





# Content

UK | MK



Reform assistance  
to North Macedonia

Поддршка на реформите  
во Северна Македонија



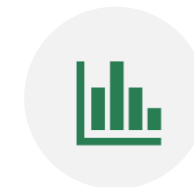
**Introduction**



**Methodology**



**Analyses of historical data  
and COVID-19 impact**



**Input data**

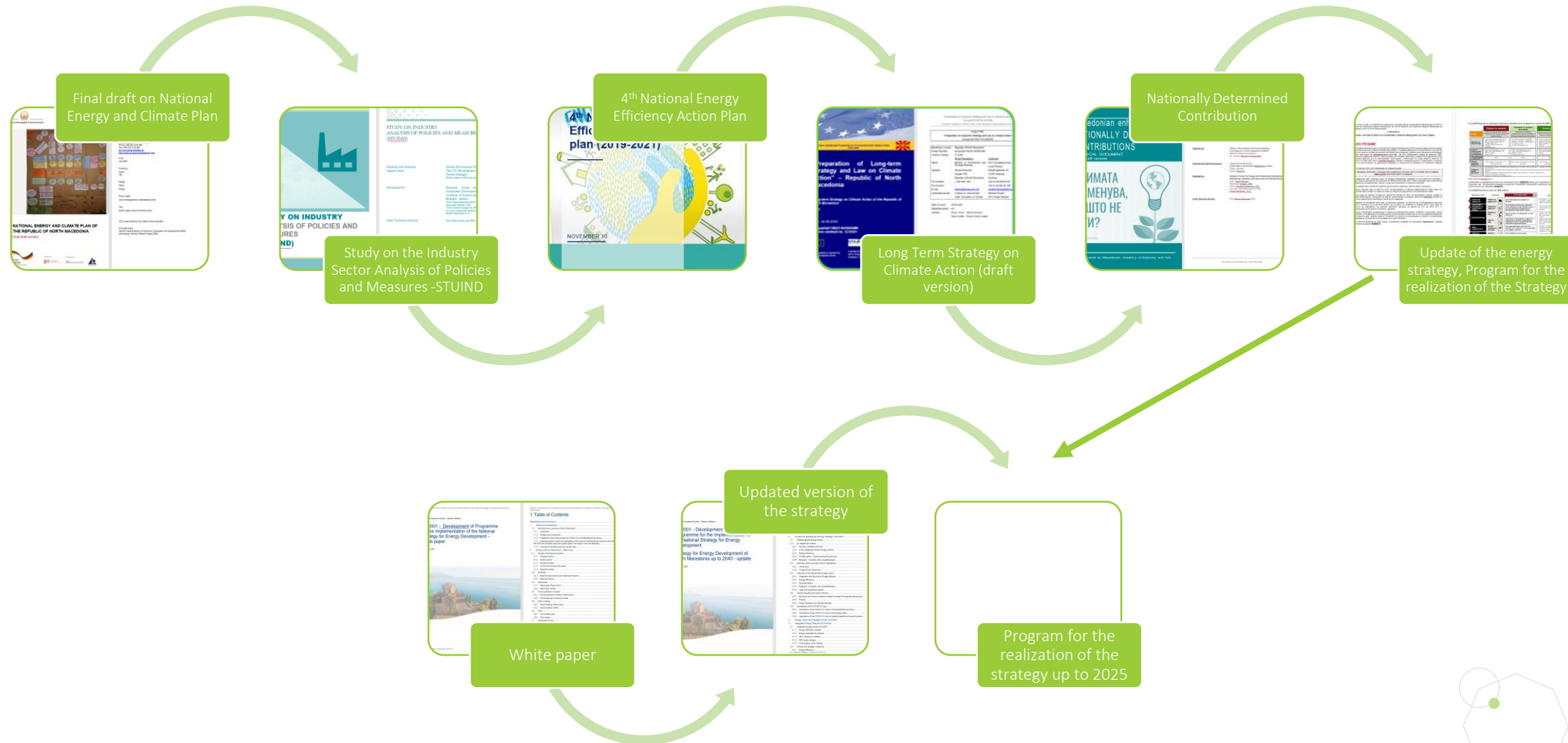


**Scenarios and results**

# Update from the previous presentation



Reform assistance  
to North Macedonia  
Поддршка на реформите  
во Северна Македонија





# Analysis of historical data and COVID-19 impact

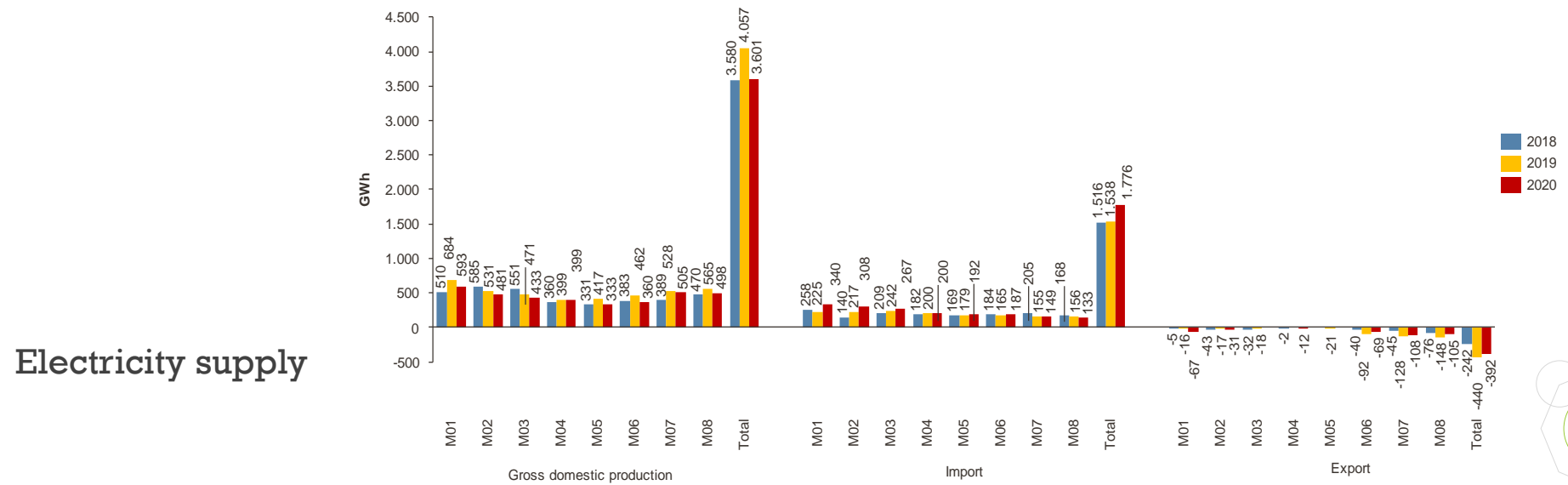
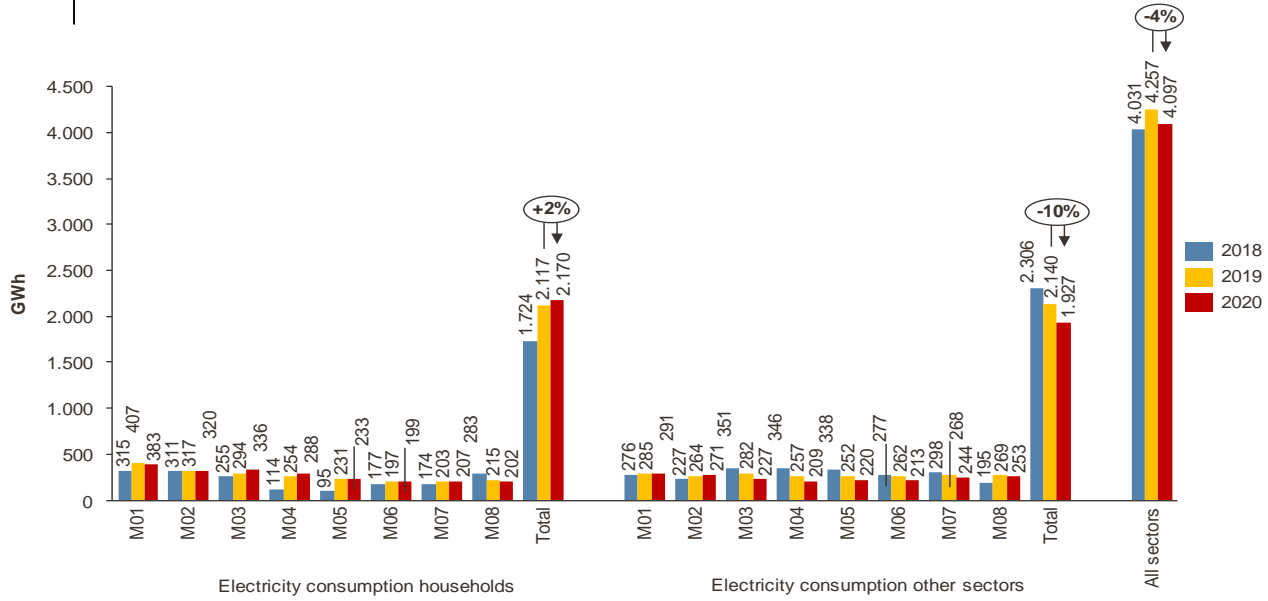
- Energy consumption by sectors
- Electricity
- Natural gas
- Oil products
- Coal
- RES
- Energy sector vs Covid-19

# Energy sector vs Covid-19

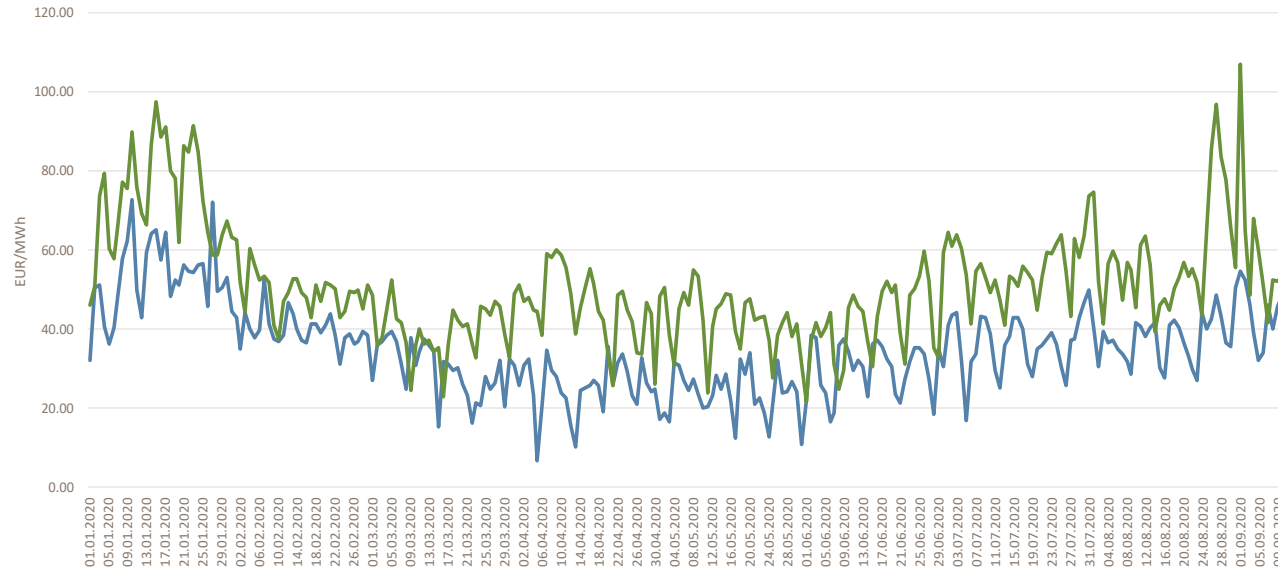


Reform assistance to North Macedonia

Поддршка на реформите во Северна Македонија



# Energy sector vs Covid-19



Wholesale electricity price HUPX,  
2019-2020

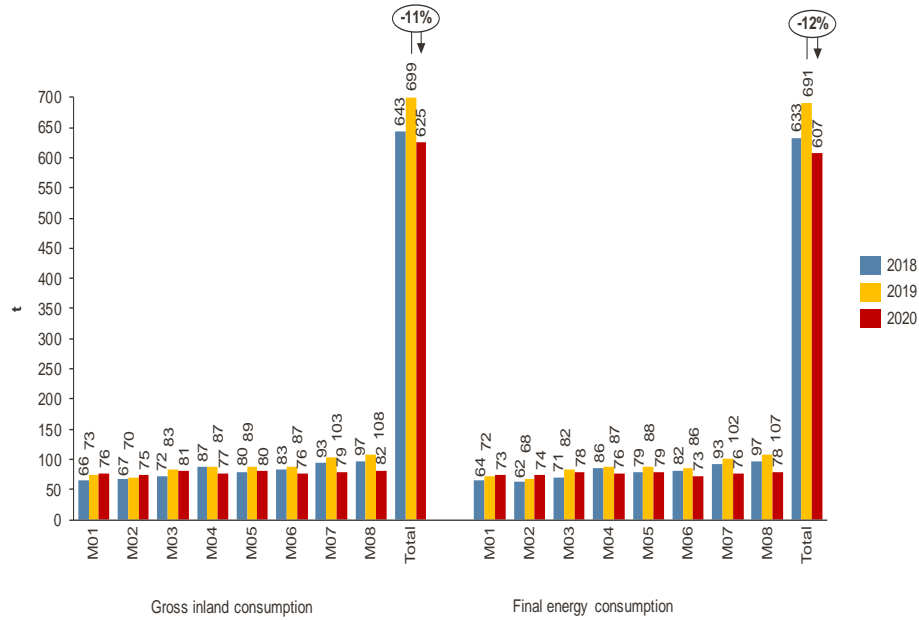
# Energy sector vs Covid-19



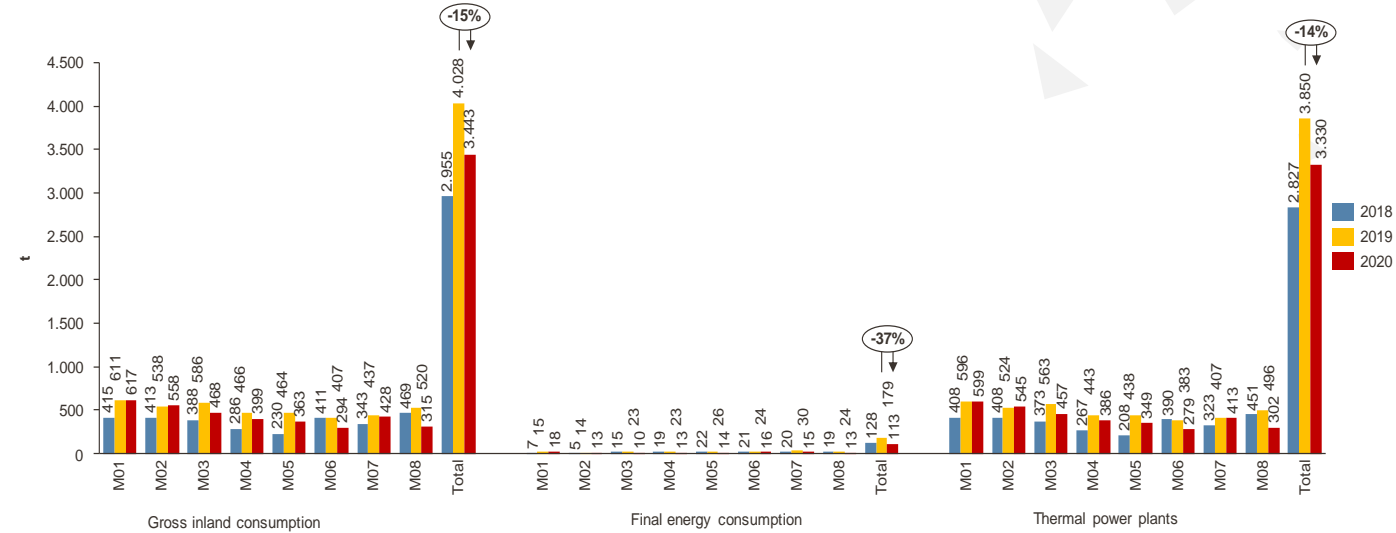
Reform assistance to North Macedonia

Поддршка на реформите во Северна Македонија

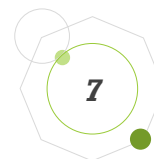
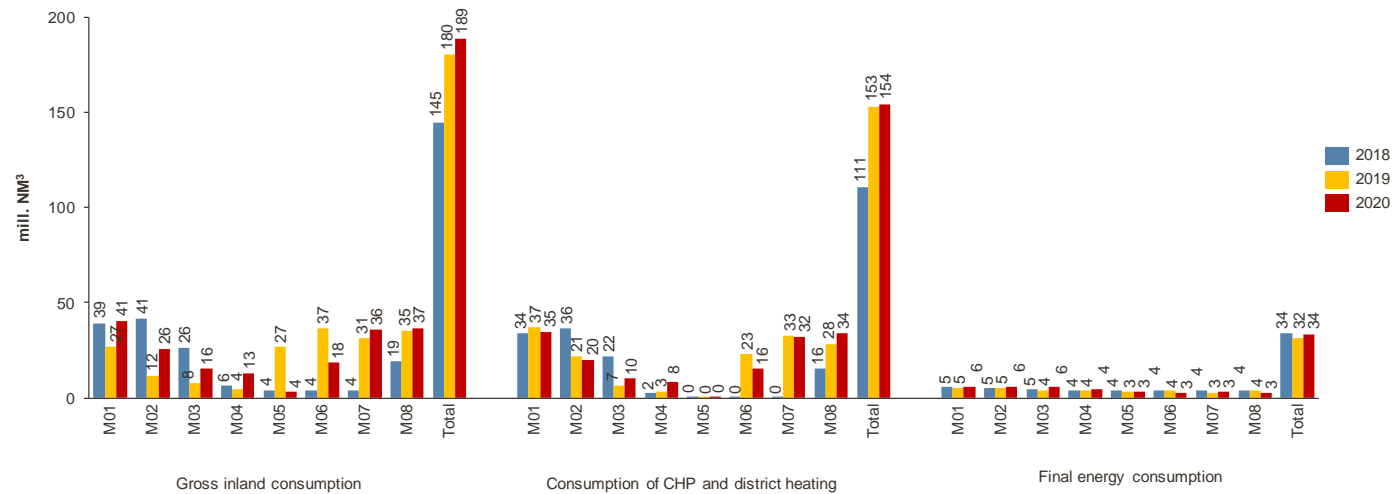
- Oil consumption, Jan-Aug 2018-2020



- Lignite consumption, Jan-Aug 2018-2020



- Natural gas consumption, Jan-Aug 2018-2020





# Input data

- GDP
- Population
- Input data per sectors
- Energy supply
- Global energy trends,
- International fossil fuel prices
- EU ETS carbon price



# Parameters used for GDP projections

---

**Investments**, as one of the key factors of the economic growth, during the second quarter of 2020, have recorded a high decline

**International trade** is the main channel through which the negative effects of the changes in the economic activity (business cycles) are transmitted between the individual countries within the global economy

Negative results from the crisis, in the domain of foreign trade, will be effected through several basic channels:

- **The first channel** is the trade with industrial products related to the global value chain. Exports through this channel account for 50 percent of the total exports of goods to the Macedonian economy, participating with 25 percent in GDP
- **The second channel** refers to the export of raw materials, semi-finished products and final industrial products of Macedonian companies that are not directly related to GVCs
- **The third channel** refers to the inflow of foreign direct investments in the economy
- **The fourth channel** refers to the inflow of remittances from our citizens working abroad - some of them have lost their jobs, some work part-time, and some returned to the country

# Parameters used for GDP projections

Table 1: Basic economic indicators for the Republic of North Macedonia in the year before the COVID-19 crises and in the first and second quarter of 2020

	2016	2017	2018	2019	2020				
					Jan	Feb	Mar	Q1	Q2
GDP (real growth rates, %)	2.8	1.1	2.9	3.2				0,2	-12,7
Industrial production cumulative average	3.4	0.2	5.4	3.7	0.3	3.5	-13.4	-3.7	-25
Inflation CPI	-0.2	2.4	0.9	0.4	0.6	0.7	0.5	0.6	0.5
Unemployment rate (in %)	23.7	22.4	20.7	17.3				16.2	16.7
Budget balance (Central budget and Funds budget balance as % of GDP)	-2.7	-2.7	-1.8	-2.0	-0.2	-0.5	-0.5		
Total credits (annual growth rate)	-0.1	5.4	7.3	6.0	6.8	6.9	5.8	5.8	6.6
Total deposits (annual growth rate)	6.1	5.0	12.1	9.0	8.8	7.8	7.9	7.9	8.4
Current account balance (as % of GDP)	-2.1	-1.0	-0.14	-2.8	0.0	-0.7	-0.8	-1.4	
Trade balance (as % of GDP)	-18	-18.1	-16.9	-17.8	-1.2	-1.8	-1.6	-4.67	
Direct investments (in million of EUR)	316.9	180	603.7	290.6	24.9	-42.2	-108.4	-132.69	
Gross external debt (as % of GDP)	74.7	73.4	3.3	72.2				76.3	
Gross foreign reserves (in million of EUR)	2613.4	2336.3	2867.1	3262.6	3100.6	3084.5	3017.3	3017.3	3639.7

Source: *National Bank of the Republic of North Macedonia: Latest macroeconomic indicators, Current Situation Report, 20 June 2020, 20 August 2020.*

# Parameters used for GDP projections

The strongest short-term decline in the economic activity since the past 150 years all over the world.

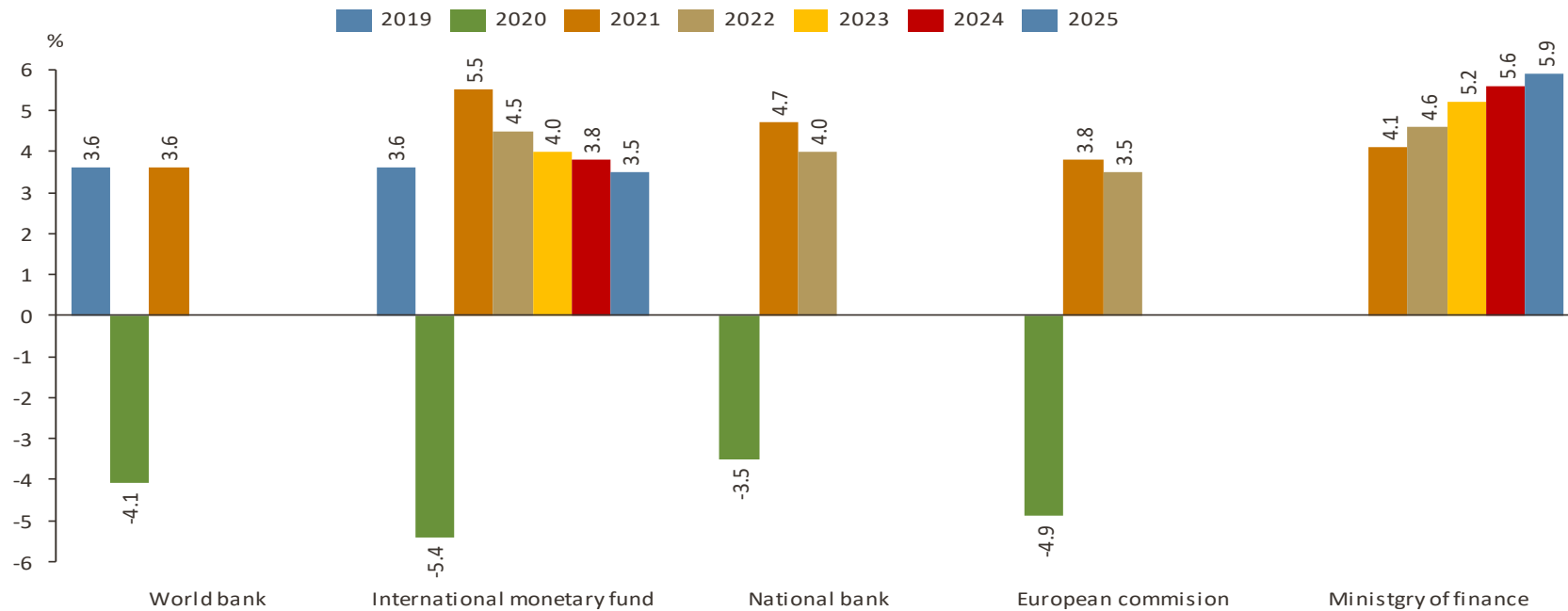
- The short-term decline of economic activity among the European Monetary Union member states (**the first two quarters of 2020**) is significant and is estimated at -12,1 %.
- The unemployment rate for the second quarter of 2020, compared to the first quarter has increased, and according to the calculation is at 7.7 %.
- The latest GDP estimates prepared by European Commission, has predicted decline in real GDP at -7.8 % among EMU countries.

Forecast of real GDP of most important trade partners of North Macedonia



# Parameters used for GDP projections

GDP growth rate projections from different institutions



Source: World bank (<https://www.worldbank.org/en/country/northmacedonia>), IMF (<https://www.imf.org/en/Countries/MKD>), News NBRNM: <http://nbrm.mk/ns-newsarticle-soopstenie-552020.nspix>, European Commission: European Economic Forecast Autumn 2020, Institutional Paper 136/November2020, Ministry of Finance of Republic of North Macedonia – Draft Budget for 2021

# Parameters used for GDP projections

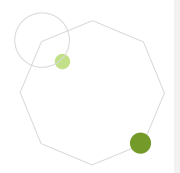
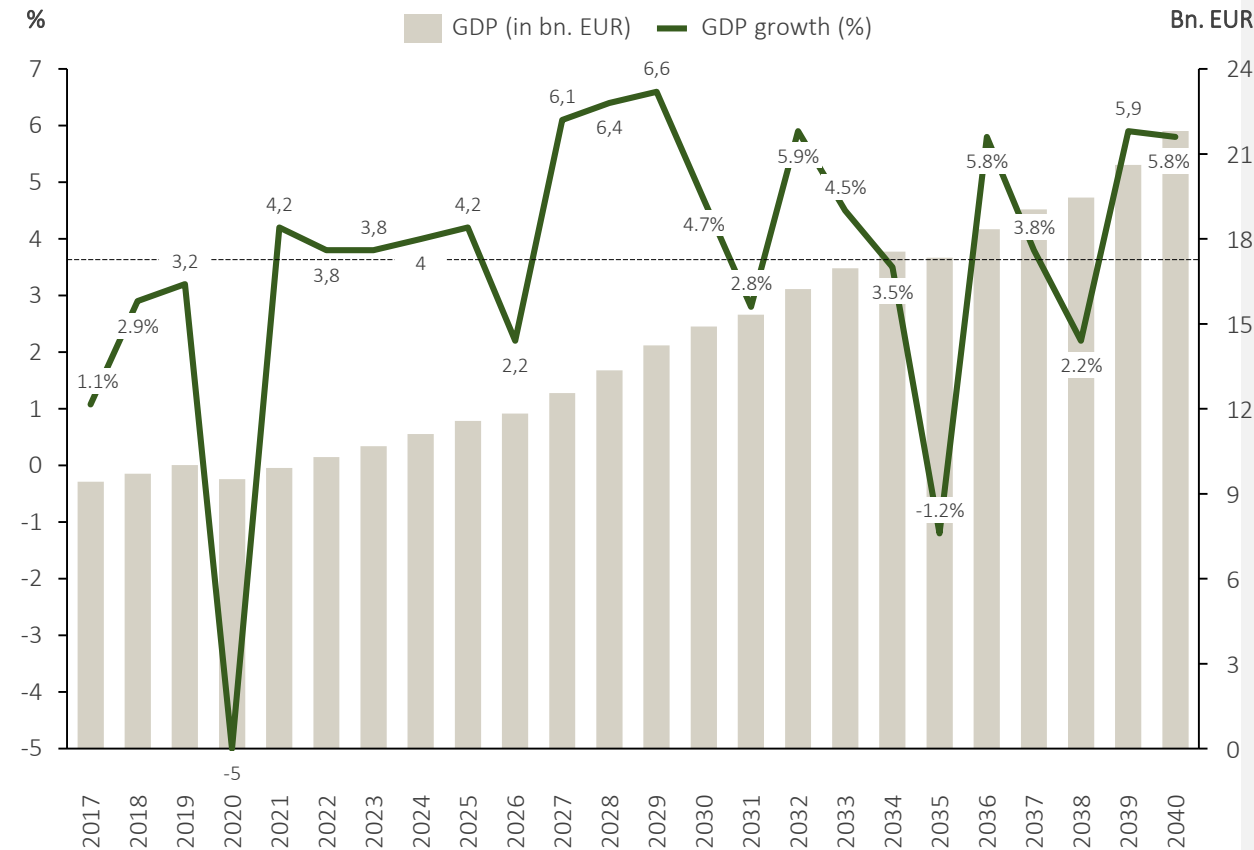
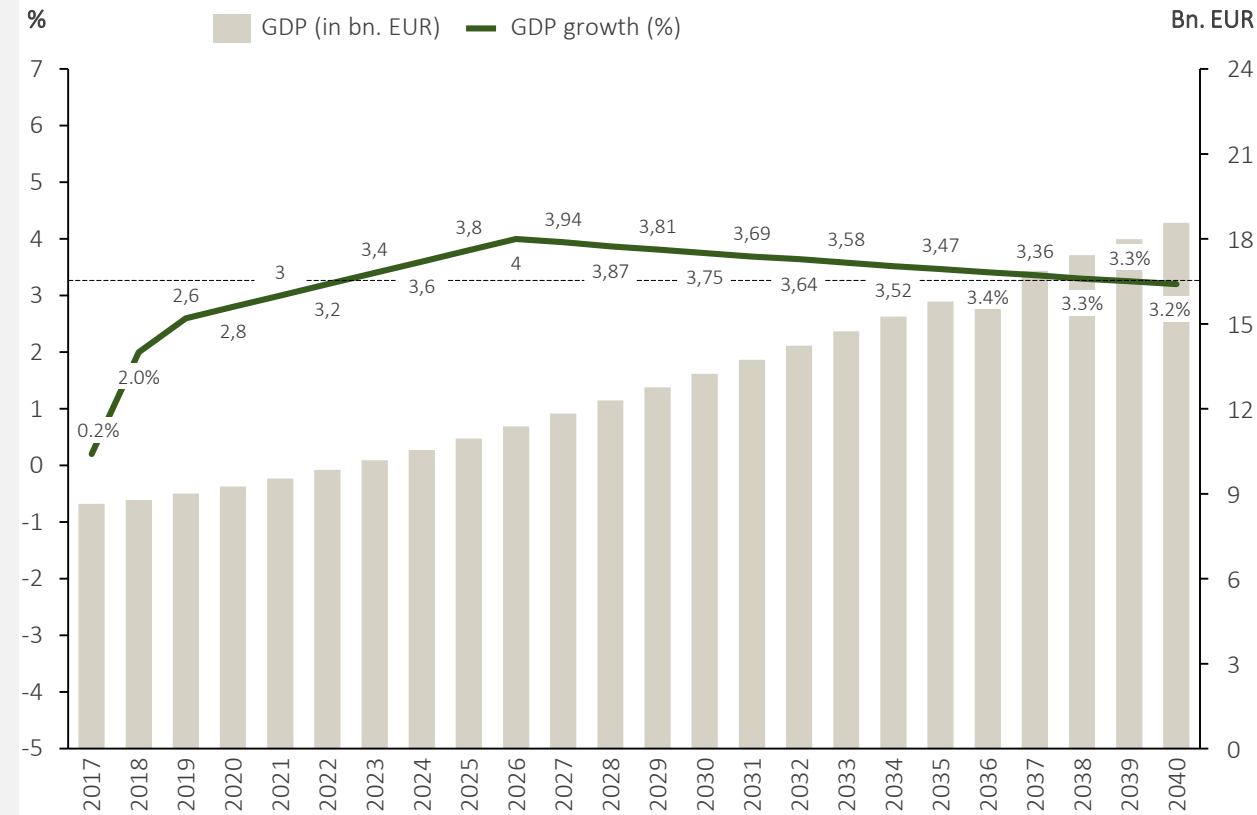
---

Besides the above mentioned elements, the projection is performed on the following assumptions:

- the pandemic intensity will significantly decrease by the end of the second quarter of 2021;
- the Government would not use extremely strict restrictions that would lead to lock down of entire economic sections and the business entities should adapt the working process to the so called “new reality”;
- in 2021, especially in the third and fourth quarters a significant recovery of the Macedonian economy will be evident, but the recovery it would not be complete, the complete recovery will happen in 2022;
- after 2022 the economy will continue to perform with growth rates around its long-term trend.



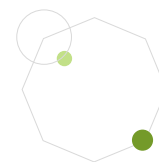
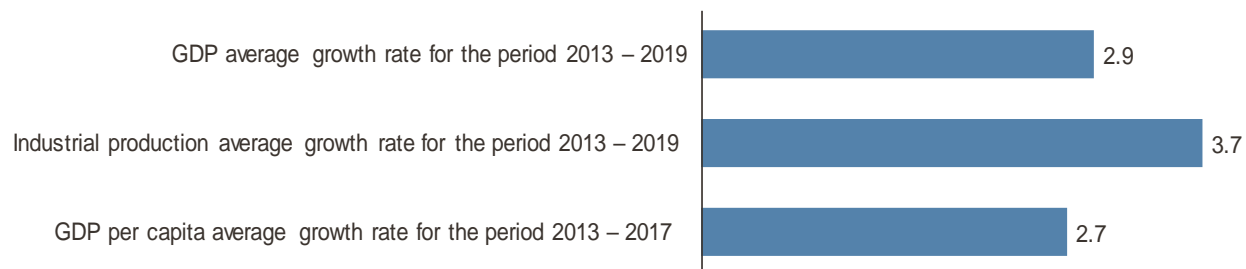
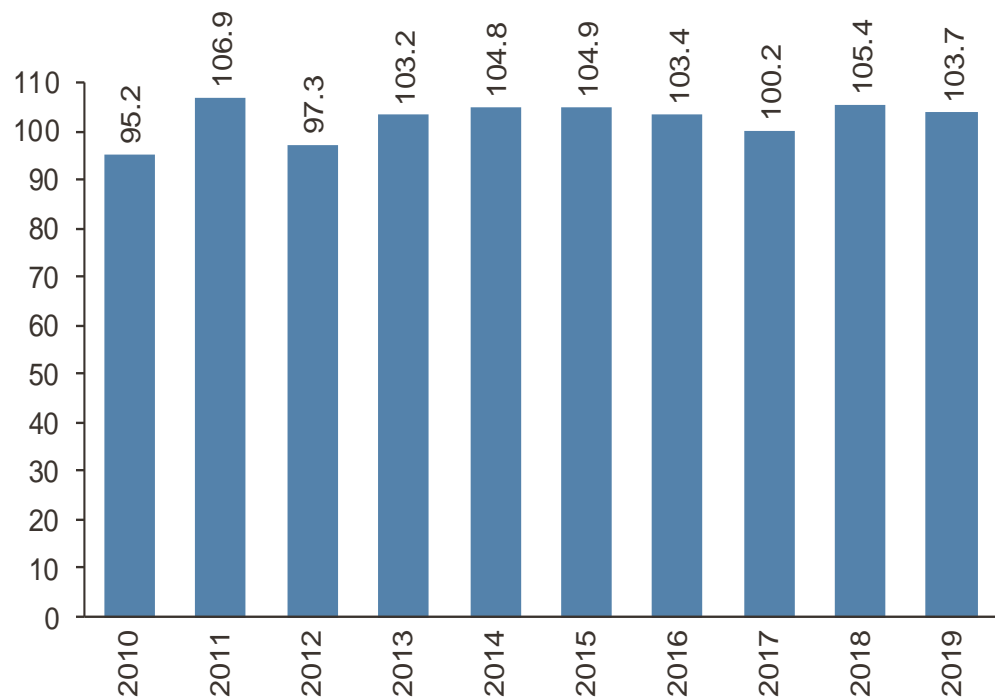
# Macedonia GDP projections



## Industrial index growth

The industrial production as a component of GDP is a typically pro-cyclical category. This means that is increasing with the growth of the total economic activity and vice versa is decreasing with the decreases of the total economic activity

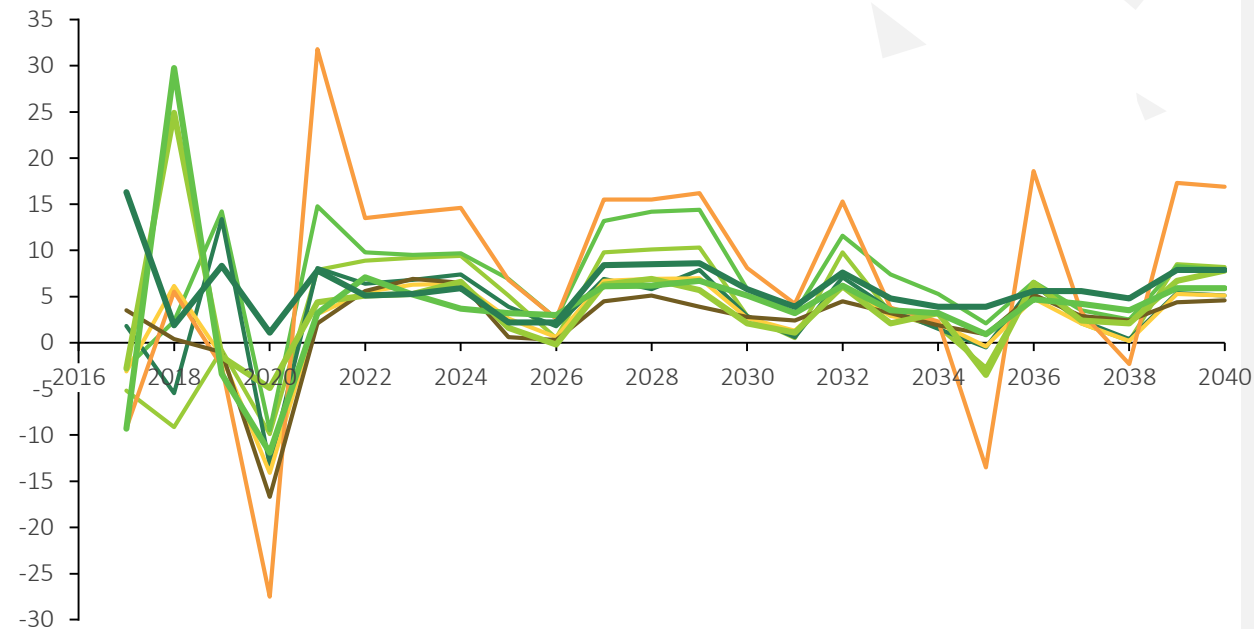
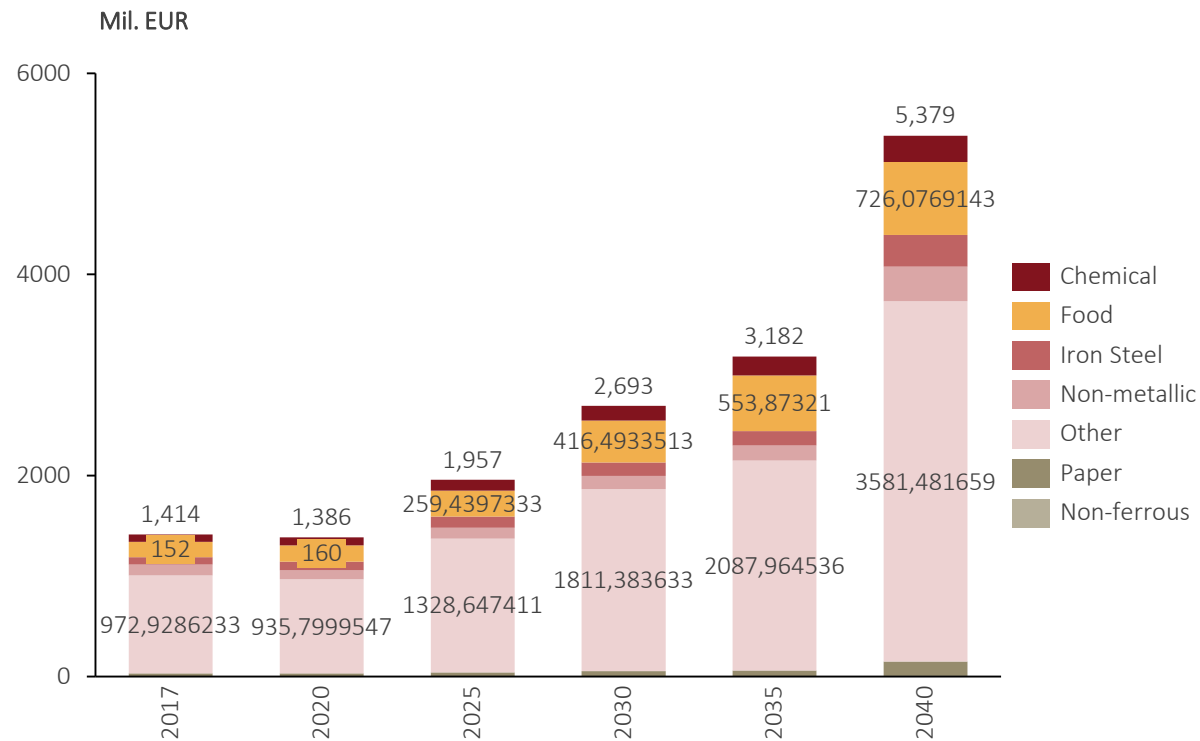
Chain indices of industrial production in North Macedonia, by years, period 2010 – 2019



# Input data – industry sector



Reform assistance  
to North Macedonia  
Поддршка на реформите  
во Северна Македонија



- Индустрија за градежен материјал, стакло и керамика
- Прехранбена индустрија, пијалаци и тутун
- Индустрија за хартија и печатење
- Текстилна индустрија и кожарство
- Инженерство и друга метална индустрија
- Експлоатација на руди
- Индустрија за железо, челик и обоена металургија
- Останати индустрии
- Хемиска индустрија





Reform assistance  
to North Macedonia

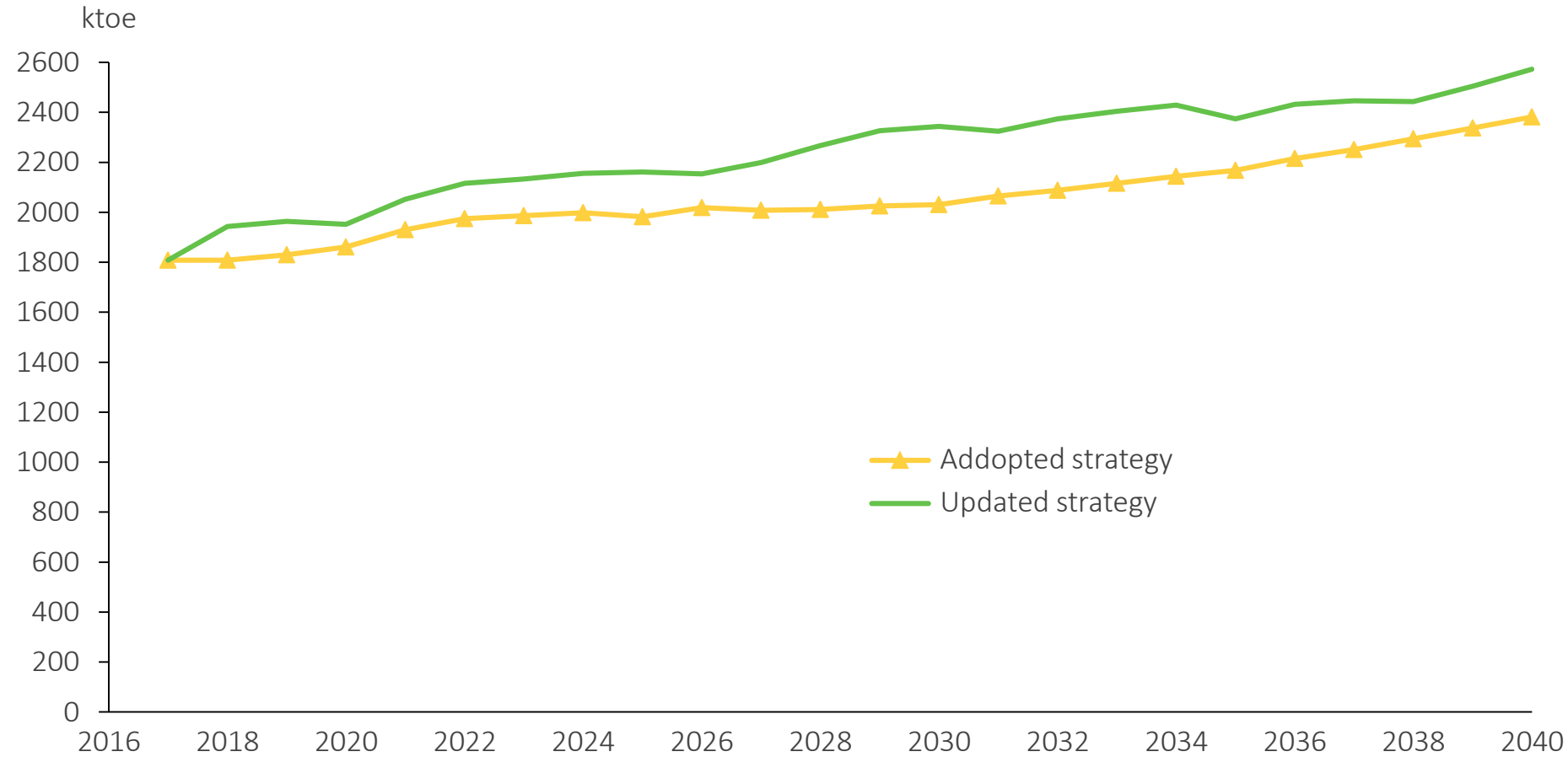
Поддршка на реформите  
во Северна Македонија



# Scenarios and results



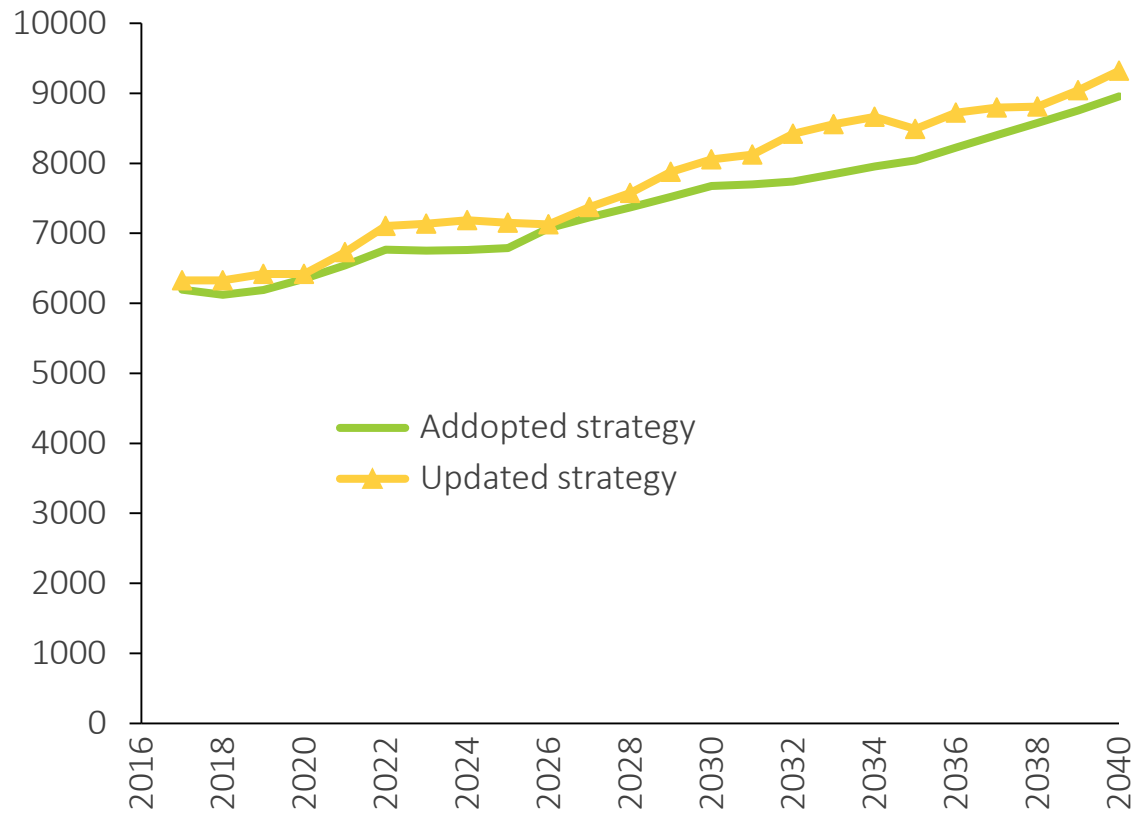
## Final energy demand per fuel



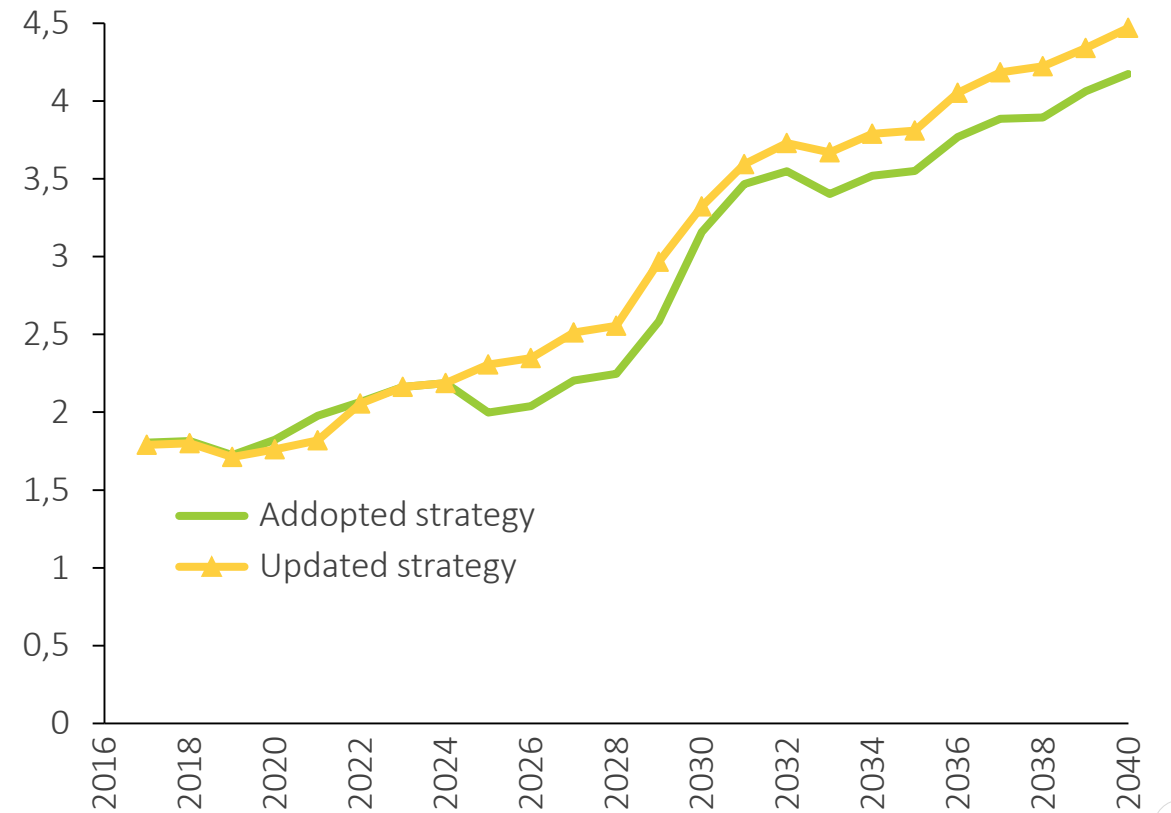


## Electricity results

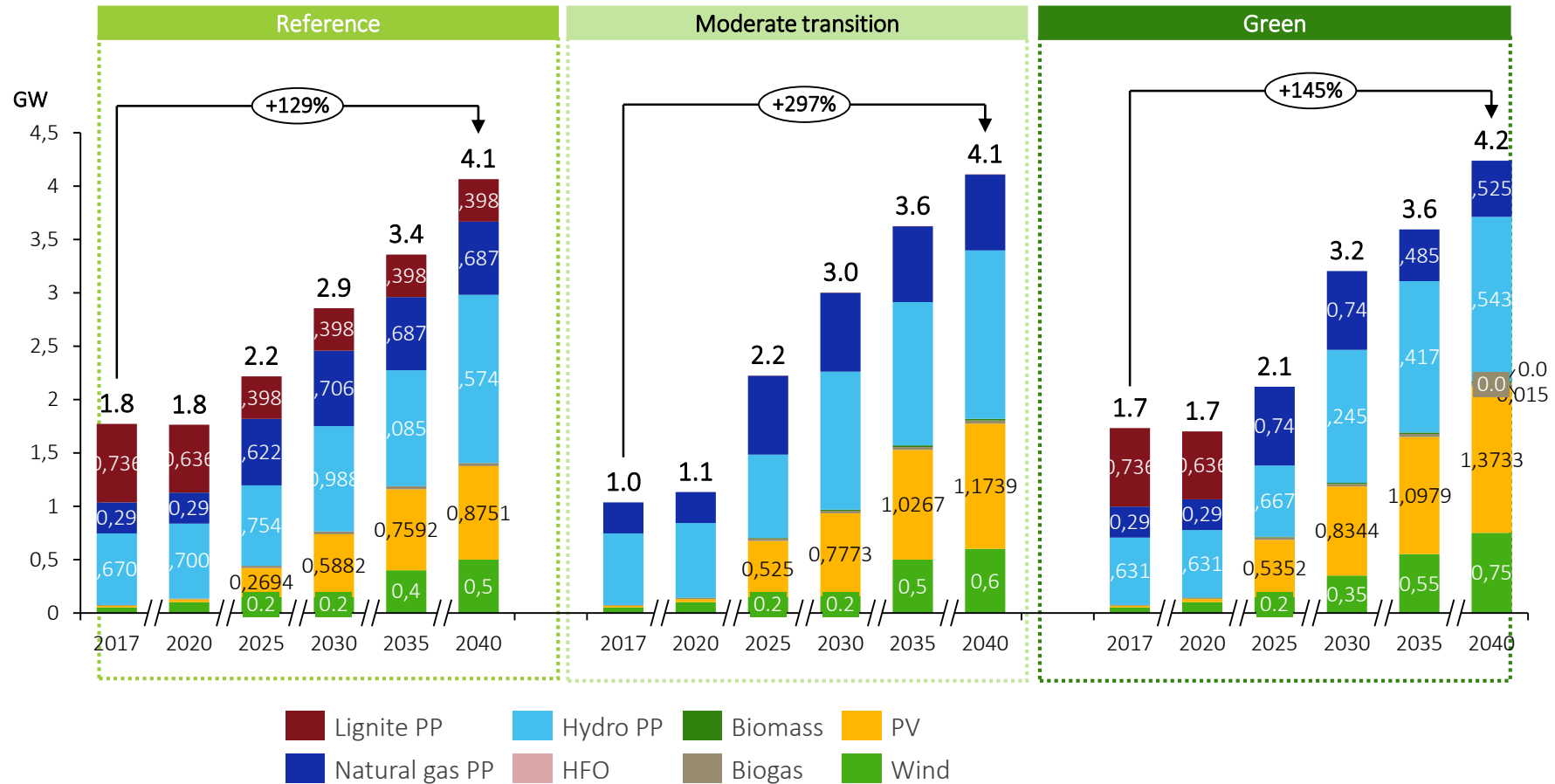
### Electricity consumption



### Installed capacity

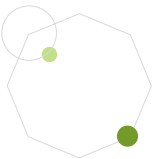


## Installed capacity by type of technology



Note: Lignite generation takes into account the raw material supply constraint of ~5 M tons / year (3.5 M tons / year since 2035). Difference may arise due to rounding

Source: Strategy& analysis, MANU modeling on net installed capacities





Thank you for your  
attention

edinec@ma...  
<http://ceon...>