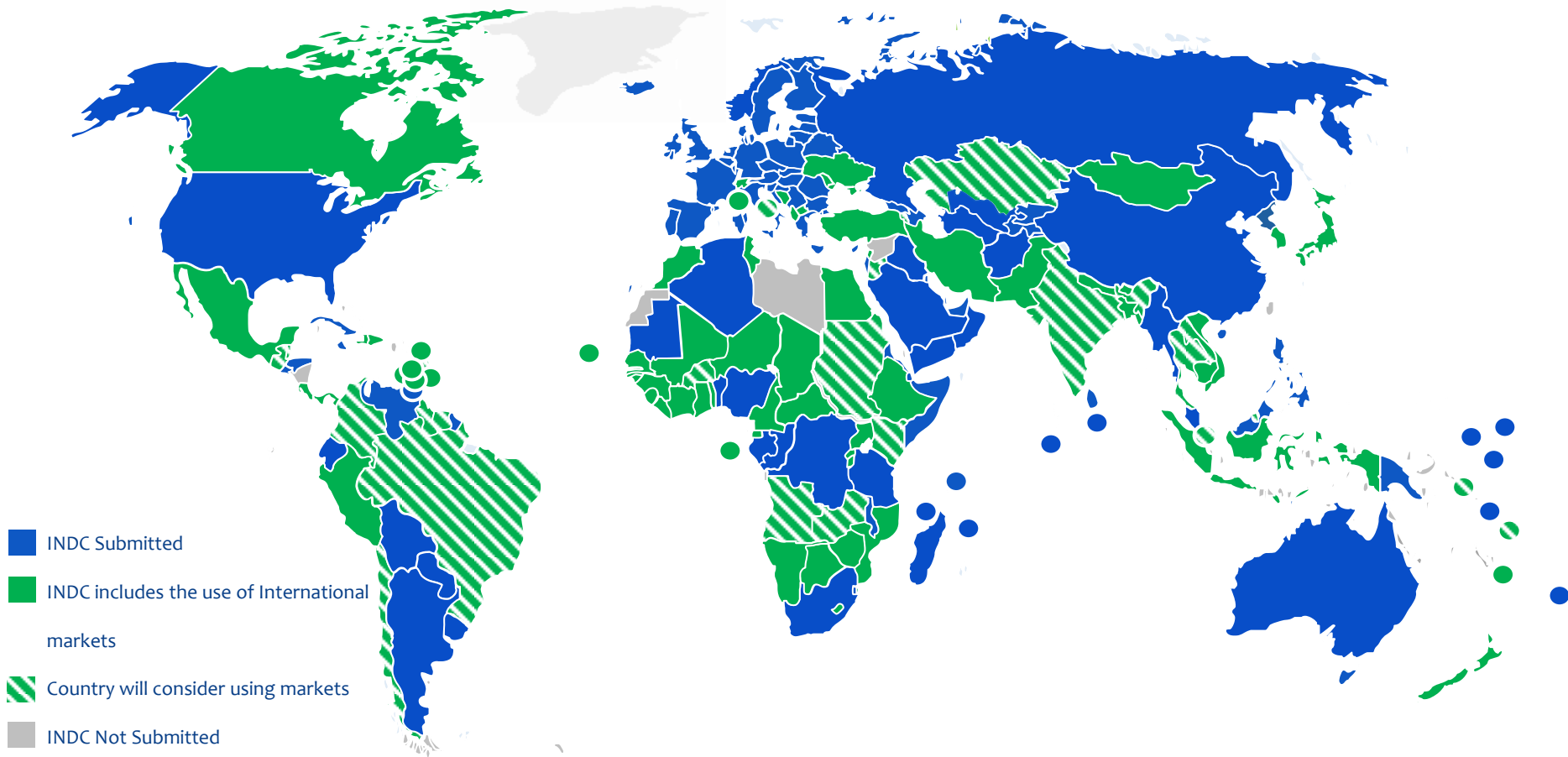


CHILE ETS WORKSHOP

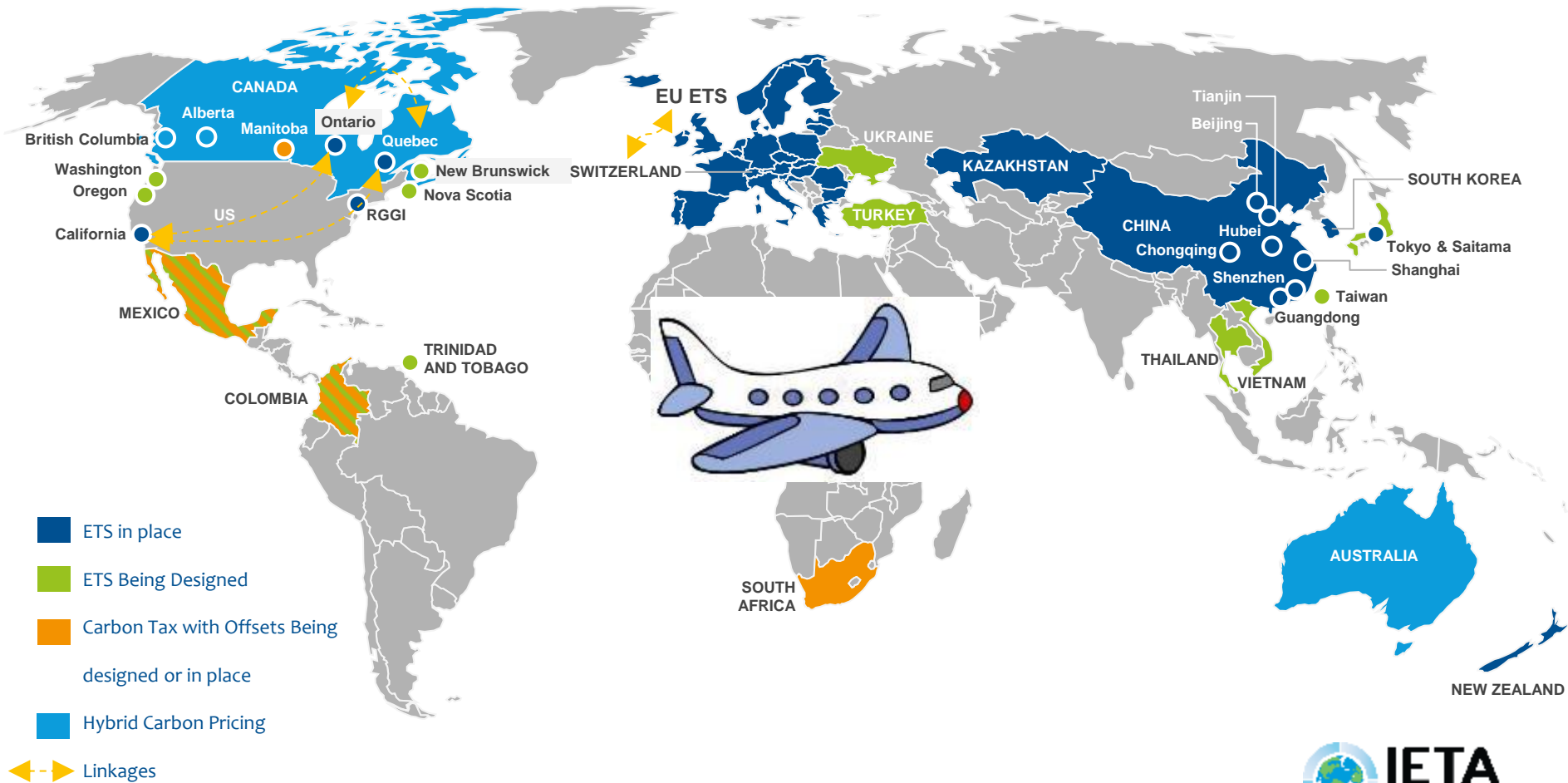


Private Sector Experiences Flexible & Complementary Mechanisms

>100 Carbon Market Friendly Targets



Carbon Markets Worldwide



Chile & Markets...Deep Thoughts

- **We've "Crossed the Rubicon".** Economic impetus to a decarbonized world is now unstoppable. Doing nothing = non-option.
- **Chile Appears to be "All In".** By confirming Chile's domestic targets, climate policy settings will inevitably tighten...and soon.
- **Future of Carbon Markets is Bright.** Chile could optimize its position as regional and international markets evolve.
- **Climate Finance-Carbon Market Links.** Big opportunities for Chile with robust & aligned market design to attract public-private climate finance.
- **Critical to Maintain Competitiveness as World Evolves.** Act early, provide predictable industry support and pathways to business and investors.

IETA Key Messages & Principles

- **CLIMATE RESULTS MATTER**
 - Measurable climate (GHG reduction) outcomes!
- **POLICY CERTAINTY MATTERS**
 - Long-term, consistent compliance pathways and price signals
- **PROFIT-INCENTIVE POWER MATTERS**
 - Drives innovation & broader economic development
- **LOW-COST & FLEXIBILITY MATTERS**
 - Trading, low-cost offsets, linking etc.
 - Broadens participation
- **ADDRESSES COMPETITIVENESS**
 - Levels playing field with international competitors



ACT

ACWA POWER

ACO
AitherCO₂

allcot

althelia
ecosphere

ecosphere+

American
Carbon
Registry

APX

argus

Baker
McKenzie.

Bank of America
Merrill Lynch

BEVERIDGE
& DIAMOND

bgc

bhpbilliton

Bloomberg
NEW ENERGY FINANCE

bluesource

BNP PARIBAS

bp

bp

target
neutral

BRINKMAN CLIMATE

Capital
Power

Carbonbay

carbonclear

CARBONCREDIT
SOLUTIONS INC.

Carbon Pulse

carbonsink
the sustainable change

cbl markets

CE2 Carbon Capital

Chevron

CLP 中電

ClearBlue
Markets

CLIMATE
ACTION
RESERVE

climatecare

Shihung Kimanpen
Fondazione Centesimo per il Clima
Climate Cert Foundation

Climate
Neutral
Group

CLIMATE
SOLUTIONS
GROUP

CRX

ClimeCo
Industrial Market Solutions

co2balance.com

COMMERZBANK

CommonwealthBank

CPE Cell
EDM & Renewable Energy Developer

crowell
moring

CSA
Group

dalkia
GROUPE EDF

DelphiGroup
Environmental Strategies, Business Solutions

DEMARCO
ALLAN
LLP

大成 DENTONS

dalkia
GROUPE EDF

DOW

3COACT

EDF

EnKing
INTERNATIONAL
Industrial Carbon Capture Services & Supplier

ELBOW RIVER

ENBRIDGE

Energia
Enel

ENGIE

eni

ERM

eex

firstclimate

Fortum

gasNatural
fenosa

GARD

G.C.T.

Global Commodities Trading

国泰君安证券
GUOTAI JUNAN SECURITIES

IBERDROLA

ICIS

IHS Markit

INLANDSIS

Ice

ITRI
Industrial Technology
Research Institute

KOCH
SUPPLY & TRADING

KPMG

KRIC
한국기후변화연구원
Korea Research Institute in Climate Change

LafargeHolcim

LATHAM & WATKINS LLP

Linklaters

Marubeni

Mercomind

MERCURIA

MGM
MIDDLE GROUP

MICHELIN

mitsui & co.

NATURE BANK

NATURAL
CAPITAL
PARTNERS

TMX | NGX

HYDRO

NACX
NORTH AMERICAN
CLIMATE TECHNOLOGY

NORTON ROSE FULBRIGHT

NOVA Chemicals

Nutrien
Feeding the Future

ONTARIO
POWER
GENERATION

PERMIAN
GLOBAL

PetroChina

PC&E

POINT CARBON
THOMSON REUTERS

powerex.
Supply Flexibility Commitment

pwc

Quimobásicos
S.A. de C.V.

REPSOL

RioTinto

RUBY CANYON ENGINEERING

RWE
The energy to lead

Shell

Sheppard
Mullin

SOLVAY
asking more from chemistry*

south pole

sse

Statkraft

Statoil

SUNCOR
ENERGY

TDR
Energy

Terra
GLOBAL CAPITAL

THE
CLIMATE
TRUST

TOTAL
COMMITTED TO BETTER ENERGY

tradewater

TransCanada
in business to deliver

uni
per

VATTENFALL

VEOLIA

VCS

VERTIS

:vivedeconomics

VNV ADVISORY

Xcel Energy

xpansiv

置信碳资产
ZHEN CARBON ASSET

IETA
CLIMATE CHALLENGES
MARKET SOLUTIONS



BUSINESS OFFSETS



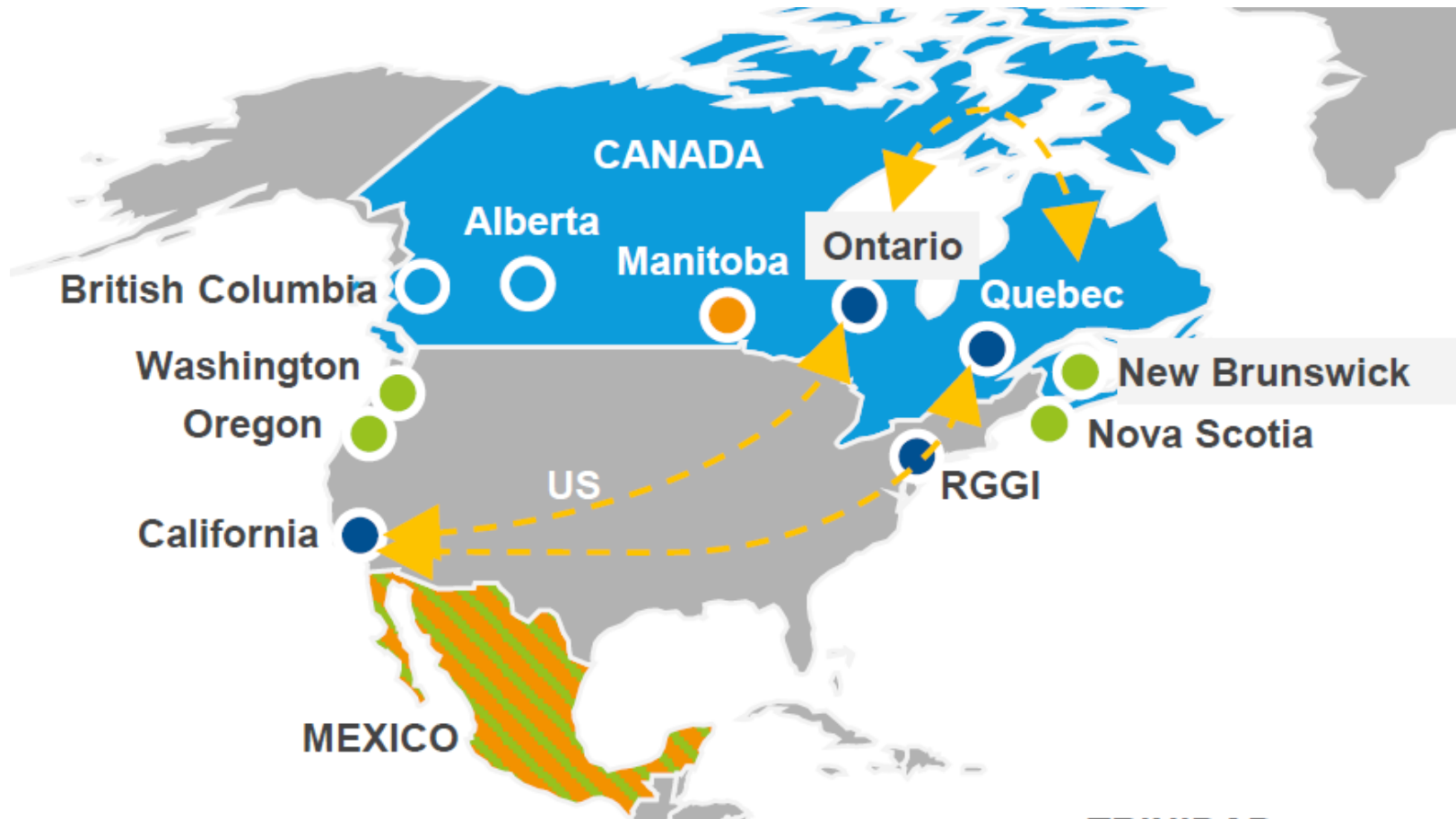
Why Business Offsets

- Cost-Containment – Carbon price pressure relief
- Drives down emissions at a faster rate
- Drives reductions & participation by unregulated sectors
- New revenue stream (e.g. farms, forests, entrepreneurs)
- Enables linkages & alignment
- Drives new technologies - spurs innovation and clean exports
- Supports climate-neutral, CSR voluntary goals

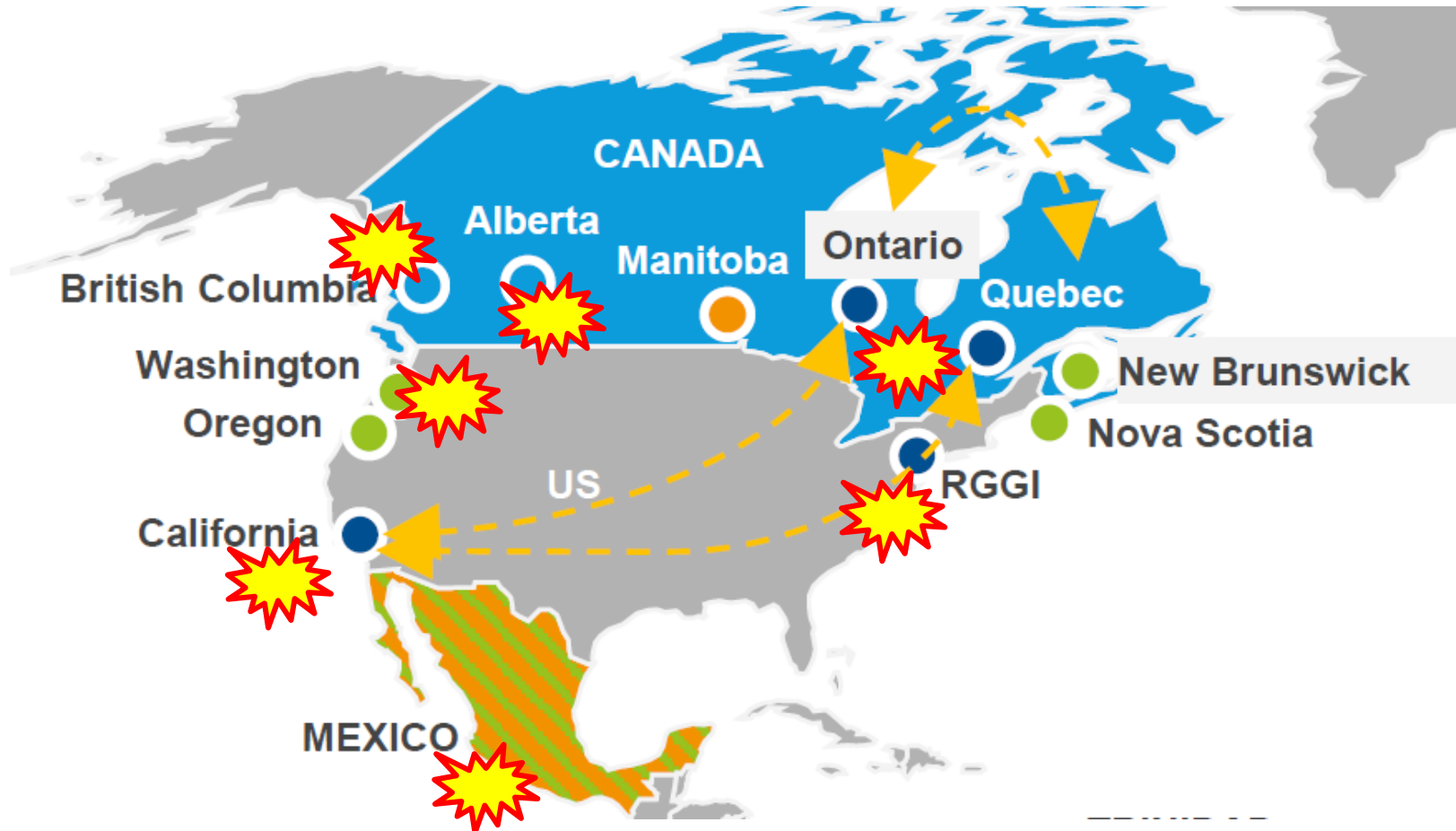
Some Key Offset Design Items

- **Offset Project Type Eligibility?**
- **Geographic Eligibility? (Local, Regional, Global?)**
- **Quantitative Limits? (100% of X% of compliance?)**
- **Offset Protocol Development? (Adopt? Adapt? Create?)**
- **Project Start Date?**
- **Infrastructure - Registry? (3rd Party? In-House?)**
- **Aggregation of Smaller Projects?**
- **Invalidation & Liability? (Buyer, Seller, Buffer?)**
- **MRV & Assurance? (Verification, Validation?)**
- **Co-Benefits (Local Prioritization?)**

North American Markets



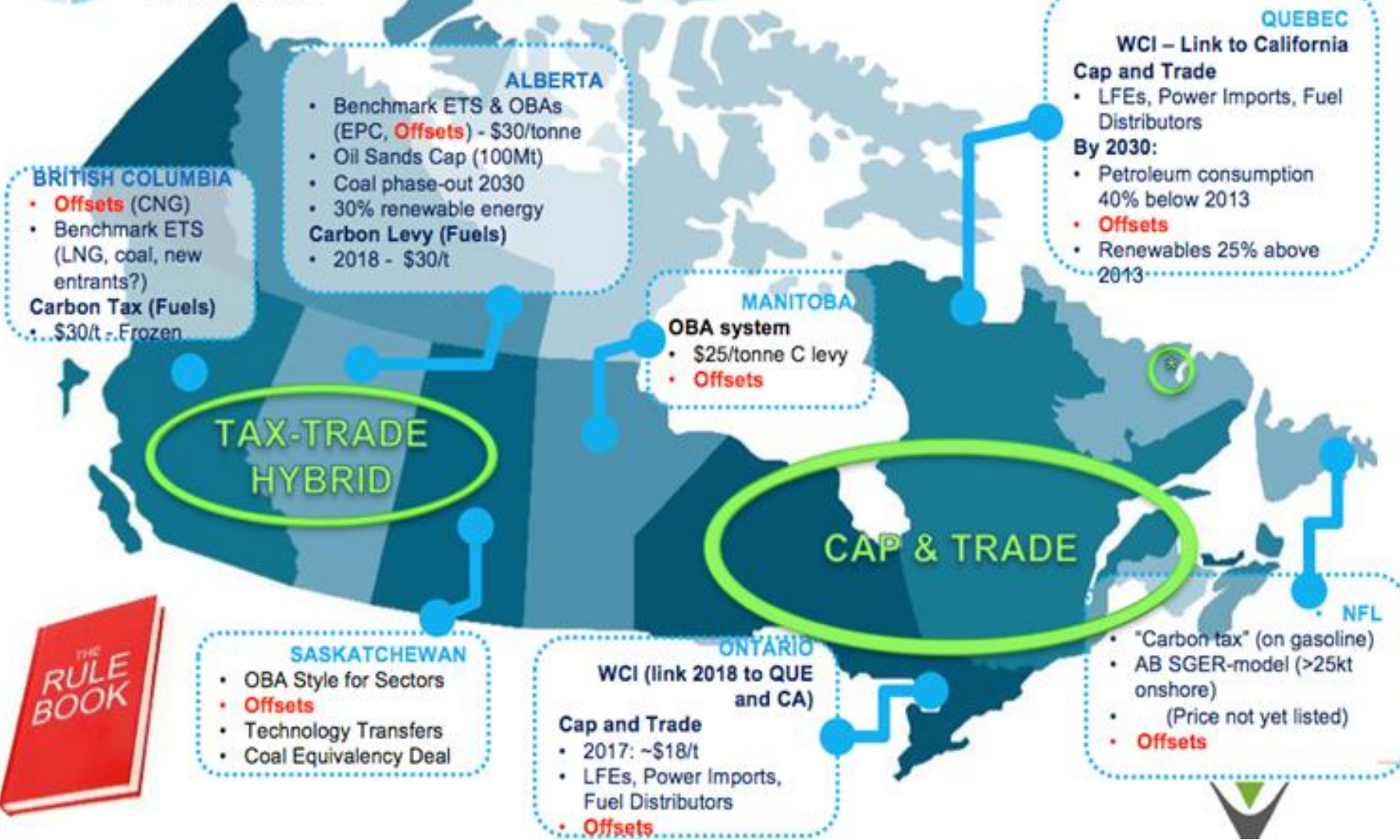
North American Offsets Explosion





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CLIMATE CHALLENGES
MARKET SOLUTIONS

Includes: PCF Offset
Harmonization Framework



BRITISH COLUMBIA

- **Offsets** (CNG)
- Benchmark ETS (LNG, coal, new entrants?)
- Carbon Tax (Fuels)**
- \$30/t - Frozen

**TAX-TRADE
HYBRID**

ALBERTA

- Benchmark ETS & OBAs (EPC, **Offsets**) - \$30/tonne
- Oil Sands Cap (100Mt)
- Coal phase-out 2030
- 30% renewable energy
- Carbon Levy (Fuels)**
- 2018 - \$30/t

MANITOBA

- OBA system**
- \$25/tonne C levy
- **Offsets**

CAP & TRADE

SASKATCHEWAN

- OBA Style for Sectors
- **Offsets**
- Technology Transfers
- Coal Equivalency Deal

ONTARIO

- WCI (link 2018 to QUE and CA)**
- Cap and Trade**
- 2017: ~\$18/t
- LFEs, Power Imports, Fuel Distributors
- **Offsets**

QUEBEC

- WCI – Link to California Cap and Trade**
- LFEs, Power Imports, Fuel Distributors
- By 2030:**
- Petroleum consumption 40% below 2013
- **Offsets**
- Renewables 25% above 2013

NFL

- "Carbon tax" (on gasoline)
- AB SGER-model (>25kt onshore)
- (Price not yet listed)
- **Offsets**



Complementary Mechanisms...



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CLIMATE CHALLENGES
MARKET SOLUTIONS