

The Green Tech Industries and the Environmental Goods Agreement Negotiations

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Bangkok

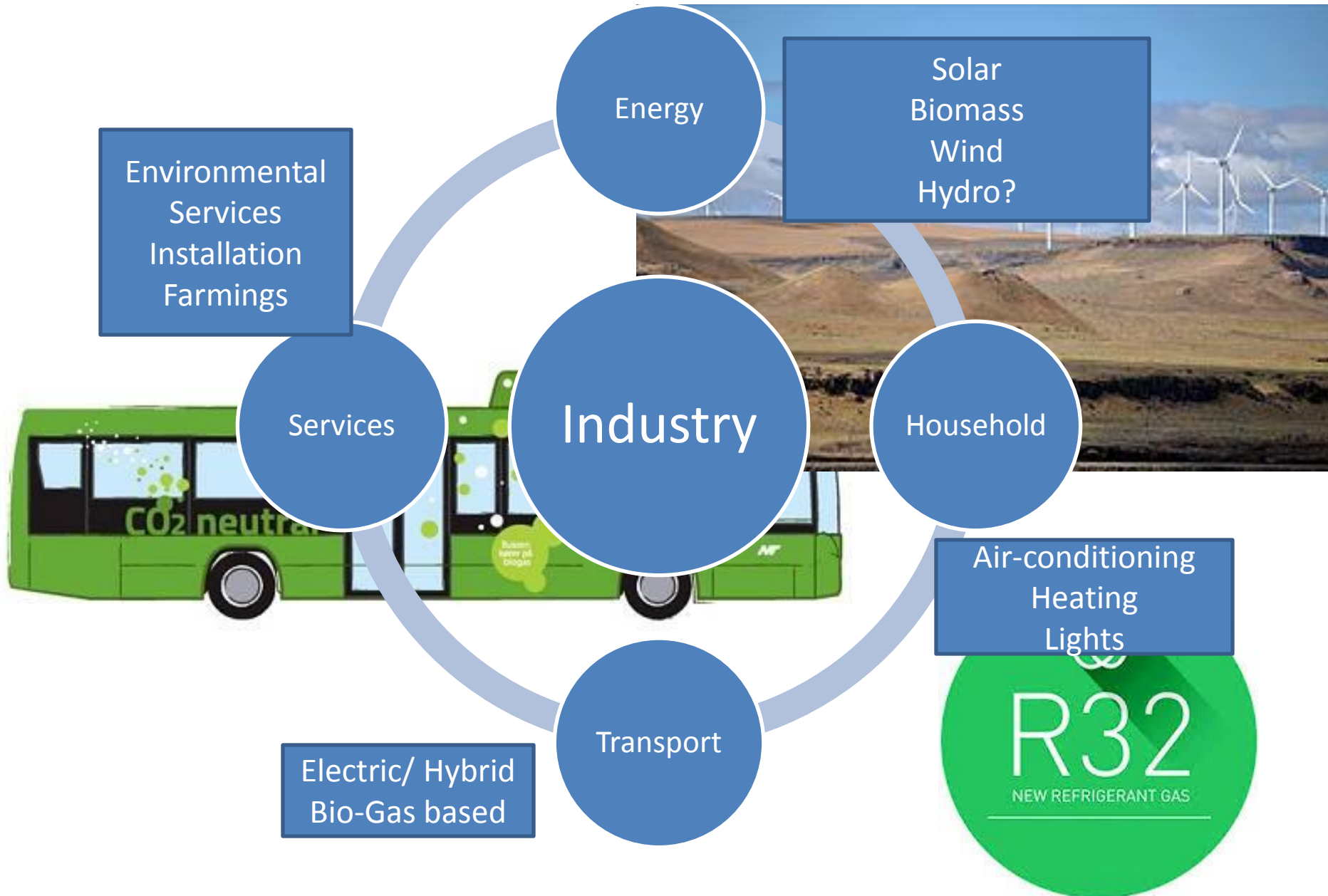
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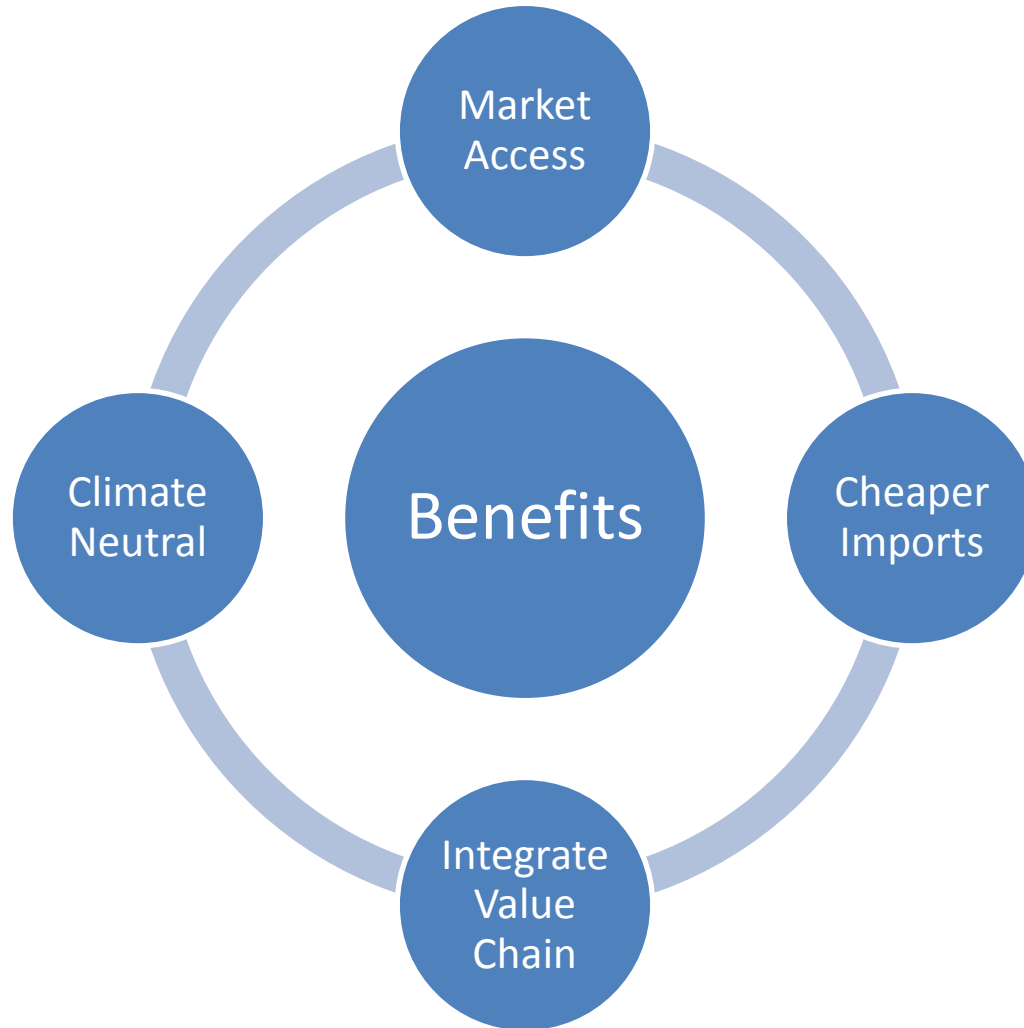
Order of Presentation

- Dynamics of the Green Tech Industries
- Potential Benefits
- Issues
- Case Studies:
 - Green Electricity
 - Biomass
- MRA as a solution for the industry?

Dynamics of the Green Tech Industries



Potential Benefits



Issues in the List (1)

- No definition, long 650 product tariff lines
- HS-6 headings, several goods can be included, an HS-6 heading might contain goods which are environmentally positive but also products which are environmentally negative
- Some included products have environmental impact: e.g. biodiesel

Issues in the List (2)

- Some products are excluded e.g. Ethanol, wood based biofuel
- Domination by countries with large comparative advantage- e.g. solar by China and electric cars by Japan.
- What is there for the LDC, developing countries and the rest of the world?

Issues: Non Tariff Barriers

Standards

SPS measures

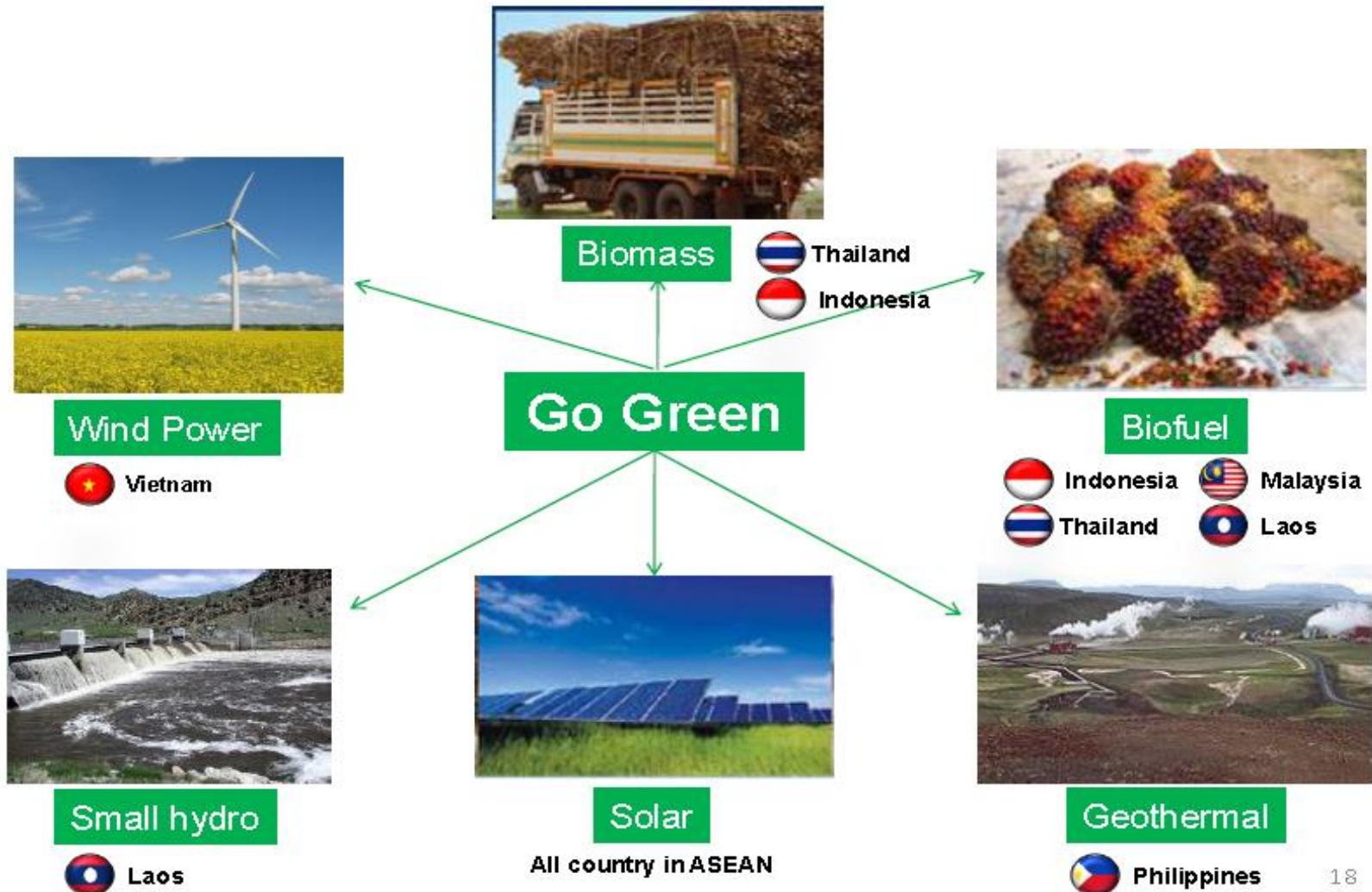
Hybrid/Multi
usage products

Creating New HS
Codes for the
environmental
Goods?

Adding Goods in
the List. Services
are not in there

**PRODUCT: ELECTRICITY AND
POWER**

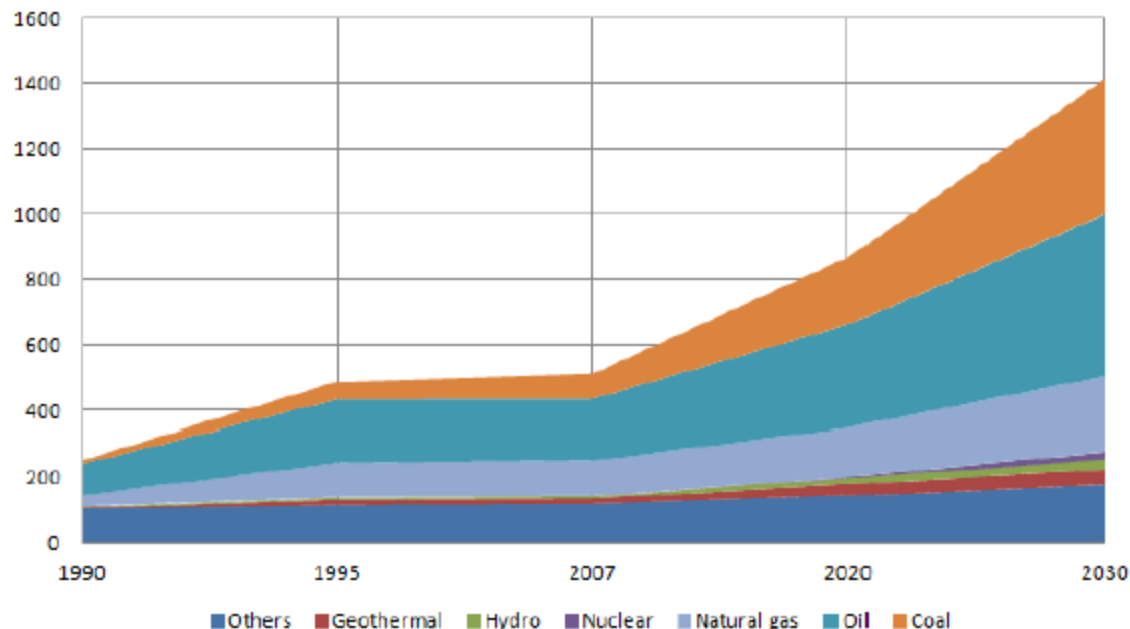
Opportunities



The 3rd ASEAN Energy Outlook



Primary Energy Consumption from 1990 to 2030 (BaU Scenario)

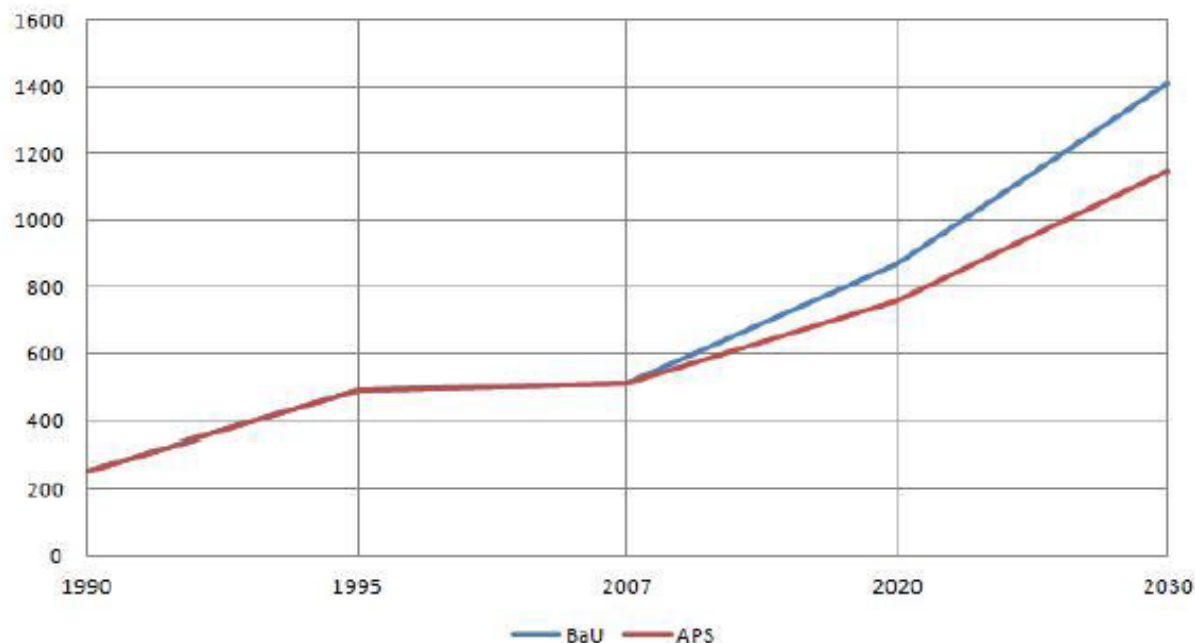


Total primary energy consumption increased from 252 MTOE in 1990, 339 MTOE in 1995 to 511 MTOE in 2007 or 3.6% per annum. Under BaU, it will grow 4.5% per year from 2007 to reach 1,414 MTOE in 2030. Coal will have the fastest annual growth as demand increases in power generation, but oil will remain as the major source of energy.

The 3rd ASEAN Energy Outlook



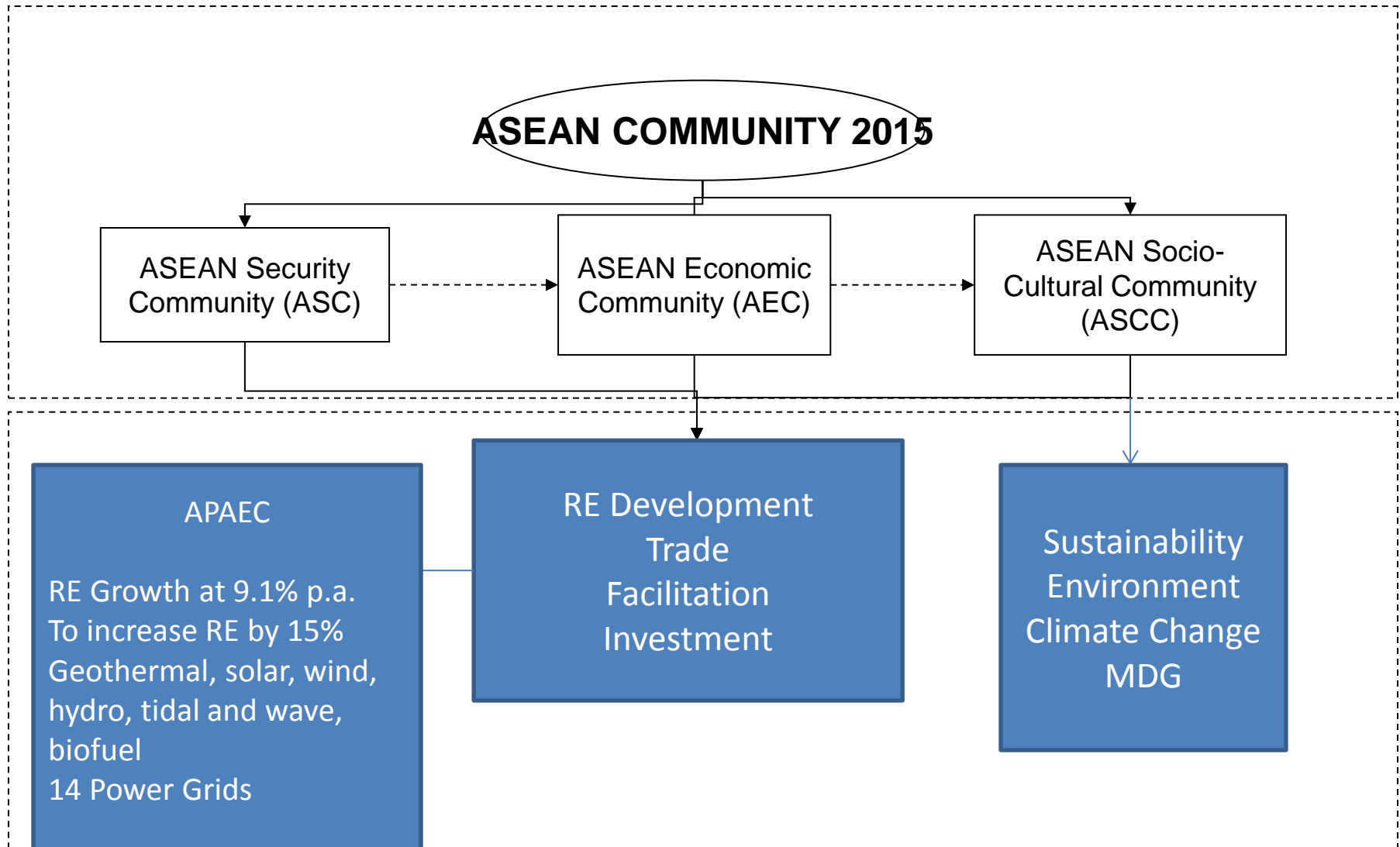
Primary Energy Consumption from 1990 to 2030 (APS)



In the APS, the growth of primary energy consumption will be at a slower 3.6% per annum to reach only 1152 MTOE in 2030, 18.5% lower than in the BAU scenario. This is the result of imposing EE&C action plans and saving targets of the member countries. Primary energy intensity will decrease by 29.7% to 408 TOE/million USD.

COURTESY: ASEAN ENERGY CENTER

ASEAN Community 2015 and Green Electricity



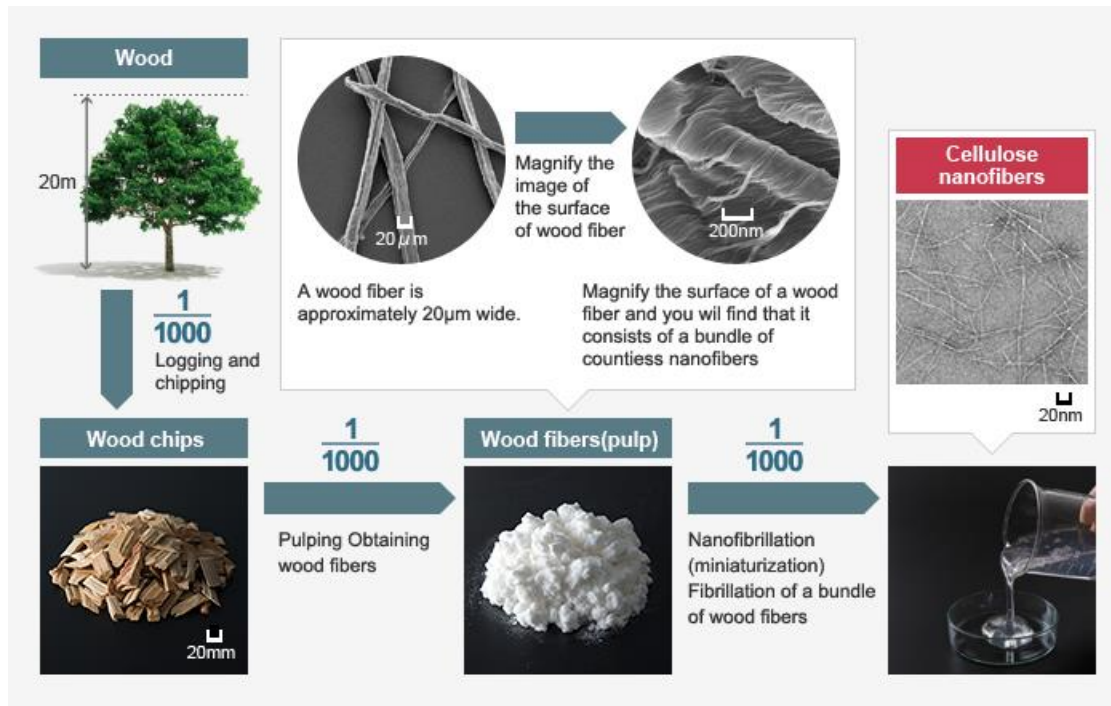
Green Electricity Private Projects

(source: World Bank Private Participation in Renewable Energy Database)

ASEAN Member States	No.	MW	RE Sources
Indonesia	14	896	Hydro, Geothermal, Solar
Lao PDR	18	4,586	Hydro
Malaysia	5	157	Solar, Geothermal, Bioenergy
Myanmar	1	575	Hydro
Philippines	16	1,053	Hydro, Solar
Thailand	23	492	Solar, Hydro
Viet Nam	21	635	Wind, Hydro

PRODUCT: BIOMASS

Cellulose Nano-cystals



Multiple usage: Painting and Coating; Consumer Products; Paper making; Textiles, Transportation Materials

Biomass Fibers

Materials Transformation



EFB

- After 2nd Press, from Mill.



Fibre

- After shredding & drying



Fibre Block

- Density: 500~900kg/m³
- Area:~ 30 x 30 mm²
- After press forming

Product Transformation = Changes in the HS Codes

Biomass Fuels



Palm Oil By Products for
Glaceryn and Lubricants

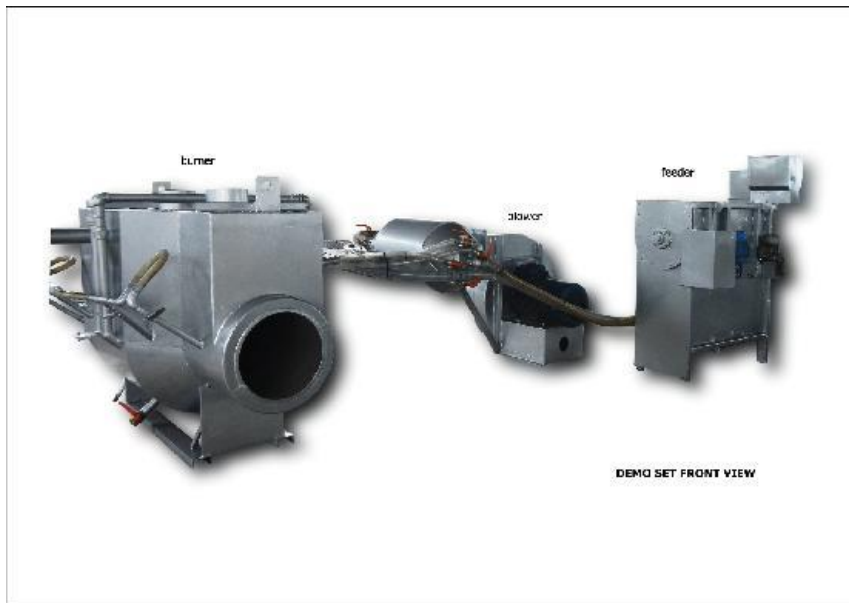
Issue: is there any HS Code for
this? Not petroleum based.

Product- How to deal with this?

Self-Combustion Patented System with Biomass Fuel

- Generating temperature from 80°C to 1,250°C
- Biomass fuel, it is a fine/blend powder that aids the firing system.

The Burners with Supporting Machineries



Pulverized Materials



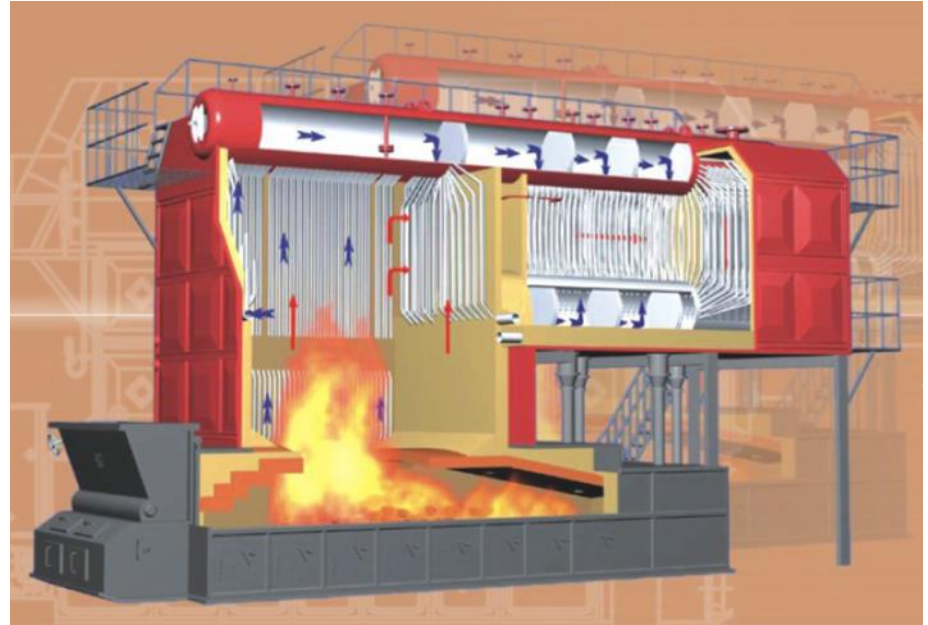
How do you deal with these products:

Environmental Products? We were asked to pay 25% tariff as it is a Boiler, irrespective of its usage.



Services

- Bio-Fuel Processing
- Trading of Processed and unprocessed Bio-Fuel
- Turnkey Project Management



Product Standard Certifications

Burner

- Eco-labelling
- Fire Listing Scheme
- Product Listing Scheme
- BSI standards for Biomass burner

Biomass Solid Fuel

- Eco-labelling
- Batch Certification Scheme
- CEN Biomass fuel standards
 - Sustainably produced biomass for energy applications (EN16214-1:2012)
 - Energy efficiency and saving calculation (EN16212:2012)
 - Solid bio-fuels quality assurance (EN15569:2009; 15149:2006; 15370:2006; 14588:2010; 14774-80:2009) etc.

Green Project Certificate & Patents

Cert. No : GTFS/E/C0049



Green Project Certificate *Sijil Projek Hijau*

It is hereby certifies that
Ini disahkan bahawa

WING-M CHEMICAL SDN BHD
LOT 31777 KG. ULU CHEMOR
31200 CHEMOR
PERAK DARUL RIDZUAN

fulfill the Green Technology Financing Scheme Eligibility Criteria
telah memenuhi kriteria Skim Pembiayaan Teknologi Hijau

Project Name : Pulverizer & Fabrication Plant of Self-Combustion System

Project Serial No. : GTFS/E/P068

Category : Producer

Sector : Energy

GT Project Cost : RM 11,741,000.00



DATUK LOO TOOK GEE
Secretary General
Ministry of Energy, Green Technology and Water

Malaysian Green Technology Corporation
(Pia Syarikat - 462237-T)
No. 2, Jalan 9/10,
Persiaran Usahawan, Seksyen 9,
43650 Bandar Baru Bangi,
Selangor

Tel: 03-89210800
Fax: 03-89210801
<http://www.greentechmalaysia.my>
<http://www.gtfs.my>

Issue Date : 21 December 2011

Tarikh Dikeluarkan :

Valid Until : 20 June 2012

Sah Sehingga : (Extension)

Certificate No. : GTFS/E/C0049

Intended for loan financing under Green Technology Financing Scheme only
Bertujuan untuk pembiayaan pinjaman di bawah Skim Pembiayaan Teknologi Hijau sahaja



MALAYSIA
CERTIFICATE OF GRANT OF A PATENT

In accordance with Section 31 (2) of the Patents Act 1983 a patent for an invention having grant number MY - 142485 - A has been granted to TAN WENG MING in respect of an invention having the following particulars :

TITLE	INDUSTRIAL PULVERISED BURNER
FILING DATE	06 SEPTEMBER 2007
PRIORITY DATE	NONE
NAME OF INVENTOR	TAN WENG MING
PATENT OWNER	TAN WENG MING 81A, JALAN RAJA PEREMPUAN MANDAH TAMAN REHSAH 38100 IPOH MALAYSIA
DATE OF GRANT	30 NOVEMBER 2011

Dated this 30 day of NOVEMBER 2011


(IBRAHIM BINTI KAMARUDDIN)
for Registrar of Patents
MALAYSIA

Selected Standard Certification Bodies



European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

CEN and BSI have developed various standards for biomass solid fuel and biomass burner systems

CEN and BSI standards comply with the European Union Regulations

Compliance with CEN and BSI standards will ensure market access

Advantages of Standards and Certifications



Powerful
tool by
supporting
and
increasing
productivity

Becoming a
leader in
the solid
biomass
fuel
industry

Attract and
assure
customers

Create
competitive
advantage

Develop and
maintain
best
practice

Services: Product Designing Upgrading



Software for burner
and accessories
design



Software for biomass
energy calculation



Software for
simulation of firing;
airflow, ash drop;
gases and efficiency



Related computer
hardware



Training of personnel

R&D For Solid Fuel Mixed-Ingredients

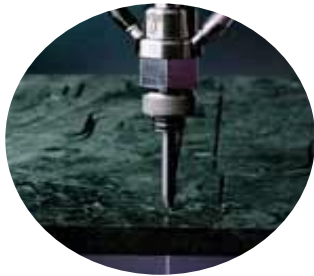
Shortage of
specific biomass

To mix different
biomass to achieve
optimum results

Grading: different
grades for
different
customers

To increase cost
efficiency

Upgrading for Burner Production and Fabrication



Precision metal
cutting



Precision fabrication



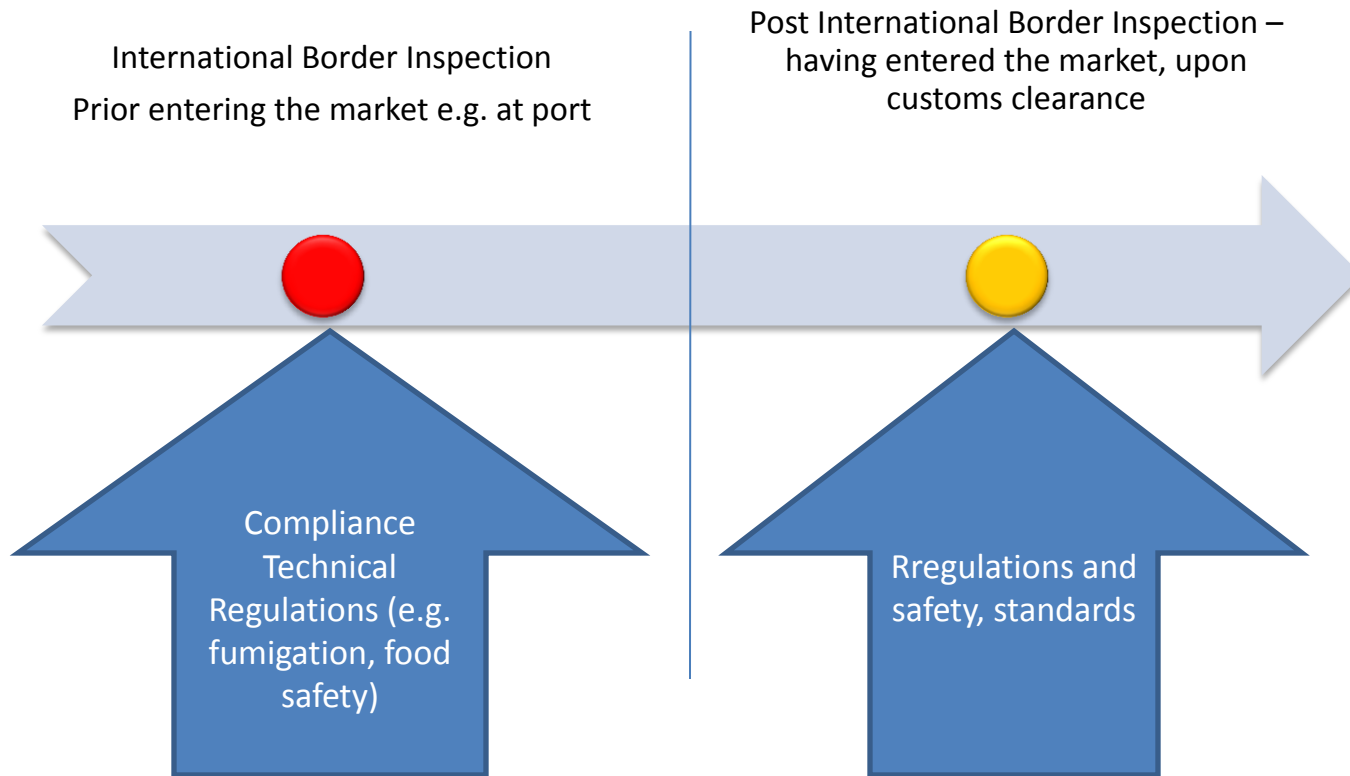
ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE



R&D and academia
ties-up

MRA AS A POTENTIAL SOLUTION?

Cross Border Requirements



Mutual Recognition

Reciprocity

- Exchange of equivalent promises to recognize each other regulations between two countries
- Accepts standards in other country to the one of its own

Acceptance

- acceptance of regulatory conditions for goods and services required in one country (exporting origin/home country) as equivalent with the conditions necessary in another country (importing country/host country).

Principle in Casis de Dijon (EU)

- If a product can be sold lawfully in one jurisdiction, it can be sold freely in any other participating jurisdiction, without having to comply with the regulations of these other jurisdictions regardless of the differences in standards or other sale related regulatory requirements.
- A process of approval can be obtained domestically by the producers and exporters set by the national law based on the same requirement set by the destination country.

Characteristics

- National rules and regulations being recognized by another State
- Judicial and Political
 - Judicial mainly in the European Union eg. Casis de Dijon; German Beer cases
 - Political imposes the contractual norm = agreements
- Do not require full harmonization of rules and regulations
- Establishment of institutional mechanisms

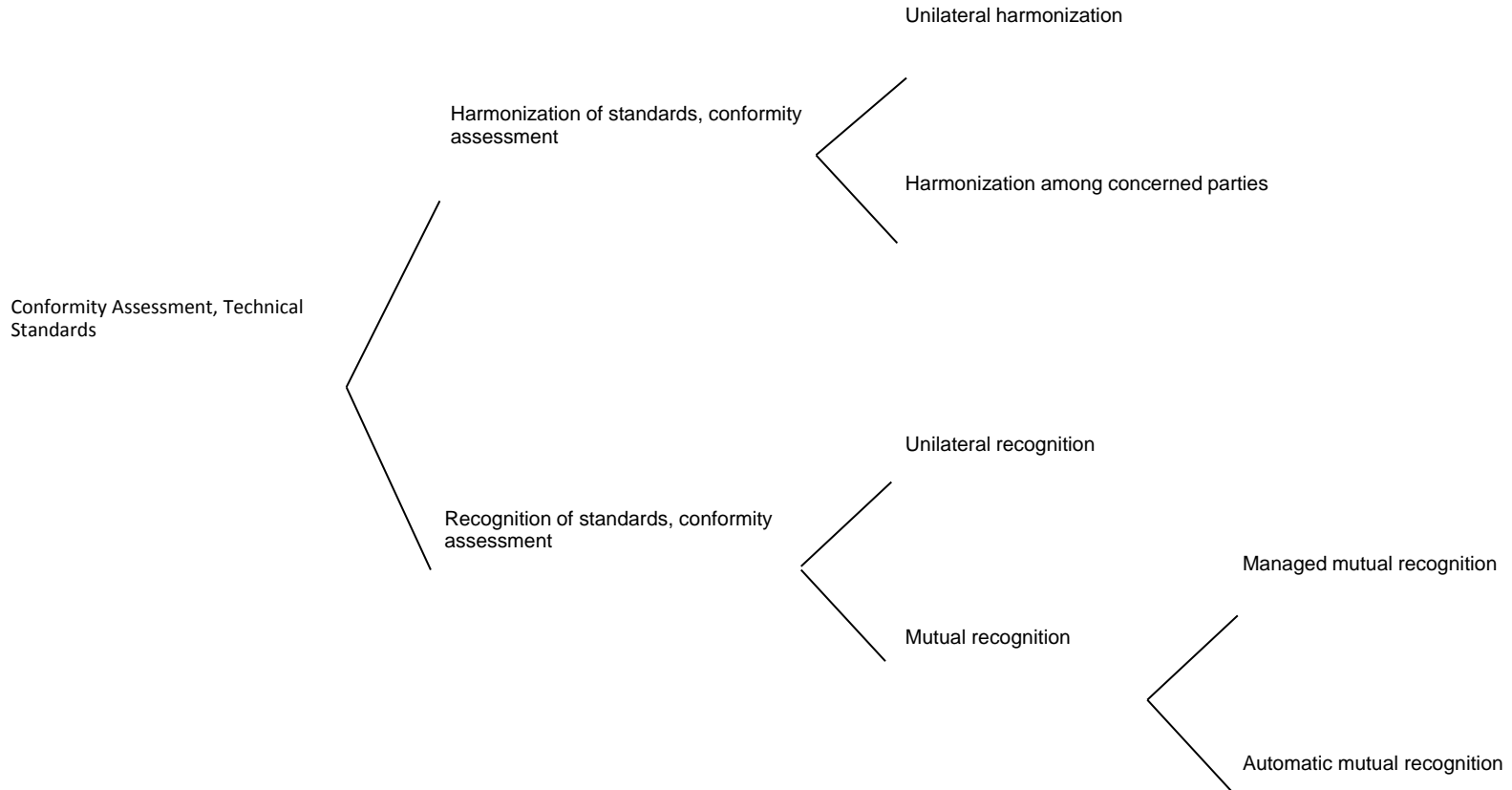
How to effect Mutual Recognition

- Mutual Recognition Agreement
 - An MRA is one in which the respective regulatory authorities accept, in whole or in part, the regulatory authorizations obtained in the territory of the other party or parties to the agreement in granting their own authorization
- To agree on the methodology for recognition
 - To verify the equivalence of the level of protection provided by the product under scrutiny.
 - Collecting the necessary data
 - Verification of the equivalence of level of protection
 - Issuing the results of the assessment
 - Communicating the results to the applicants.

Alternative of MRA: Harmonisation and Standardisation

- Harmonisation:
 - The process of making different domestic laws, regulations, principles and government policies substantially or effectively the same or similar
 - Making the regulatory requirements or governmental policies of different jurisdictions identical or at least more similar
 - A process of reducing divergence or fragmentation to increasing similarity or comparability
- Standardisation is focusing on a common standard, i.e. a generally accepted and followed system of nomenclature

Comparison between harmonization and recognition



Negotiations

- Genuine Market Access: Cost Benefit Analysis
- Negotiations by the specialists
- Build the trust
- Clarify scope of application
- Require information sharing
- To have domestic system in place for conformity assessment, standard setting, consumer protections
- Comparing their compatibility
- Identify possible lacunae and agreeing on ways to address such lacunae
- Involve value judgments and subjective perceptions and evaluations of equivalency.

Remember:

MRA is
Reciprocal in
nature

Capacity Building

- Technical Expertise
- Laboratories
- Inspectors
- Engaging Stakeholders

A diagram illustrating capacity building components and their sources. On the left, a list of four items (Technical Expertise, Laboratories, Inspectors, Engaging Stakeholders) is grouped by a blue bracket. This bracket points to a blue rectangular box on the right. Inside the box, four sources of assistance are listed: Assistance from FTA Partners, Export Partners, Regional Arrangement, and Facility Sharing.

Assistance from FTA
Partners
Export Partners
Regional Arrangement
Facility Sharing