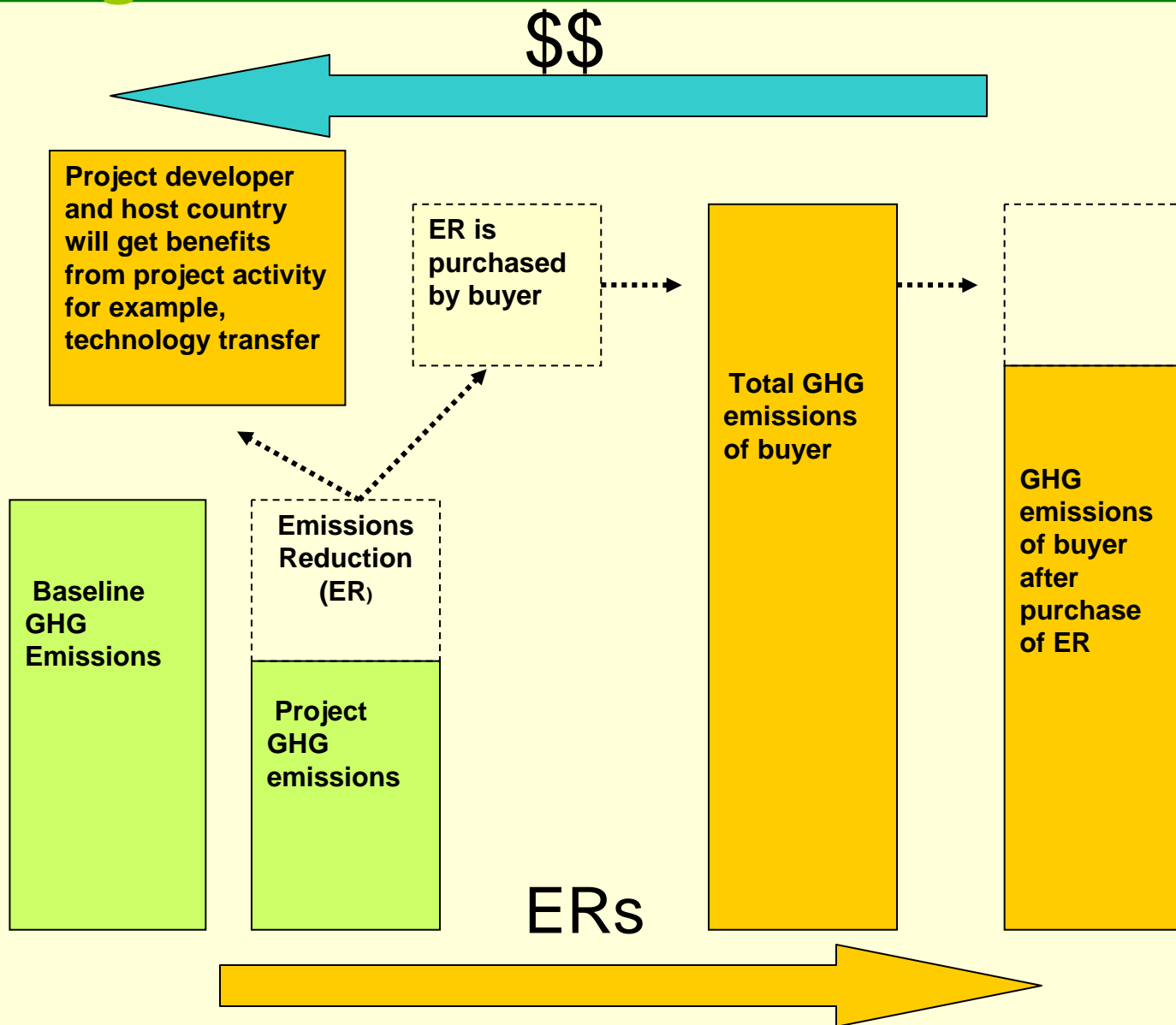
Motivated by requirements of the Kyoto Protocol and regional programs, and by voluntary initiatives, governments, private companies, and individuals have collectively committed billions of dollars to buy emission reductions.

International carbon markets have resulted in new capital flows that are supporting sustainable energy and other climate protection activities.

# Market Characteristics

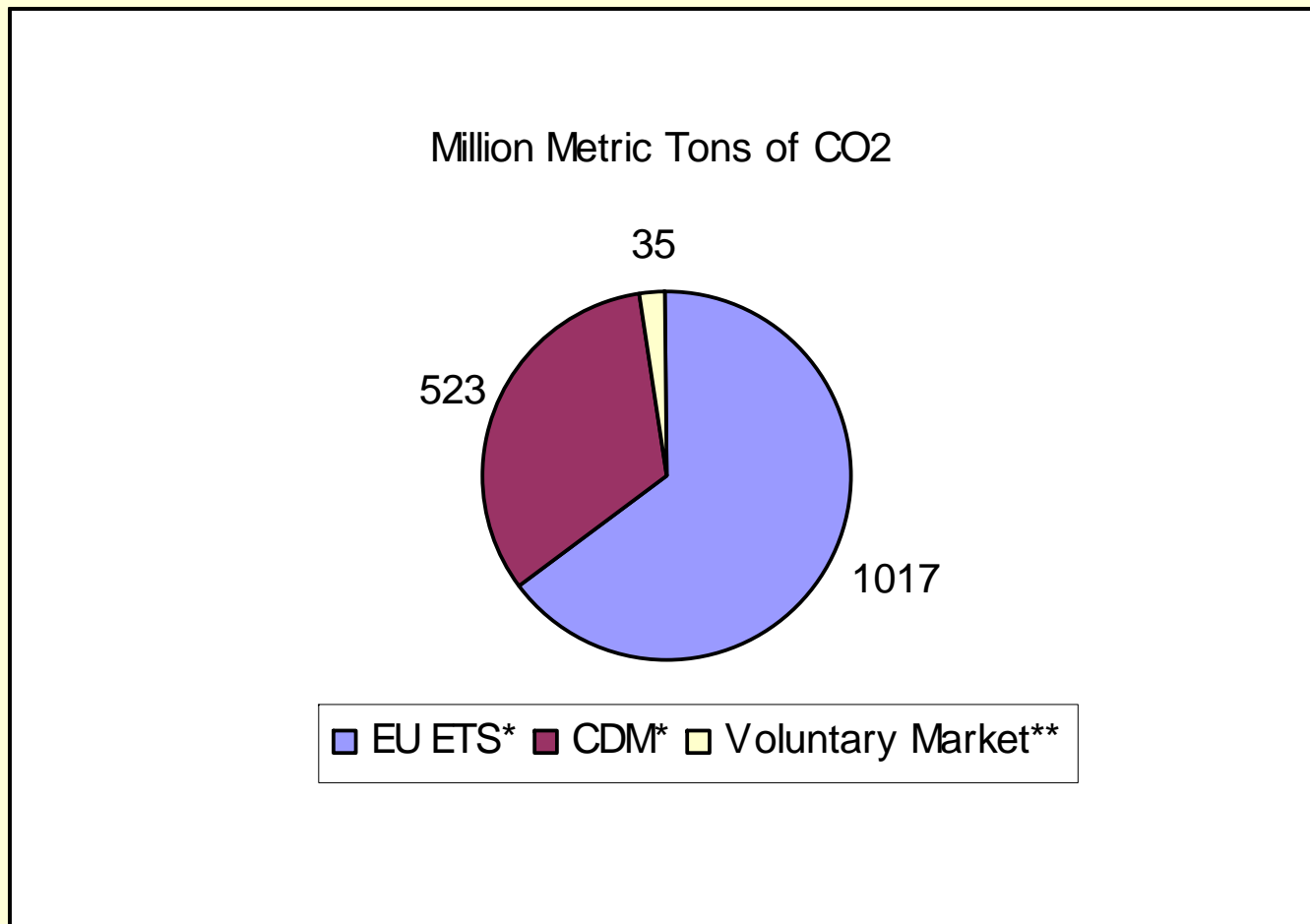
<b>Carbon Market Program</b>	<b>Voluntary vs. Regulatory</b>	<b>Allowance based vs. Project based</b>	<b>Notes</b>
Voluntary Offsets Markets	Voluntary	Project Based	Companies, individuals, and events buy emission reductions to reduce their carbon footprint
Clean Development Mechanism (CDM)	Regulatory	Project Based	Certified Emission Reductions (CERs) can be used for compliance with Kyoto commitments
European Union Emission Trading System (EU ETS)	Regulatory	Allowance based	EU ETS regulates emissions from power generation and other industries in the EU

# The concept of project based carbon trading



# Growth of carbon markets

The voluntary market consists of companies, governments, NGOs, individuals that purchase carbon credits for purposes other than meeting regulatory targets.



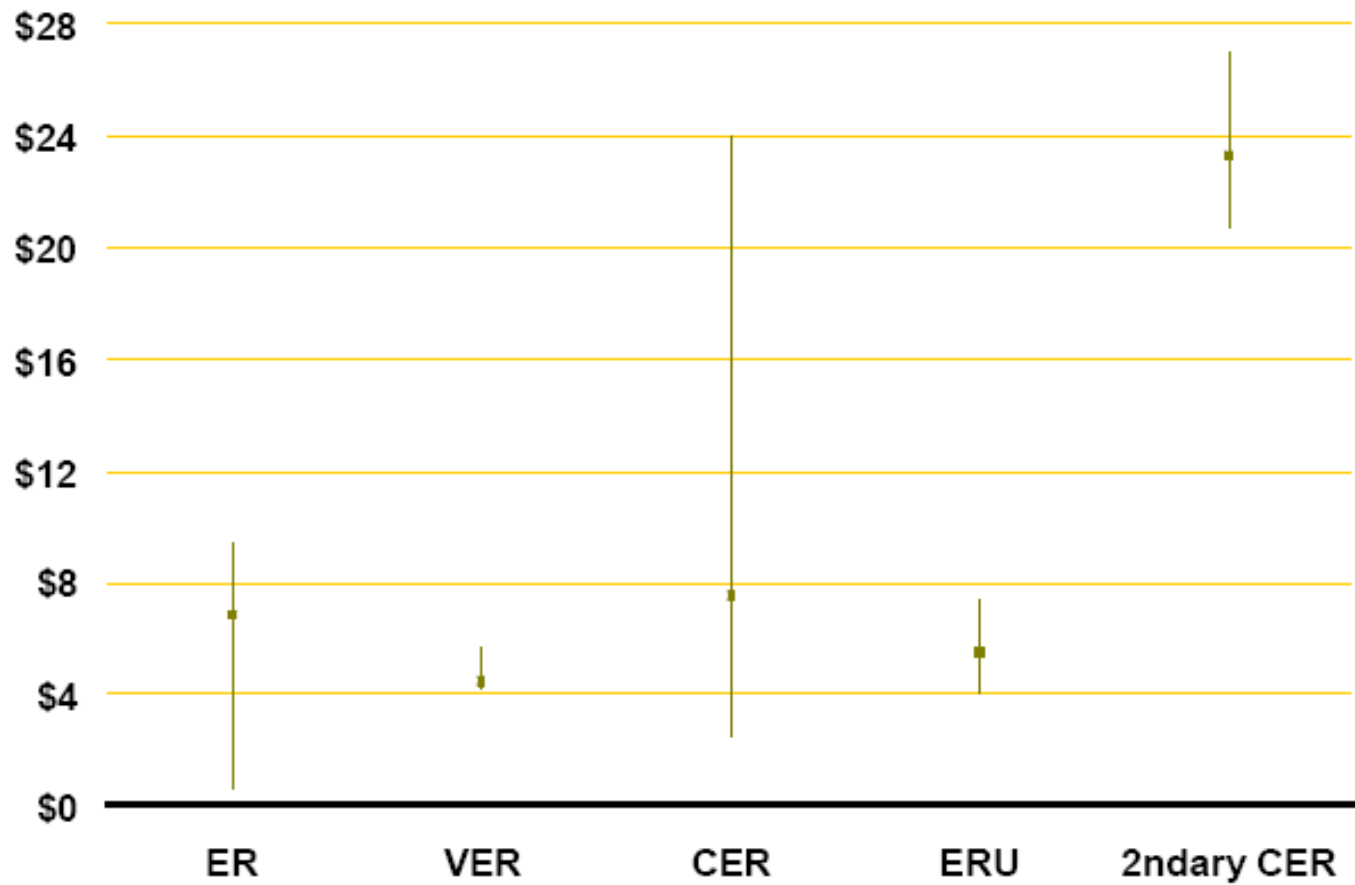
Source: (PCIA, 2007)

# Market Characteristics



<b>Market Programs</b>	<b>Relative Market Size</b>	<b>Participation Requirements / Transaction Costs</b>	<b>Regulation</b>	<b>Buyers</b>
<b>Voluntary Offsets Market</b>	<b>Small, but significant</b>	<b>Variable / Less than regulatory market programs, but can be high depending on standards</b>	<b>Unregulated</b>	<b>Conscience based</b>
<b>Kyoto Compliance Market (CDM, JI)</b>	<b>Large</b>	<b>Rigorous / High</b>	<b>Regulated</b>	<b>Compliance based</b>

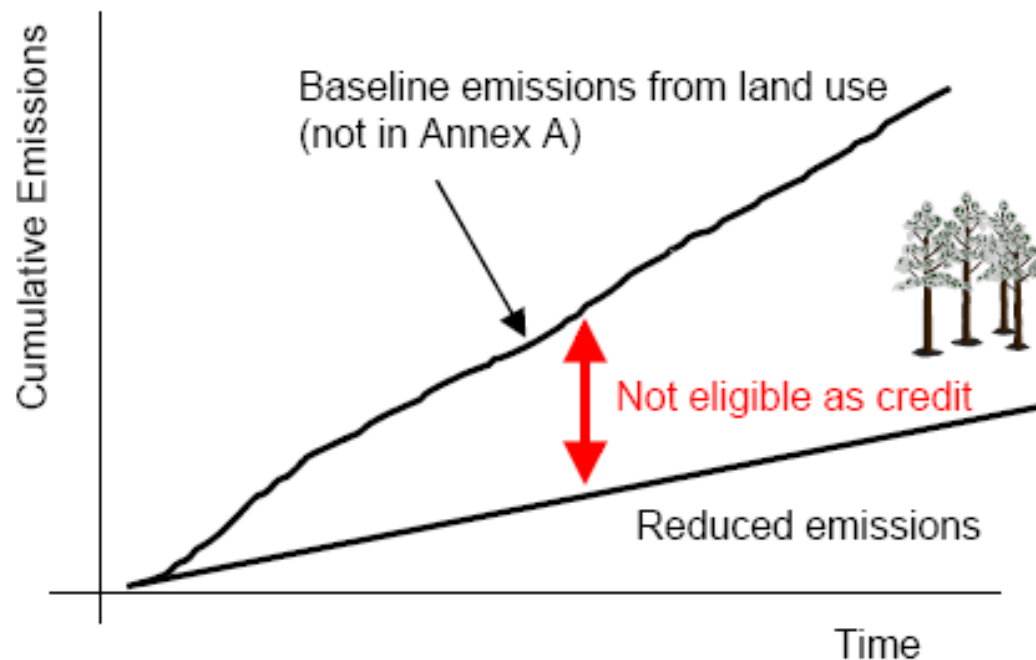
# Carbon Trading Prices



Source (World Bank 2006)

# Stove project and Carbon Markets

- Stove projects are ineligible for CDM.
- Cannot generate emissions reductions from avoided deforestation



## Some negative publicity

### EasyJet slams 'snake oil sellers' in offset market goes it alone

Monday April 30, 2007  
The Guardian

Is carbon offsetting the solution?  
(Or part of the problem?)  
Guardian Unlimited, Sunday June 10 2007

### Offsetting chief warns of carbon

Guardian Unlimited, Monday

Carbon offsets 'harm environment'  
Carbon offsets do not cut pollution, MPs were told.

Tuesday 20<sup>th</sup> February, 2007

BBC

The current trend for "offsetting" carbon emissions by planting trees is doing more harm to the environment than good, MPs have been told

The inconvenient truth about the carbon offset industry  
Guardian Unlimited, Saturday June 16 2007

# Voluntary market standards



- Protocol and criteria to certification entities and project developers.
- Gives buyer and investors confidence in emission reductions
- Globally applicable standards
- Transparency and standardization
- Provide integrity to the market
- Delicate balance between simplicity and stringency

# Comparison of two market standards



Voluntary Standard	Founders	Launch date	Market Positioning	Project Types	Methodological Requirements	Additionality	Validation and Verification
<b>Voluntary Gold Standard (VGS)</b>	Initiated by WWF, SSN and Helio International	2006	Premium	Energy Efficiency Renewable Energy	Methodologies approved by EB's meth panel small scale working group UNDP MDG Carbon Facility	UNFCCC additionality tools	UN accredited DOE
<b>Voluntary Carbon Standard (VCS)</b>	Founded by IETA, Climate Group, World Economic Forum	Nov 2007	Benchmark	All project types	Procedures methodologies and credits from other credible GHG mitigation programs	Additionality barrier analysis, performance standard, positive list	VCS approved accreditation bodies.

# The New Lao Stove



- Targets charcoal users in urban areas
- 21% More efficient than traditional stove
- Began monitoring of project activity in 2003
- Commercialised dissemination
- Over 230, 000 units sold
- 2003-2007 180,000 t/ CO<sup>2</sup>e
- Verified in May 2007 according to Voluntary Carbon Standard

# Conclusion



Motivated mostly by mandatory reduction requirements, international trade in greenhouse gas reductions is now a multi-billion dollar market.

The voluntary carbon market has been comparatively very small, but is growing rapidly.

Emerging standards could help to drive the market further, but using these may be cost prohibitive for very small projects.

In some cases, carbon market participation can provide a substantial boost to sustainable energy activities.