## Formulate a comprehensive climate action plans toward happiness, carbon neutral, and sustainable future for Da Nang city, Viet Nam

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#### Background

Da Nang City has been the fastest growing city in Vietnam in recent years with a projected increase in urban area and populations in line with rapid economic growth. Viet Nam has recently announced the carbon neutrality by 2050 at COP26. Therefore, it is increasingly important to formulate Local Climate Change Action Plans (LCCAP) with concrete reduction targets in the major sectors in Da Nang city in line with the recently approved Da Nang city 10 Year Environmental Plan and national NDC (2020). As Da Nang city is currently in the significant urban and economic transitions phase, long-term visions to be sustainable and carbon neutral should be integrated into the real development plan. This practice requires novel methodologies to conduct the evidence-based research as well as stakeholder engagement.





**5** GENDER EQUALITY

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**17** PARTNERSHIPS FOR THE GOALS

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16 PEACE, JUSTICE AND STRONG

15 LIFE ON LAND

### **Carbon Neutral Da Nang city** by 2050

(Tentative front page)

Travel Guide

Da Nang city

Climate action plan

Sustainable Future Pathway

## Green growth

• Based on the master plan (by 2030 vision to 2050) Increase local resilience & well-beings beyond growth/

# Viet Nam NDC by 2030 (2020)

- Total 9% (~27%) reduction by 2030\*
- Energy efficiency reform
- Green industry & Green agriculture
- Lifestyle transitions

**10** REDUCED INEQUALITIES

**8** DECENT WORK AND ECONOMIC GROWTH

Quality of living standards

• Preparations for the climate risks

4 QUALITY EDUCATION

\* Viet Nam NDC (2020) states that Viet Nam will reduce the total GHG emissions by 9% compared to the BAU scenario which is base year in 2014. Energy sector is expected to reduce 51.5 MtCO<sup>2</sup>e (5.5 % compared to the BAU). The ctotal ontribution 9 % can be increased by up to 27% compared to the BAU with international supports.

SUSTAINABLE CITIES

AND COMMUNITIES



### Achievement of the SDG targets (by 2030)

### Key strategies in building sector

- Reduce total energy use in existing buildings and new energy-optimized buildings
- Reduce climate change impact on buildings by adaptive envelope design measures
- Establish city energy regulations and benchmarks
- Develop a workforce that is able to design, build, and operate buildings efficiently
- Smart & sustainable regional planning (linked with sustainable neighbourhoods strategies.)

#### Key strategies in transport sector

- Promote public transit use & zero emission freight transport.
- Increase electric cars and electric motorbikes.
- Design public plaza and recreation facilities as well as pedestrian pathways and cycling infrastructures.
- Nature based solutions for mitigating the heat for public roads and open spaces (Green corridor).
- Smart & sustainable regional planning (linked with land use policies to support sustainable mobility systems).

### Key strategies in agriculture & food

- Conduct a study on rice production system, to potentially switch to a more water-efficient and less GHG-emitting system.
- Encourage the substitution of synthetic fertilizers by organic fertilizers.
- Consuming less meat.
- Encouraging an increase in local food production to ensure the food security (Increase community farms), which is linked with sustainable land use policies.



#### Current climate risks and concerns

- Da Nang is under the high risks of sea level rise and flooding. Adaptation strategies have been prioritized for the City's climate actions. - Sea level has increased over the years, the average increase is 3.69mm / year from satellite data. Da Nang city sea level rise (Source: Da Nang city, 2021)



Da Nang city climate risk scores (Source: Da Nang city, 2021) **Risk score** 



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