



Low-Carbon Model Town in Da nang city

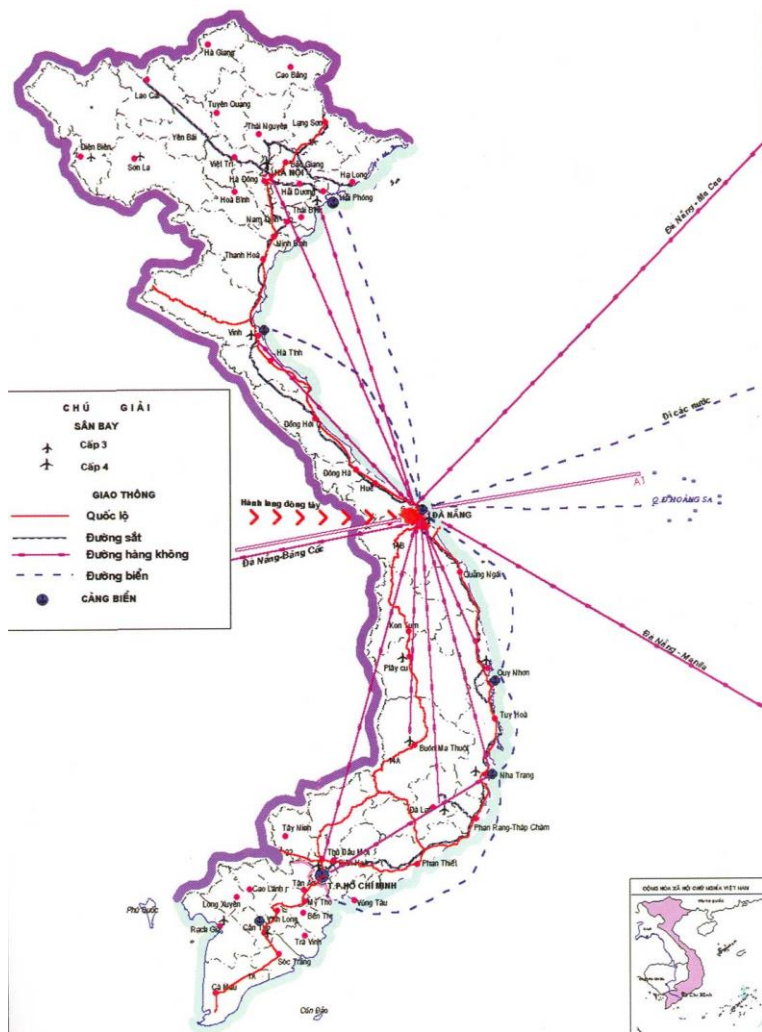
Mr Minh Huy TRAN,
Officer of Energy
Management Division
Danang Department of
Industry and Trade

APEC Low-Carbon Model Town Project Wrap-up Symposium

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Introduction of Da nang city

- ❑ Area: 1,283 km²
- ❑ Population: 1.2 million
- ❑ The fourth largest seaport of VN
- ❑ Da Nang is in a tropical monsoon zone with high temperatures and a stable climate
- ❑ Da Nang's economy has historically been dominated by the industry and construction sectors, but this is slowly changing.
- ❑ Currently, the services sector became the largest economic sector in the city as measured by gross output. The tourism sector is also expected to grow, as the city strives to become a major national tourist sector that capitalizes on the city's beaches and proximity



Low-Carbon Model Development in Da nang city

- Efficient energy: Public lighting

Table 8.1 Da Nang Sector Prioritization Results

Priority ranking	Sector	2010 energy spending (US\$)	Relative energy intensity (%)	Level of city authority control ^P	Savings potential (US\$) ^P
City authority sector ranking					
1	Street lighting	1,200,000	78.2	1.00	939,141
2	City buildings	2,069,047	15.1	1.00	312,426
3	Solid waste	452,380	48.8	0.97	214,277
4	Potable water	564,349	26.4	0.96	143,163
5	Wastewater	95,000	11.1	0.96	10,133
Citywide sector ranking					
1	Power	54,285,714	33.8	0.38	6,973,725
2	Private vehicles	44,665,149	10.0	0.14	669,977
3	Public transportation	361,773	65.8	0.90	214,416

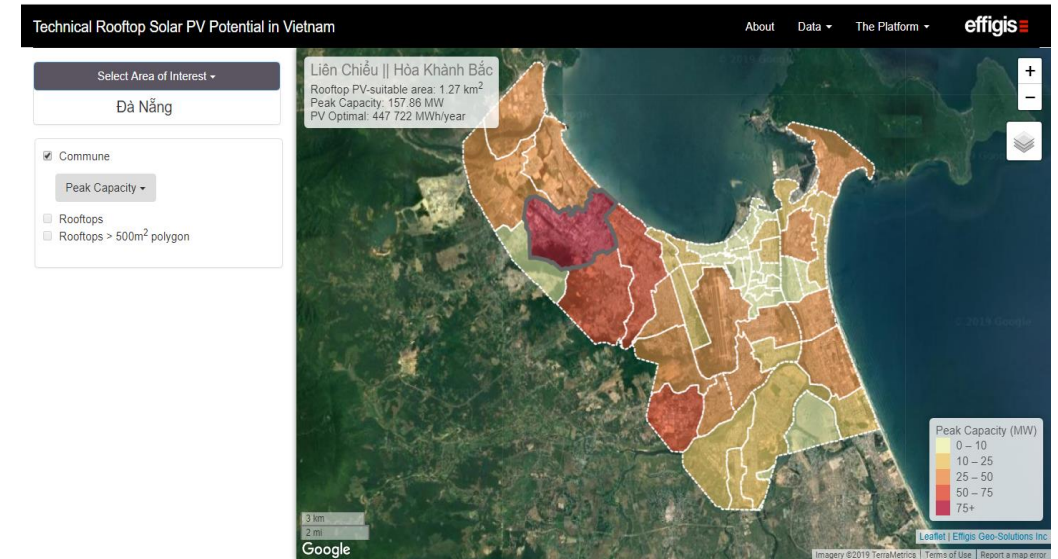
2016 - Feasibility study report on the application of LED lights in public lighting

Currently, the People's Committee implement the LED replacement project in phase 2 with a replacement schedule of about 10% per year to 2030

2018 - Pilot project to replace Sodium public lighting with LED lights at 19 main streets with nearly 3,000 light points (5% of total lights). The investment in the form of ESCO, the investor implements the project, the city returns the investment capital within 5 years

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- Renewable energy: Rooftop solar power



2017 - Technical potential map of rooftop solar power

QĐ 02/2019/QĐ-TTg: Rooftop solar power projects are implemented with the electricity purchase and sale mechanism according to the separate delivery and receiving directions of the two-way meter, FIT 9.35 Uscents/kWh. Total installed capacity 3.5 MWp

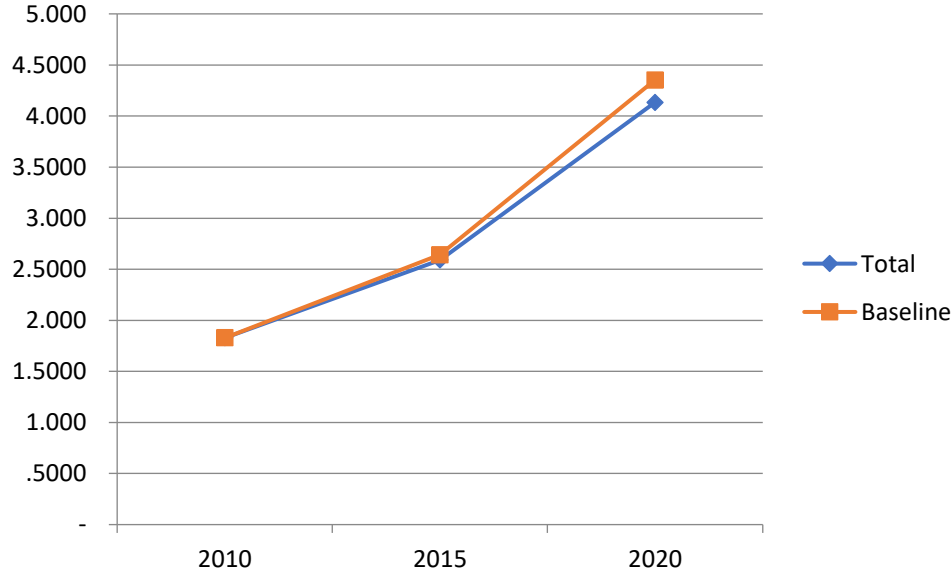
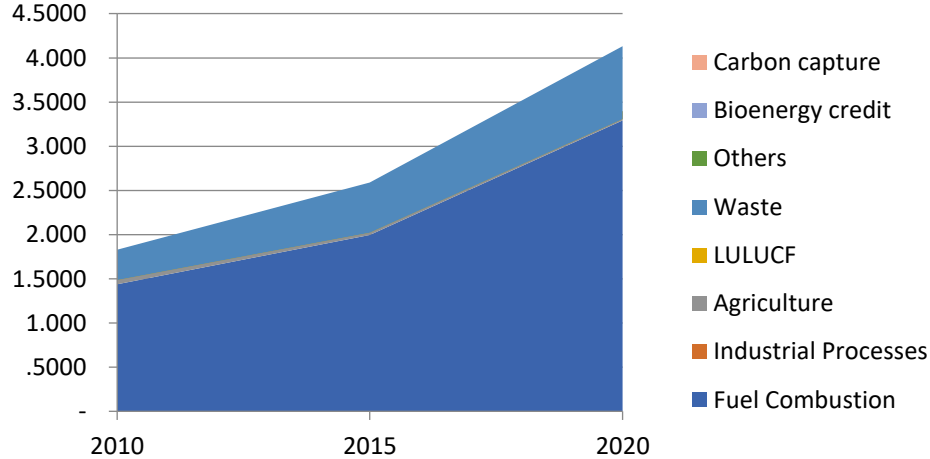
2021 - The project of developing rooftop solar power to 2025 with a vision to 2035 sets the following goals: Total installed capacity of rooftop solar power 169.54 MW (about 17.76% of technical potential) to by 2025, , reaching 293.92 MW (about 30.78% of the technical potential) by 2030 and 402.24 MW (about 42.13% of the technical potential) by 2035

QĐ 11/2017/QĐ-TTg: Rooftop Solar projects are implemented net-metering using a two-way metering system.

QĐ 13/2020/QĐ-TTg: Adjust the FIT price of rooftop solar power to 8.38 Uscents/kWh. Total installed capacity 75 MWp

CO₂ reduction results and roadmap

	Mt CO₂e	2010	2015	2020
1	Fuel Combustion	1,44	2,00	3,29
2	Industrial Processes	-	-	-
4	Agriculture	0,12	0,11	0,11
5	LULUCF	(0,07)	(0,08)	(0,09)
6	Waste	0,34	0,57	0,83
7	Others	-	-	-
X2	Bioenergy credit	-	-	-
X3	Carbon capture	-	-	-
	Total	1,83	2,59	4,13
	Baseline	1,83	2,64	4,35
	Percentage reduction	-	2%	5%

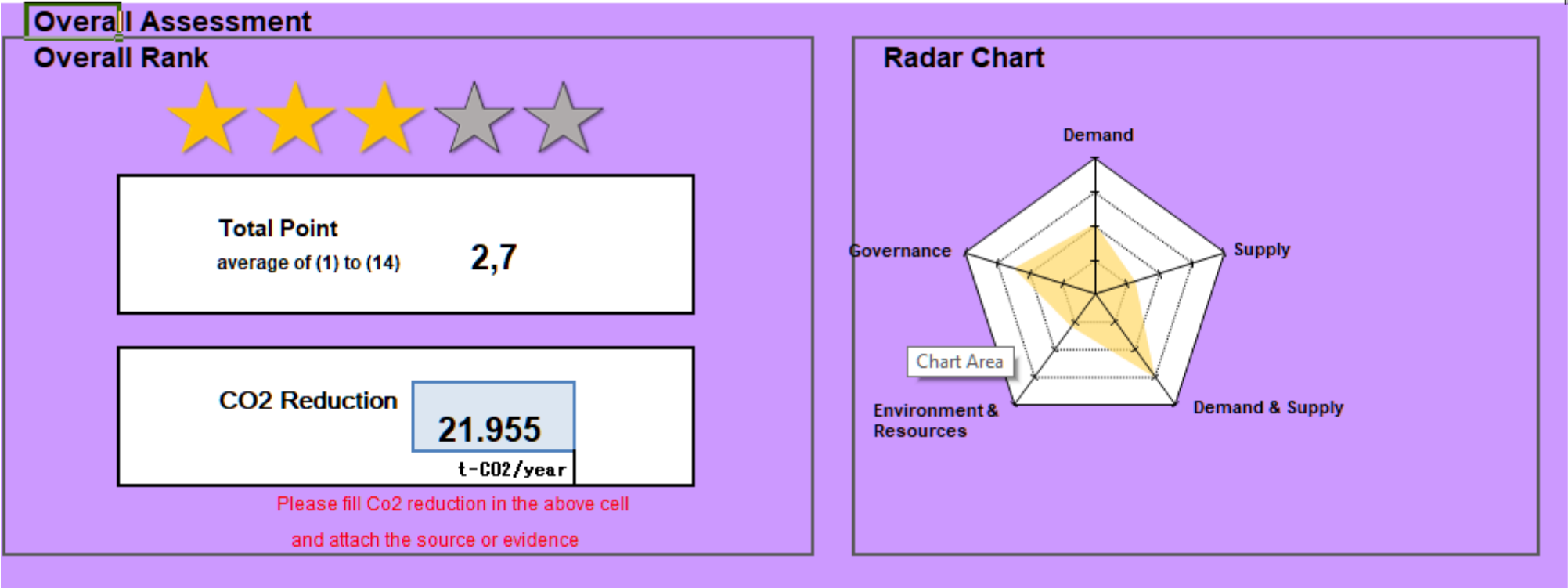


Notable achievements

- The air pollution index (API) in urban areas was maintained at less than 100;
- Noise levels in residential areas under 60 db(A), on main roads under 75 db(A);
- Average urban green area at 6 – 8 m²/ person;
- Percentage of households with access to clean water in city center and rural area were 97.83% and 76.81% respectively;
- 100% of industrial wastewater met discharge requirements;
- The proportion of domestic solid waste collected in urban areas was higher than 95%, in rural areas higher than 70%;
- In 2020, over 83% of domestic wastewater was collected, over 50% was properly treated in accordance with standards.

Self-assessment results by LCT-I system

- Please explain in more detail about the current status and challenges to low-carbon town development.



Future plan

- According to the construction project of Da Nang - Environmental city approved in Decision No. 1099/QD-UBND dated April 2, 2021, the GHG emission reduction target is as follows: The rate of GHG emission reduction from solutions to develop new and renewable energy: by 2025, reduce by 1-2%, by 2030 by 5-7%; By 2025, 100% of public transport by bus will meet Euro 4 emission standards; by 2030, 25% of public buses will run on electric motors out of the total number of buses in operation in the city; The rate of daily-life solid waste collected and treated up to meet standards will reach > 95% by 2025, and by 2030.
- Implement the national program on economical and efficient use of energy in the 2021-2030 period, in which the minimum energy saving level is 5% compared to the forecasted energy consumption. the whole city in the period of 2020-2025 and achieve a savings of at least 7% in the period of 2020-2030.
- The project of developing rooftop solar power to 2025 with a vision to 2035 sets the following goals: Total installed capacity of rooftop solar power 169.54 MW (about 17.76% of technical potential) to by 2025, , reaching 293.92 MW (about 30.78% of the technical potential) by 2030 and 402.24 MW (about 42.13% of the technical potential) by 2035.
- The Scheme on Proposing locations for construction of electric car charging stations, mechanisms to encourage the development of electric cars, electric car charging stations, sets out the following objectives: By 2025: To build 150 level 1 and 2 charging stations. and 15 level 3 charging stations; By 2030: Build 250 level 1, 2 and 50 level 3 charging stations.

Low-Carbon Model Town in images



- Mr Minh Huy TRAN
- Email: huytm@danang.gov.vn
- Officer of Energy Management Division - Department of Industry and Trade
- Da Nang city, Vietnam

Thank you for your attention !