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# VIETNAM ETHANOL INDUSTRY

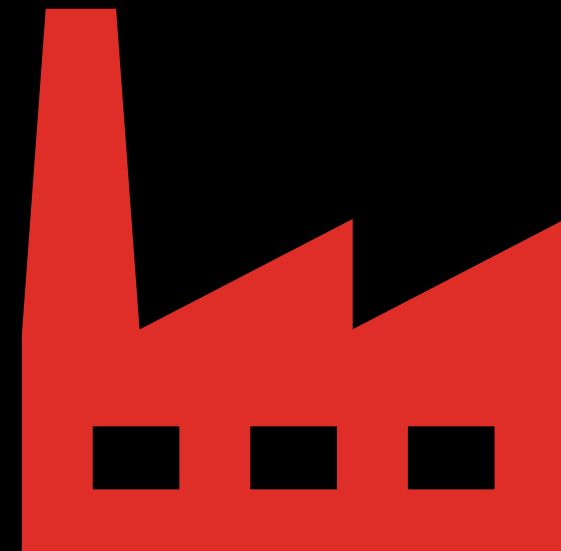
Brief History and Outlook

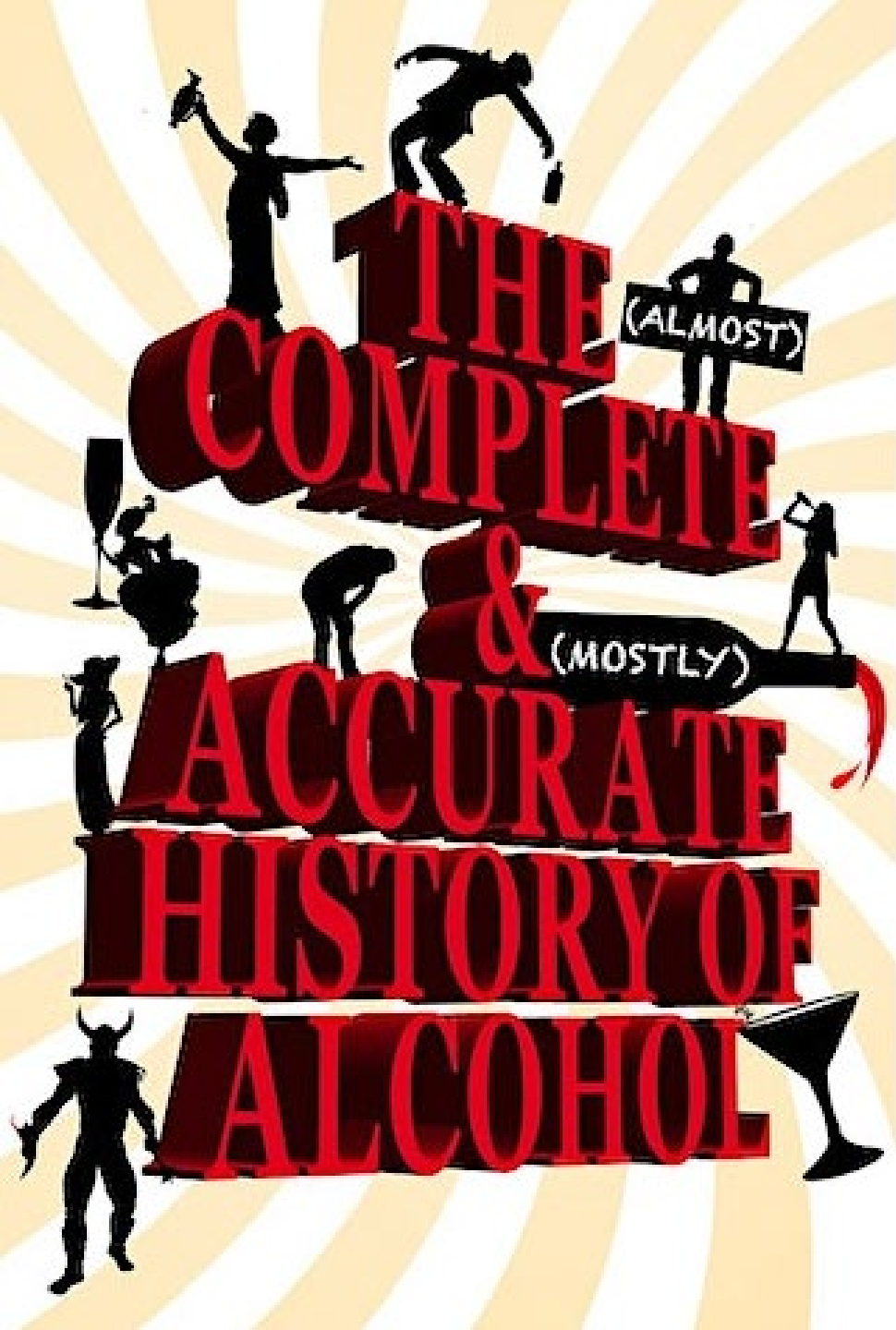
VIETNAM BIOFUELS ASSOCIATION

4/17/2024

# CONTENT

1. The history of Ethanol Industry in Vietnam
2. The Ethanol usage in Vietnam
  - a) Average annual demand
  - b) Advantages
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3. The Feedstock market in Vietnam
4. The Outlook and what to expect
5. The Discussion





# THE HISTORY OF VIETNAM ETHANOL

# THE HISTORY OF VIETNAM ETHANOL

It all started with some smaller scale factories which produce alcohol grade ethanol for their own alcohol products.

• **HALICO** being the first factory there is dating back from 1898, producing from rice

In 2007, Vietnam's Prime Minister has officially approved "**Biofuel development project until 2015, vision to 2025**", which kick-started the ethanol industry of Vietnam

In 2009, the first larger scale ethanol – **Dai Viet Ethanol Factory** (Dak Nong Province) started producing industrial grade ethanol with registered capacity of 40.000MT annually, with cassava as main feedstock

In 2010, **Dai Tan Ethanol Factory** (Quang Nam Province) started producing, being the first fuel grade ethanol producer in Vietnam; with capacity of 70.000MT annually and using cassava

In 2011, **Tung Lam Ethanol Factory** (Dong Nai Province) started producing, being the only factory which could produce many type of ethanol products from Industrial, Fuel to Pharmaceutica, Alcohol Grade, with capacity of 50.000MT annually and using cassava at first

# THE HISTORY OF VIETNAM ETHANOL

In 2012, **Dung Quat Bio-ethanol Factory** (Quang Ngai Province) finished construction and test run; eagerly waiting for the mandate to start producing Fuel Grade Ethanol from cassava, with registered capacity of 80.000MT annually

Also in 2012, **Binh Phuoc Bio-ethanol Factory** (Binh Phuoc Province) finished construction with similar capacity with Dung Quat

2013 to 2017, no sight of bio-fuel mandate, no significant market growth, Dai Viet, Dai Tan factory went bankrupt; Dung Quat and Binh Phuoc factory could not start producing. The Ethanol Industry of Vietnam in on the verge of breaking down

15/12/2017, finally the mandate has come with the selling of **E5-RON92** (replacing RON92) together with RON95 has given the industry more hope

In 2019, Tung Lam factory has stated to produce from **corn**, hence adding another possible feedstock to the industry, a move considered due to cassava price skyrocketed over the years and quality has worsen

2018 to 2023, no sight of final complete mandate and low demand from market, Dung Quat and Binh Phuoc factory still could not produce, Dai Tan factory has been sold, being now called Biofuels Ethanol Factory. Factories keep on trying to explore new ethanol market/product since fuel grade market is reducing demand every year

# LIST OF ETHANOL FACTORIES AND STATUS

2023 updated

Name	Product(s)	Capacity	Status
<b>Dai Viet Ethanol Factory</b>	Industrial Grade; Food Grade	Up to 40.000MT anually	Not running
<b>Vietnam Biofuel Ethanol Factory</b>	Fuel Grade; Industrial Grade	Up to 70.000MT anually	Running 50%
<b>Dak To Ethanol Factory</b>	Food Grade	Up to 20.000MT anually	Running 50%
<b>Tung Lam Ethanol Factory</b>	Fuel Grade; Industrial Grade; Food Grade; Alcohol Grade	Up to 50.000MT anually	Running 80%
<b>Dung Quat Bio-Ethanol Factory</b>	Fuel Grade	Up to 80.000MT anually	Not running
<b>Binh Phuoc Bio-Ethanol Factory</b>	Fuel Grade	Up to 80.000MT anually	Not running

# ETHANOL USAGE



- Bio-fuel use
- Industrial use
- Food use
- Alcohol use

# ETHANOL USAGE BIO-FUEL USE

## Usage:

- E5-Ron92 blending according to mandate

## Current local availability: 02 factories:

- Vietnam Biofuels Factory (Quang Nam Province): Up to 70.000MT annually
- Tung Lam Ethanol Factory (Dong Nai Province): Up to 50.000MT annually

## Possibilities to improve local availability: Yes

- OBF Ethanol Factory (Binh Phuoc Province): Up to 80.000MT annually
- BSR-BF Ethanol Factory (Dung Quat Province): Up to 80.000MT annually

## Current demand:

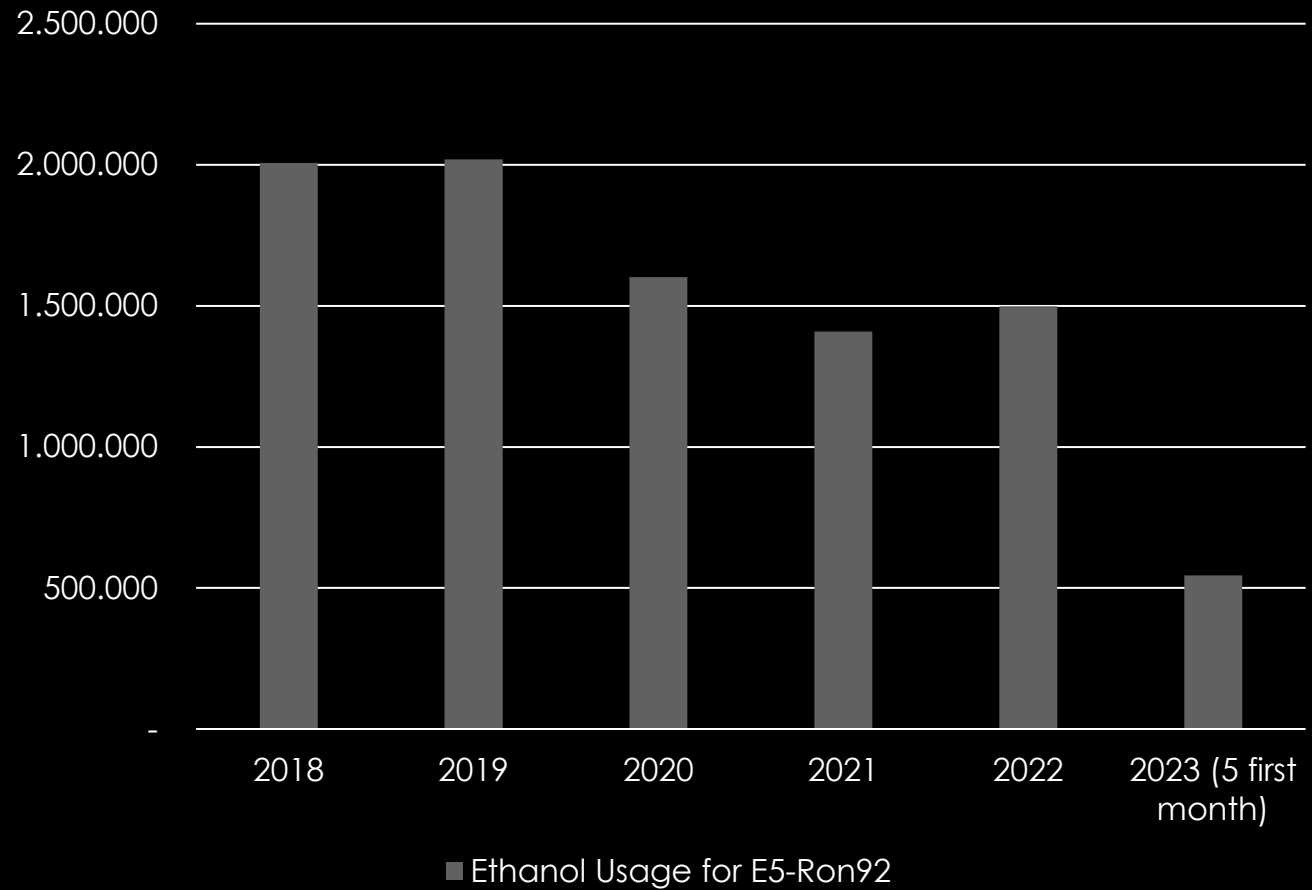
- 100.000MT annually, with ~50% import via major gasoline blenders

- **Unreliable local feedstock (dried cassava):**
  - **Fierce competition from Animal Feed producers, Starch producers**
  - **Complications in quality control**
- **Rely on imported feedstock (corn):**
  - **Reduce competitiveness in international market**
- **Limited output due to low demand locally**
  - **Import tax reduction (20% to 15% to 10%)**
  - **No regulations on import**
- No support on development of E5-RON92 market, public usage lowered over the years



# ETHANOL USAGE BIO-FUEL USE

### Monthly Ethanol Usage for E5-Ron92 of PETROLIMEX (kL)



# ETHANOL USAGE INDUSTRIAL USE

## Usage:

- For production chemical products such as Acid Acetic, and as disinfectant for many production plants.

## Current local availability: 02 factories:

- Vietnam Biofuels Factory (Quang Nam Province): Up to 70.000MT annually
- Tung Lam Ethanol Factory (Dong Nai Province): Up to 50.000MT annually

## Possibilities to improve local availability: Yes

## Current demand:

- 20.000MT annually

- **Limited output due to low demand locally**
- **High import tax (40%)**

# ETHANOL USAGE FOOD USE

## Usage:

- For production of ethanol based beverage(s) and hygiene product(s)

## Current local availability: 03 factories:

- Tung Lam Ethanol Factory (Dong Nai Province): Up to 50.000MT annually
- Dai Viet Ethanol Factory (Dak Nong Province): Up to 40.000MT annually
- Dak To Ethanol Factory (Kon Tum Province): Up to 30.000MT annually

## Possibilities to improve local availability: No

## Current demand:

- 50.000MT annually

- **Limited output due to low demand locally**
- **High import tax (40%)**

# ETHANOL USAGE ALCOHOL USE

## Usage:

- For production of alcohol products

## Current local availability: 02 factories:

- Tung Lam Ethanol Factory (Dong Nai Province): Up to 50.000MT annually
- Dak To Ethanol Factory (Kon Tum Province): Up to 30.000MT annually
- (and plurals small scales ethanol factories)

## Possibilities to improve local availability: No

## Current demand:

- 10.000MT annually

- **Limited output due to low demand locally**
- **Very niche market**
- **Quality rely a lot on smell which is a personal taste of each alcohol producers/brands**
- **High import tax (40%)**

# OUTLOOK TO THE FUTURE

- **What we must do:**

- Develop reliable feedstock with constant quantity and quality; price comparable to other significant ethanol industries but profitable to farmers
- Improve technology to save production cost
- Getting involved more into international market
- Create more applicable usage(s) for ethanol to increase demand

- **What we need:**

- A final complete mandate of E5 and possibly E10 to help boosting demand and stabilize production
- A governmental control over importing of ethanol
- Public education on Ethanol to get rid of bad product (Methanol blended) being able to be sold into the market and therefore increase market volume

# DISCUSSION TIME



PLEASE DO NOT HESITATE TO SHOUT OUT  
YOUR IDEAS AND/OR QUESTIONS

**THANK YOU FOR  
YOUR ATTENTION!  
SEE YOU!**

