



**VIETNAM MINISTRY OF PLANNING AND INVESTMENT**

**GREEN GROWTH STRATEGY  
PATHWAY TO IMPLEMENT  
NATIONALLY DETERMINED CONTRIBUTION**

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- 1. Summary of Vietnam Green Growth Strategy, NDC of Vietnam and Green Growth Action Plan;**
- 1. Update of GG Action Plan Implementation;**
- 2. Recommendations.**

# VIETNAM GREEN GROWTH STRATEGY

A **strategy** to promote the process of restructuring and improving economic institutions towards more **efficient use** of natural resources, improved **competitiveness** of the economy.

This will contribute to responding to **climate change**, **reducing GHG & poverty** and ensuring **sustainable economic development**.

- **Strategic Task 1:** Low Carbon Growth  
- By 2020 to reduce voluntarily the intensity of greenhouse gas emissions by 8-10% as compared to the 2010 level and 25% with additional international support;

Reduce energy consumption per unit of GDP by 1-1.5% per year.

- **Strategic Task 2:** Greening Production with the aim to encourage the development of green industry and green agriculture based on environmentally friendly structures, technologies and equipment;
- **Strategic Task 3:** Greening Lifestyle and Promoting Sustainable Consumption.

# NDC OF VIETNAM

Sector	Modality	Reduction target by 2030 (%)	Expenditure (mil. US\$)
Energy	self-executing	-4.4	1,894.3
	international support required	-9.8	5,317.4
Agriculture	self-executing	5.8	885.43
	international support required	41.8	12,093.54
Waste	self-executing	-8.6	311.7
	international support required	-42.1	2,596.2
LULUCF*	self-executing	+50.05	131.98
	international support required	+145.7	1,127.98
<b>Total self-executing expenditure</b>			<b>3,223.41</b>
<b>Total required international support expenditure (mil. US\$)</b>			<b>17,911.71</b>
<b>Total (mil. US\$)</b>			<b>21,135.12</b>

**Unconditional reduction in GHG emissions of 8% by 2030 and would increase the emissions reductions to 25% with international support**

# MACC OPTIONS/VGGS TARGET

## CO2 emission reduction potential of sub-sectors/options by cost 2020

Sub-sector	Cost of CO <sub>2</sub> emission reduction (US\$/ton CO <sub>2</sub> )							
	<=0		<=5		<=10		<=20	
	No. of option	Amount of emission reduction (MtCO <sub>2</sub> )	No. of option	Amount of emission reduction (MtCO <sub>2</sub> )	No. of option	Amount of emission reduction (MtCO <sub>2</sub> )	No. of option	Amount of emission reduction (MtCO <sub>2</sub> )
Building	3	0.17	3	0.17	3	0.17	3	0.17
Construction material	1	0.49	1	0.49	1	0.49	1	0.49
Cement	3	2.61	3	2.61	3	2.61	3	2.61
Textile	2	0.08	2	0.08	2	0.08	2	0.08
Household	8	14.80	9	16.22	9	16.22	9	16.22
Pulp and paper	2	0.19	2	0.19	2	0.19	2	0.19
Electricity generation	0	0	1	15.49	3	17.96	9	61.23
Iron and steel	2	0.09	3	0.22	3	0.22	3	0.22
Road transportation	1	3.45	1	3.45	1	3.45	1	3.45
<b>Total:</b>	<b>22</b>	<b>21.88</b>	<b>25</b>	<b>38.92</b>	<b>27</b>	<b>41.38</b>	<b>33</b>	<b>84.65</b>

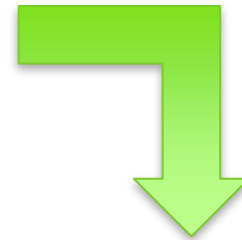
**Emmission intensity to be reduced by 8-10% annually by 2020 and could be doubled with international support**

# RELATION BETWEEN NDC - MACC OPTIONS/VGGS TARGET

## NDC OF VIETNAM

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## MACC OPTIONS/VGGS TARGET

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Cement	3	2.61	3	2.61	3	2.61	3	2.61
Textile	2	0.08	2	0.08	2	0.08	2	0.08
Household	8	14.80	9	16.22	9	16.22	9	16.22
Pulp and paper	2	0.19	2	0.19	2	0.19	2	0.19
Electricity generation	0	0	1	15.49	3	17.96	9	61.23
Iron and steel	2	0.09	3	0.22	3	0.22	3	0.22
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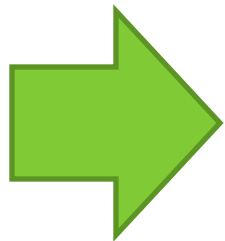
Emmission intensity to be reduced by 8-10% annually by 2020 and could be doubled with international support



# VIETNAM GREEN GROWTH ACTION PLAN

**12 task groups with 66 specific activities dealing with several aspects:**

- Institutional arrangements;
- Revision of Master Plans;
- Technology transfer;
- Business promotion of enterprise development;
- Financial arrangements.



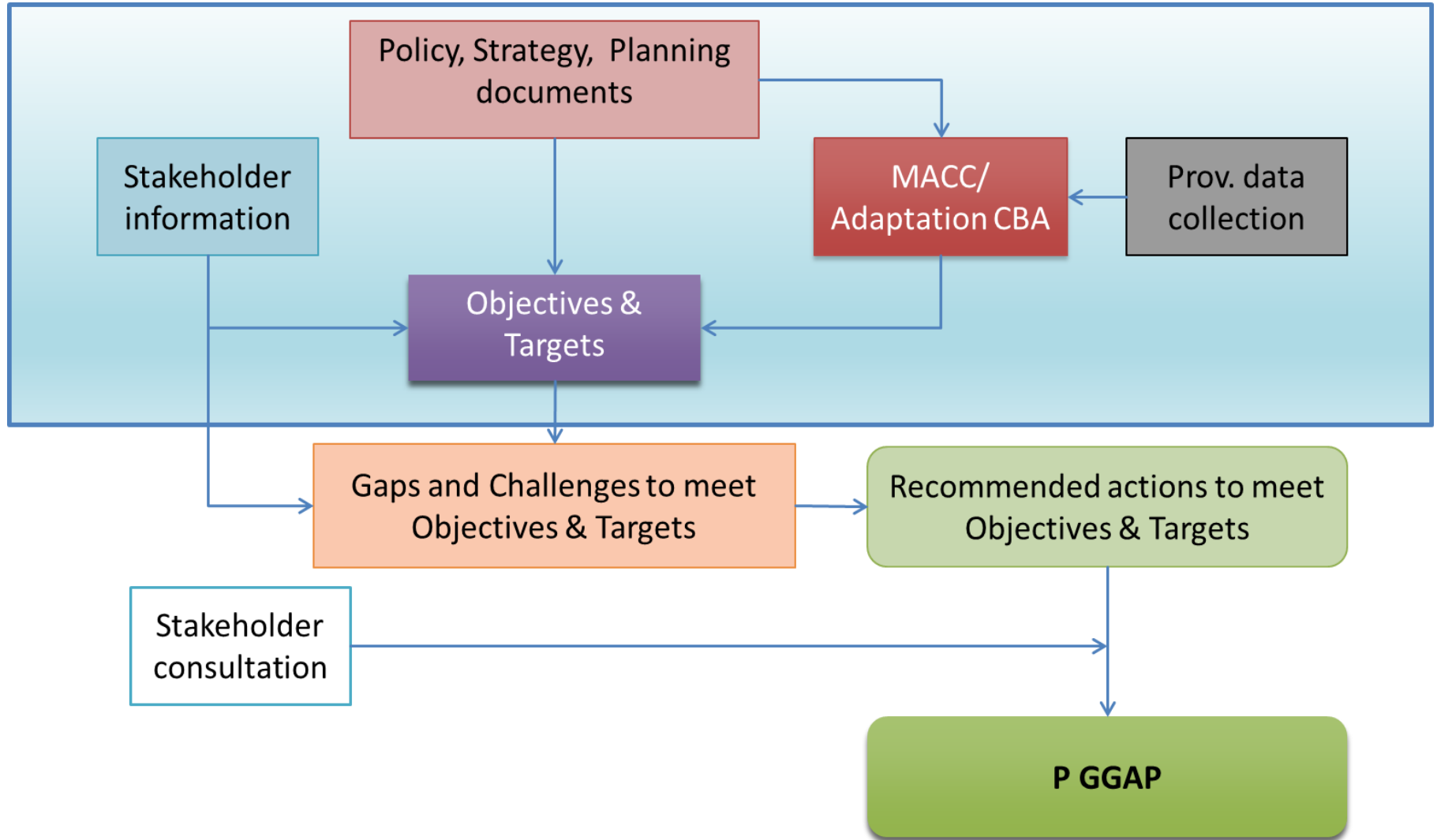
**Vietnam Green Growth Action Plan covers 55% tasks Vietnam NDC action plan, with 100% of mitigation contribution.**

# VIETNAM GREEN GROWTH ACTION PLAN

- MPI, MOF, SBV, MONRE, MOST will focus on legal frameworks, institutional arrangements, business promotion of enterprise development and financial arrangements;
- MARD, MOT, MOIT, MOC and Provincial authorities will focus on both:
  - ◆ Legal frameworks, institutional arrangements, business promotion of enterprise development and financial arrangements;
  - ◆ Sectorial and provincial action plans to reduce emission, including reduction scenarios and priority projects.



# METHODOLOGY FOR GGAP



# PROCESS DIAGRAM

## PHẦN B: NHỮNG ƯỚNG ƯỚNG XANH ĐẾN NĂM 2020

- 1.1. Bối cảnh và yêu cầu đặt ra trong giai đoạn mới
- 1.2. Những yêu cầu thiết để nâng cao sức cạnh tranh, sử dụng hiệu quả tài nguyên, thực hiện TTX, Đimg phó ĐĐKH, Đđm bảo PTBV
- 1.3. Mục tiêu và định hướng trong Kế hoạch hành động tăng trưởng xanh giai đoạn 2016-2020

## PHẦN C: CÁC PHÁP LỰC HIỆN TĂNG ƯỚNG XANH ĐẾN NĂM 2020

- 2.1. Nhóm giải pháp về tăng cường năng lực và thể chế
- 2.2. Nhóm giải pháp về nâng cao nhận thức và tăng cường sự tham gia
- 2.3. Nhóm giải pháp về giảm cường độ phát thải khí nhà kính
- 2.4. Nhóm giải pháp về xanh hóa sản xuất
- 2.5. Nhóm giải pháp về xanh hóa lối sống và thúc đẩy tiêu dùng bền vững

## PHẦN D: NHỮNG TRINH MỤC TIÊU VÀ DỤA ĐAN TRONG ĐIỂM LIÊN QUAN ĐẾN TĂNG ƯỚNG XANH

- 3.1. Nhóm nhiệm vụ, dự án tăng cường năng lực và thể chế
- 3.2. Nhóm nhiệm vụ, dự án nâng cao nhận thức
- 3.3. Nhóm nhiệm vụ, dự án về giảm phát thải khí nhà kính
- 3.4. Nhóm nhiệm vụ, dự án về xanh hóa sản xuất
- 3.5. Nhóm nhiệm vụ, dự án xanh hóa lối sống và thúc đẩy tiêu dùng bền vững

## PHẦN E: CÁC CHỨC VỤ/CHUYÊN

PHỤ LỤC 1: ĐAN H MỤC L C Á C H Ư O N G T R I N H , Đ U Á N , K É HOẠ C H I H C H I E N

PHỤ LỤC 2: ĐAN H I Á T H U C T R A N G P H Á T T R I E N C Á T I N H T H E O H Ư O N G T R I N H TĂNG ƯỚNG XANH

PHỤ LỤC 3: ĐỀ M N Á N G I Á M P H Á T T H Á K H I N H Á K I N H

Strategy-Master plan-Plan

Socio-economic data

- Statistical Yearbooks
- Annual/5-Y reports
- S-E projections

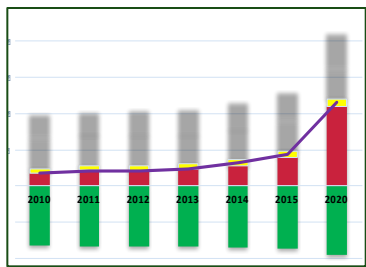
Sector data

- Energy & Industry
- Transport
- Aquaculture & Forestry
- Waste

SWOT analysis

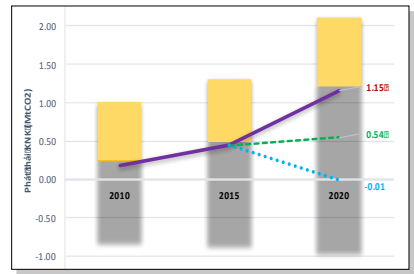
Reducing GHG emissions intensity, promote the use of clean energy, renewable energy	Greening production	Greening lifestyle and sustainable consumption
Use of energy saving and efficiency in industry (minimizing, conserving materials, food processing...)	Check and adjust the C-Q-K towards Green Growth (economic restructuring)	Develop green and sustainability urban with smart climate change (urban planning, waste management, water, urban greenery, green building...)
*Use of energy saving and efficiency in transport (public, cutting modes of transport...)	Efficient and sustainable using of natural resources (resource & ecology conservation...)	Development of public transport, control the development of personal motorized vehicles
*Use of energy saving and efficiency in buildings, hotels, restaurants...)	Regional green economic development (green industry, green agriculture, environmental protection technology)	New Rural Development
Development of clean energy sources, renewable energy (wind, solar, biomass, biogas, energy from waste...)	Developing sustainable infrastructure (transport, energy, irrigation & water resources)	Sustainable consumption promoting and green lifestyle building (green label, eco label, public expenditure towards green economy...)
Cultivation technology innovation, good practice in agriculture, forestry and fisheries in order to reduce GHG emissions	Sustainable enterprises development	Sincerely develop IT and E-Government

Matrix of prioritized GG actions

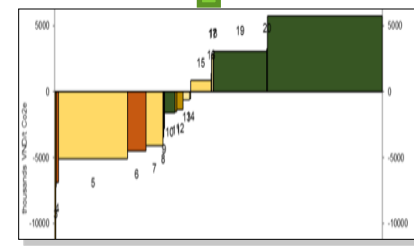


Patterns of GHG emitters

P-GGAP



Targets for GHG emission reductions



MACC Analysis

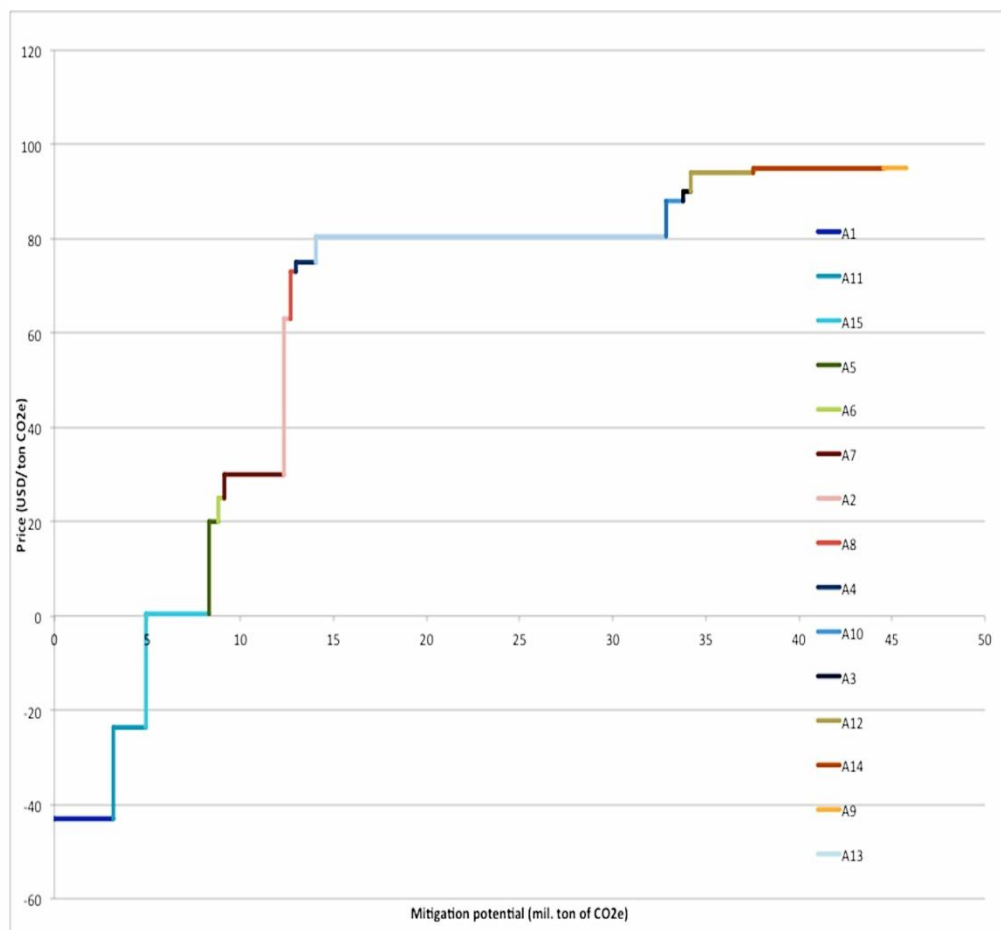
# VGGS PROGRESS

- 6 ministries MOF, SBV, MONRE, MARD, MOT, MOC developed GGAP while others are on the right track;
- 10 provinces, cities approved GGAP while 20 others are about to be finalized;
- Business community actively engages in GGAP under the coordination of VCCI with diversified approaches;
- Projects under GGAP have been implemented in provinces and ministries.

# NDC & MACC OPTIONS IN AGRICULTURAL SECTOR

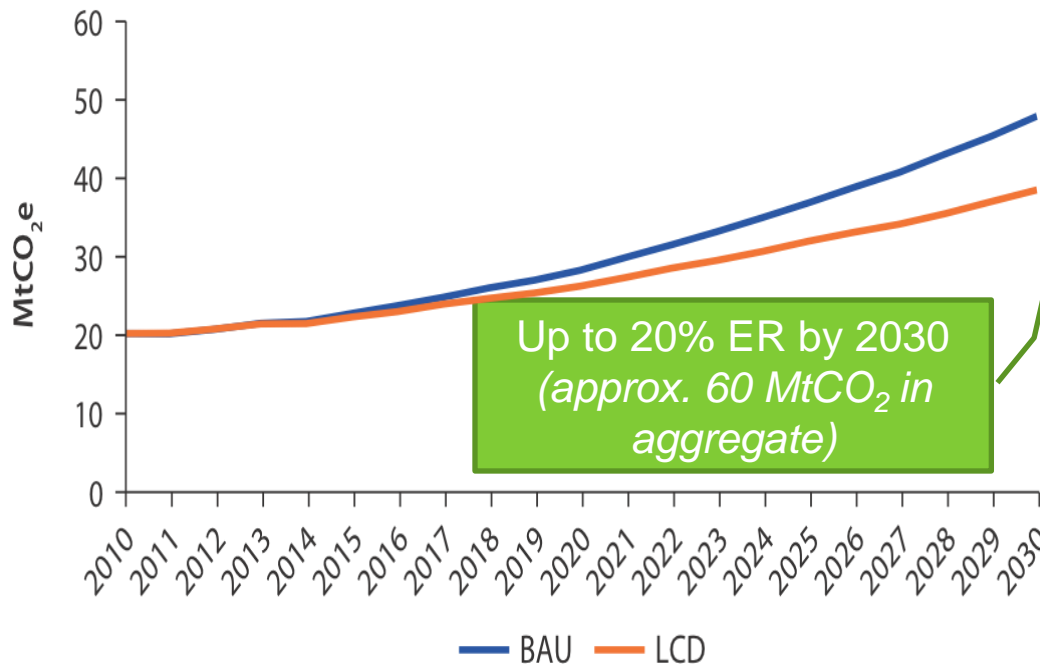
Table 1. Costs and mitigation potential of mitigation options in the agricultural sector

Option	Potential for emission mitigation by 2030 (Million metric ton of CO <sub>2</sub> equivalent)	Cost for emission mitigation* (\$/t.CO <sub>2</sub> )
A1. Increased use of biogas	-3.17	-43.00
A2. Reusing of agricultural residues	-0.36	63.02
A3. Alternate wetting and drying, and improved rice cultivation	-0.94	88.00
A4. Introduction of biochar	-1.07	75.00
A5. Integrated Crop Management (ICM) for rice	-0.50	20.00
A6. Integrated Crop management (ICM) for upland annual crops	-0.32	25.00
A7. Substitute of Urea fertilizer by Sulfate amon-(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	-3.2	30.00
A8. Reusing of agricultural residues	-0.29	73.02
A9. Alternate wetting and drying, and improved rice cultivation	-7.02	94.90
A10. Introduction of biochar	-18.80	80.45
A11. Improving diets for cattle	-1.75	-23.63
A12. Improve quality and services of variety, food and input material for aquaculture	-0.41*	90.00
A13. Revise technologies for aquaculture and waste treatment of aquaculture	-1.21*	95.00
A14. Revise technologies of food processing and waste treatment for crop, forestry, livestock and aquaculture	-3.36**	94.00
A15. Optimal irrigation for coffee	-3.39	0.46

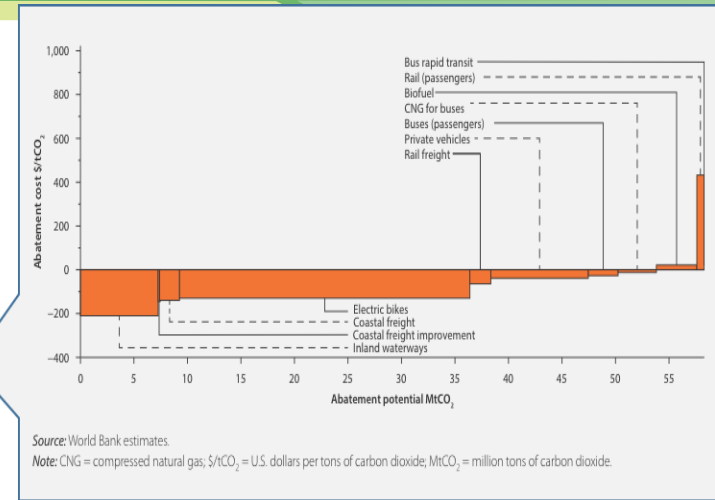


- Reduce 6.63 mil. tonnes of CO<sub>2</sub> by 6 options
- Continue to reduce 39.422 mil. tonnes of CO<sub>2</sub> by 9 extended options with intl support

# LOW CARBON DEVELOPMENT IN TRANSPORT

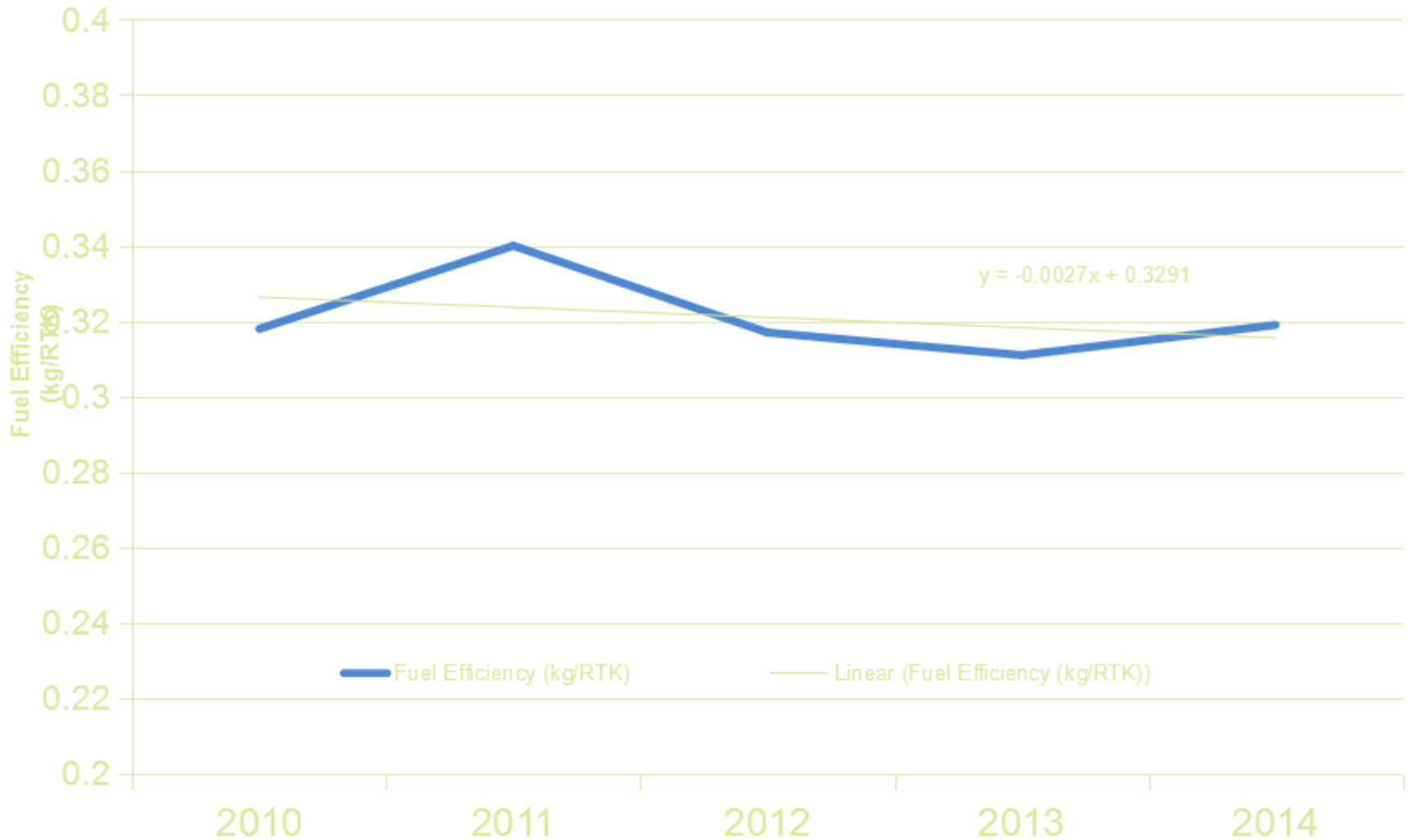


BAU = Business-as-Usual, LCD – Low Carbon Development  
 Source: WB (2016). *Exploring a Low-Carbon Development Path for Vietnam*.



- 1 Improve inland waterways: larger vessels + pushed barges
- 2 Coastal freight: larger ships or vessels
- 3 Freight modal shift from road to coastal
- 4 Motorcycles: shifting to electric
- 5 Freight modal shift from road to rail
- 6 Private vehicles move to EURO VI standard by 2030
- 7 Shifting from 2-wheelers to public transport & cars to buses
- 8 Switch bus fuel to CNG
- 9 Increase the use of biofuel
- 10 Passenger modal shift from road to rail
- 11 Add BRT in Hanoi (1 line) and HCMC (2 lines)

# ACTION PLAN FOR AVIATION INDUSTRY



# CONCLUSIONS AND RECOMMENDATIONS

- Green Growth Strategy is one among the pathway to implement NDC of Vietnam with similar target of CO<sub>2</sub> emission reduction and action plan;
- Though Vietnam Green Growth Strategy sets a target and action plan with different timeframe (2020 compared to 2030), it shows Vietnam's strong commitment to implementing NDC of Vietnam;
- How next ?



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**THANK YOU FOR YOUR ATTENTION!**

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