

## PALM OIL INDUSTRY TRANSFORMS RIAU'S ECONOMY FROM NON-RENEWABLE TO RENEWABLE

By  
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### RESUME

*Riau's economy since the colonial era has been built on the mainstay of non-renewable resources based on petroleum (oil and gas sector) with multinational corporations as the main actors, namely Caltex (California Texas Oil Corporation). Riau's highest oil production ever reached one million barrels per day in 1976, but its production continued to decline to only 222,000 barrels per day in 2000 and 76,000 barrels per day in 2019. The decline in the role of the oil and gas sector in Riau's economy was also seen in its share of the structure of GRDP (from 62 percent to 14 percent) and export structure (from 86 percent to 4 percent) in the last 20 years.*

*On the other hand, Riau has succeeded in developing an economy based on more renewable resources, namely oil palm plantations, with the main actor being the synergy of smallholders, private and state-owned enterprises (PTPN). Oil palm plantations have also played a role in driving Riau's economy, both in the district's economic growth and in reducing unemployment and poverty. Even in Riau's exports, the palm oil industry succeeded in replacing the position of the oil and gas sector, with its export share increasing from only 0.34 percent to 60 percent. This shows that the palm oil industry has transformed Riau's economy from a non-renewable economy to a renewable one, while also changing from an unsustainable economy to a sustainable one.*

*The role of oil palm plantations in Riau is not only transforming the economy but also creating new value, namely environmental value, considering their role as a carbon sink and carbon stock. In the oil and gas era, Riau produced quite large carbon emissions into the earth's atmosphere, whereas oil palm plantations actually absorbed carbon dioxide from the earth's atmosphere. Through palm oil plantations, they clean the earth's air polluted by the oil and gas sector. So, overall, palm oil plantations in Riau have not only succeeded in transforming Riau's economy from non-renewable to renewable, but also transformed Riau's economy from an unsustainable economy to a sustainable one.*

## INTRODUCTION

Riau Province, previously known as Central Sumatra, has a unique history related to its regional economic development. Riau was once the largest oil refinery in Indonesia, with a peak production of around 1 million barrels per day in 1976. The actors who controlled the Riau petroleum era were multinational corporations such as PT. Caltex Pacific International, later named PT. Cevron Pacific International.

However, oil lifting activity in Riau continues to decline. On the other hand, Riau has also succeeded in developing oil palm plantations. Since 2006, Riau has also become the main center for palm oil in Indonesia, whose production has increased from year to year (Directorate General of Plantations, 2007). The main actors in oil palm plantations in Riau are smallholders with their own oil palm plantations.

This shows a change in Riau's economy from being a petroleum center to being a major center for palm oil. Riau's economic transformation model from a non-renewable "oil at below" has shifted relatively smoothly to a more renewable "oil at above". In addition, another interesting thing is that if the main actor in the petroleum era was large multinational corporations, in the palm oil era it was smallholder oil palm plantations. The Riau economy is also an interesting example of how the regional economy is transforming both in terms of base and actors from a non-renewable and exclusive economy to a renewable and inclusive economy.

This article will discuss the phenomenon of Riau's economic transformation. In addition, it will also discuss how the palm oil industry has become an important sector in the process of Riau's economic transformation.

## RIAU'S OIL-BASED ECONOMY IS DECLINING

The era of petroleum in Riau Province began in 1952, when the first commercial production was carried out at Sumur Minas. The main actor is Caltex (California Texas Oil Corporation) in collaboration with PT. Pertamina through production sharing. The highest production ever reached was one million barrels per day in 1976. However, oil production in Riau continued to decline to only 222,000 barrels per day in 2000 and 76,000 barrels per day in 2019.

Previously, the Riau Economy was a non-Renewable Resources Economy (NREs) because the main sector was petroleum/oil and gas sector, which is classified as a non-renewable resource. The characteristic of petroleum as a non-renewable resource is that it will be depleted at some time, so that the economic activities related to or generated by these resources will also decline or stop and only leave ghost towns.

Based on Statistic Indonesia's data, in line with the decline in Riau's oil lifting, the contribution of petroleum (oil and gas sectors) to Riau's Gross Regional Domestic Product (GRDP) also decreased significantly (Figure 1). In 2000, the oil and gas sector still contributed about 62 percent to GRDP, but its share experienced a significant decline in 2020 by only 14 percent.

The declining contribution of the oil and gas sector, in addition to following the depletion rate of NREs, also indicates that there is no reinvestment of surplus oil resources in the Riau area. The phenomenon of the absence of surplus reinvestment in the form of economic diversification in NREs-based regions/countries is common (Battaile and Mishra, 2015). The relationship between NREs and economic growth is not always encouraging (Arifin and Syahrudin, 2011).

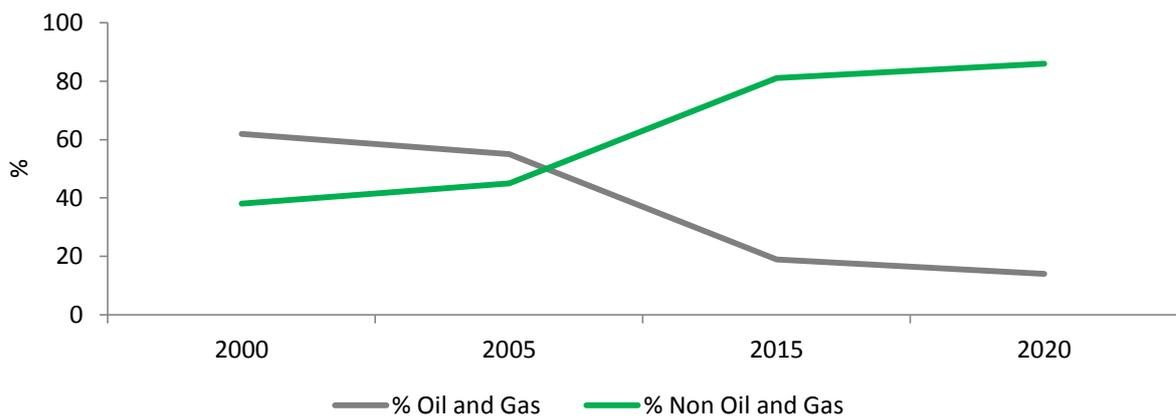


Figure 1. The Share of the Petroleum Industry (Oil and Gas Sectors) to Riau's GRDP (Source: Statistics Indonesia)

In addition to the minimum reinvestment surplus, Riau's petroleum sector is also very exclusive. This shows the exclusivity of petroleum/oil companies in Riau both in terms of technology, business opportunities, job opportunities, and suppliers company (Harun, 2009). The involvement of local companies, local workers, and local products is very limited, while the negative externalities of mining activities, both socially, economically, and environmentally, are also borne by the local community (Prance and Turner, 1990; Harun, 2009).

### OIL PALM ERA IN RIAU

Oil palm plantations in Riau began around 1982 through the development of smallholders nucleus plantations (Pola Inti Rakyat/PIR) between state-owned enterprises (currently known as PTPN V) and surrounding farmers who act as plasma (Sipayung, 2012). Oil palm plantations in Riau grew rapidly when the government made Riau one of the transmigration destinations (Appresian et al., 2020) and its growth was increasingly significant due to decentralization of development with an agribusiness-led development strategy (Vikkey, 2012).

Riau's palm oil plantation area has increased from 300 thousand hectares in 1990 to 2.8 million hectares in 2020. Riau's palm oil production also increased from 200.6 thousand tons to 9.7 million tons during that period (Figure 2).

The interesting thing behind the development of oil palm plantations in Riau is the actors, consisting of state companies, private companies, and smallholders. During the period 1990-2019, the share of smallholders in oil palm plantations in Riau increased from 55 percent to 65 percent. Likewise, private plantation companies's share increased from 22 percent to 33 percent in the same period. Meanwhile, the share of state-owned plantation companies actually fell drastically from around 22 percent to 2 percent in 2020.

Based on this data, it can be concluded that the main actors in Riau's oil palm plantations are smallholders, amounting to about 678.6 thousand households. The increasing number of farmers who choose the oil palm plantation sector is due to the greater income from oil palm plantations compared to other crops (PASPI, 2014, Krishna, 2017). This is different from Riau's petroleum (oil and gas) sector, where the main actor is a multinational company and does not involve the local community.

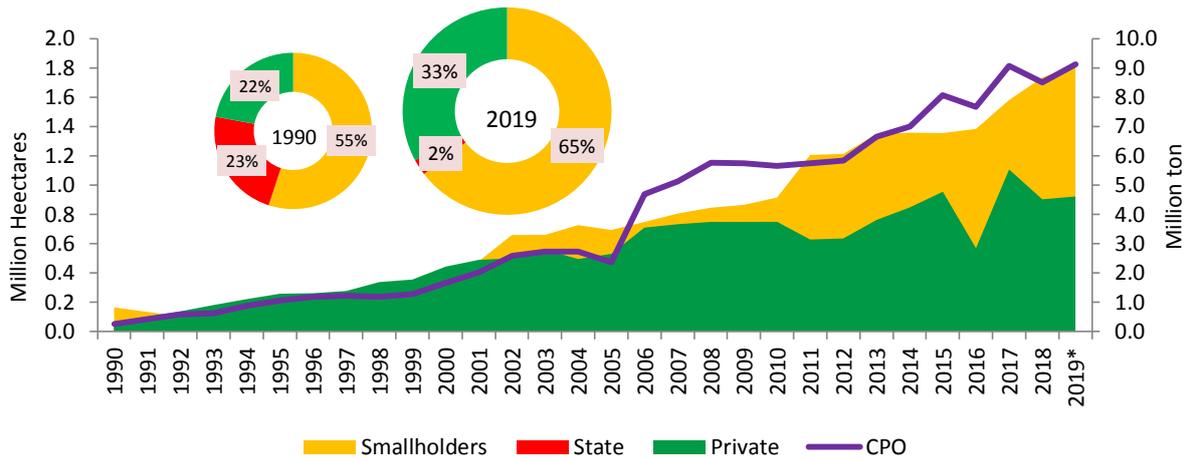


Figure 2. Development of Riau's Area, Production, and Share of Palm Oil in Riau by Concession Status (Source: Oil Palm Statistics)

The oil palm plantations are spread across all regencies/cities so that the production process does not only involve the local communities but also involves almost all areas in Riau. Different from the oil and gas sector, which does not involve them.

With the development of oil palm plantations, Riau's economic growth also increased simultaneously. Economic growth in the Riau district, which is the center of oil palm, is faster than in districts with lower oil palm plantations (PASPI, 2014). The economic growth of oil palm center districts driven by oil palm plantations will have an impact on improving the smallholders' welfare as well as increasing economic inequality in Riau (Syahza, 2005).

Oil palm plantations in Riau are also able to absorb around 3.2 million direct and

indirect workers, support hundreds of thousands of SMEs and reduce poverty. The rate of poverty reduction in Riau's districts as an oil palm plantation center is also faster than that of non-oil palm plantation districts (PASPI, 2014; Sipayung, 2021). The growth of the oil palm plantation sector could attract the growth of other sectors of the Riau economy (PASPI, 2014; Hasanah et al., 2015).

The increase in production of palm oil was also followed by its downstreaming in Riau, which also changed its export structure. The dominance of oil and gas products in Riau's export structure is decreasing and being replaced by palm oil and its derivative products (Figure 3).

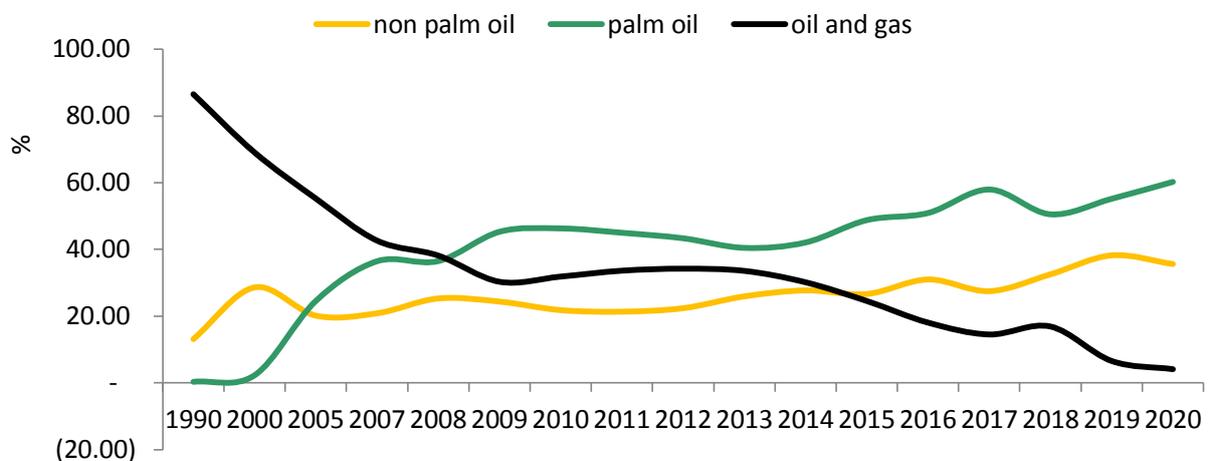


Figure 3. Changes in Riau's Export Structure (Source: Statistics Indonesia)

The contribution of oil and gas to Riau's exports was still around 86 percent in 1990 and continued to decline significantly to 4.13 percent in 2020. On the other hand, the export share of palm oil (CPO) and its derivative products increased from only 0.34 percent to 60 percent in the same period.

The changes in the structure of Riau's exports (Figure 3) and the structure of Riau's GRDP (Figure 1) show that the oil and gas sector as an economic base is increasingly being depleted. This also shows that there has been a transformation of Riau's economy from oil and gas to palm oil, from non-renewable resource-based industries to renewable resources-based industries, and from a non-renewable economy to a more renewable economy. In the transformation process, the palm oil industry became the main driver.

The transformation of Riau's economy is also accompanied by the creation of new values, namely environmental values. Oil palm plantations in the production process have a role as carbon sinks, which absorb carbon net and store it in the form of biomass or carbon stock (Henson, 1999; Chan, 1990).

In the oil and gas era, Riau produced quite large carbon emissions into the earth's atmosphere, whereas oil palm plantations actually absorbed carbon dioxide from the earth's atmosphere. Through palm oil plantations, they clean the earth's air polluted by the oil and gas sector. So, overall, palm oil plantations in Riau have not only succeeded in transforming Riau's economy from non-renewable to renewable, but also transformed Riau's economy from an unsustainable economy to a sustainable one.

## CONCLUSION

Riau's economy since the colonial era has been built on the mainstay of non-renewable resources based on petroleum (oil and gas sector) with multinational corporations as the main actors. However, in the last 20 years, the share of petroleum (oil and gas sector) in Riau's GRDP has continued to decline from 62 percent to 14 percent in 2020. The decline in their role was also seen in Riau's export structure,

which decreased from around 86 percent to only around 4 percent in the same period.

On the other hand, Riau has succeeded in developing an economy based on more renewable resources, namely oil palm plantations, with the main actor being the synergy of smallholders, private and state-owned enterprises (PTPN). Oil palm plantations have also played a role in driving Riau's economy, both in the district's economic growth and in reducing unemployment and poverty. Even in Riau's exports, the palm oil industry succeeded in replacing the position of the oil and gas sector, with its export share increasing from only 0.34 percent to 60 percent. This shows that the palm oil industry has transformed Riau's economy from a non-renewable economy to a renewable economy, while also changing from an unsustainable economy to a sustainable one.

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