# **ONLINE EVENT**

Webinar: Understanding Bioenergy Trade and Supply Chain Risks in Asia a civil society's perspective



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Webinar: Understanding Bioenergy Trade and Supply Chain Risks in Asia a civil society's perspective

**24 February 2021,** 10:00 am -12:00 pm KST

## Welcome

You are invited to an online event on "Understanding Bioenergy Trade and Supply Chain Risks in Asia – a civil society perspective".

The goal of this event is to enhance understanding on the risks associated with bioenergy supply chain and trade in Asia. Bioenergy feedstocks we address in this webinar include wood pellets, wood chips, and bio-SRF, as well as palm oil-based biofuels. Civil society representatives will share lessons learned from their actions to address the challenges in bioenergy trade and supply chain risks in their jurisdictions.

We encourage those who are interested in environmental justice, energy transition, deforestation, and human rights to join this webinar.

This webinar is co-hosted by three Korean NGOs, the Solutions for Our Climate (SFOC) Korea Federation for Environmental Movement (KFEM), and Advocates for Public Interest Law (APIL).

## Outline

- | Title Understanding on the risks associated with bioenergy supply chain and trade in Asia
- **Date** Wednesday, February 24, 2021, 10:00 am 12 :00 pm (approx. 120 minutes)
- **Organizer** Solutions for Our Climate(SFOC), Korea Federation for Environmental Movement (KFEM), and Advocates for Public Interest Law (APIL).
- | Webinar Registration Link https://zoom.us/webinar/register/WN\_TImHbaBATbCvBst5dFuT6A

## Agenda (120 mins)

\*\* Moderator: Hye Lyn Kim(international solidarity activist, KFEM)

TIME	SUBJECT		
10:00-10:05	Welcome and introduction		
10:05-11:05	Presentation 1 Overview of S.Korea's bioenergy trade and supply chain risks - Soojin Kim (SFOC)		
	Presentation 2 Understanding Vietnam's biomass supply chain and associated sustainability/legality concerns - Phuc Xuan To (The Forest Trend)		
	Presentation 3 Understanding biofuel supply chain risks and the impact of Korean businesses in Indonesia - Christopher Wiggs (Aidenvironment)		
	Presentation 4   Bioenergy supply chain risks - lessons learned from the EU civil society perspective     - Almuth Ernsting (Biofuel Watch)		
11:05-11:20	Q&A		
11:20-11:55	Panel discussion Major issues of bioenergy supply chain risks and civil society responses in S.Korea, Indonesia and the United States   - Shin-young Chung (APIL) - Kurniawan Sabar (INDIES)   - Tommy Pratama (Traction Asia) - Rita Frost (Dogwood Alliance)		
11:55-12:00	Declaration of the NGO Statement on bioenergy sustainability		

### Presentation



### Soojin Kim

Affiliation SFOC (Solutions for our Climate) E-mail soojin.kim@forourclimate



### **Phuc Xuan To**

Affiliation The Forest Trend

**E-mail** pto@forest-trends.org

Soojin Kim is a Senior Researcher at SFOC. She is a climate change professional with expertise in forestry, agriculture and natural resources management sector, as well as energy and carbon markets. Soojin brings more than 10 years of relevant experience from her previous work at LG Electronics, United Nations Food and Agriculture Organizations (FAO), Environmental Defense Fund (EDF), and Asian Forest Cooperation Organization. She holds bachelor's degree in Forestry and Anthropology from Seoul National University (SNU) and master's degree in Environmental Management from Yale University.

Phuc To has led Forest Trends' work in Vietnam since 2009. His work has been focusing on the dynamics of forest-risk commodity trade, marketbased instruments and global legality regulations, and land use changes. Phuc has also been a research fellow at Resources, Environment and Development Group at Crawford School of Public Policy, Australian National University (ANU). His research under the ANU explores how forest users in the Mekong countries respond to emerging market for forest carbon, and to the large-scale interventions such as hydropower dams and agro-business projects. Phuc has been providing policy advice to private sector and governments in the Mekong region, and to development agencies. Phuc holds a PhD in resource governance.



Chris Wiggs is the Programme Director of Aidenvironment Asia in Indonesia. Chris has a background in wildlife conservation and spent several years working to protect wild orangutans living in agricultural landscapes in West Kalimantan, Indonesia. At Aidenvironment, he manages projects to improve sustainability in agricultural supply chains and implement stakeholder mechanisms for sustainable palm oil.

### **Christopher Wiggs**

Affiliation Aidenvironment E-mail wiggs@aidenvironment.asia



Almuth Ernsting helped to found Biofuel watch in 2006 and has been researching the impacts of different types of bioenergy, including road transport and aviation biofuels, second generation biofuels, wood-based bioenergy, and Bioenergy with Carbon Capture and Storage (BECCS). She has been involved in advocacy and campaigning opposing destructive bioenergy developments and calling for biomass subsidies to be redirected to low-carbon, clean renewable energy. Almuth lives in Edinburgh, Scotland.

### **Almuth Ernsting**

Affiliation Biofuel Watch

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## **Panel Discussion**



### **Hye Lin Kim**

Affiliation KFEM (Friends of the Earth Korea/ Korea Federation for Environmental Movements)

E-mail naserian@kfem.or.kr



Shin Young Chung has been a full-time attorney at Advocates for Public Interest Law (APIL) since 2012. At APIL, she has supported victims of human trafficking and human rights violations by Korean companies. She has also actively engaged in research and advocacy through domestic and international human rights mechanisms. She received her law degree (J.D. equivalent) from Handong International Law School in Korea.

### **Shin Young Chung**

Affiliation Advocates for Public Interest Law (APIL)

E-mail sychung@apil.or.kr Hye Lyn Kim is an international solidarity activist working for Friends of the Earth Korea/Korea Federation for Environmental Movements since 2015. She has been conducting policy campaigns against the government, companies and market stakeholders to deal with environmental destruction and human rights violations by Korean companies overseas. She has also been highlighting the accountability of transnational corporations for environmental crimes as a steering group member of the Economic Justice Program, Friend of the Earth Asia Pacific. She majored in international politics and is currently studying for a master's degree in urban environmental policy.



### **Kurniawan Sabar**

Affiliation INDIES – Institute for National and Democracy Studies

**E-mail** kurniawansabar@gmail.com Kurniawan Sabar became a staff of WALHI Province of South Sulawesi. He was active in community organizing and built peasant organizations, fishermen and youth in the villages in South Sulawesi province. In 2011, he continued to develop advocacy and campaigns on agrarian conflicts, people's rights to land, food sovereignty, and environment sustainability due to bad practice of the large-scale corporations in plantation and mining sectors in South Sulawesi. In 2014, he became the campaign manager of National Executive of WALHI (Friends of the Earth - Indonesia), and in 2015 also became Co-coordinator of Food Sovereignty Program -Friends of the Earth Asia Pacific. During 2014 – 2017, he was actively in the research, advocacy and campaign nationally and internationally on the issues of agrarian conflicts, land rights, forest fire, and climate change due to large expansion of palm plantation and timber plantation in Indonesia. He is currently a member of People's Coalition on Food Sovereignty (PCF).



Tommy Pratama is the executive director of Traction Asia. He has 13+ years' experience in project design, strategy development, socio-economic studies, monitoring and evaluation, and partnership building with stakeholders.

### **Tommy Pratama**

**Affiliation** Traction Asia

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A lifelong Southerner, Rita Frost grew up climbing live oaks and building forts in the canopies of Texas hill country. Her life has been shaped by a childhood in the woods, and she has dedicated her adult career, thus far, to protecting forests of the Southern United States. As the Campaigns Director of Dogwood Alliance, Rita is an advocate for forest protection and has worked on Dogwood's wood pellet biomass campaign and the forests & climate campaign.

### **Rita Frost**

**Affiliation** Dogwood Alliance

E-mail rita@dogwoodalliance.org **Presentation1** 

# Overview of S.Korea's bioenergy trade and supply chain risks

Soojin Kim

# South Korea's Bioenergy Sourcing and Supply Chain Risks: an overview

Feb 2021



기후솔루션 Solutions for Our Climate

Soojin Kim (Senior Researcher)

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# Contents



- 1. Background and definition
- 2. Overview of biomass production and sourcing
- 3. Overview of biofuel production and sourcing
- 4. Korea bioenergy supply chain risks
- 5. Conclusion

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# **Background and Definitions**



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Solid biofuels used to generate power and heat: wood pellets, wood chips, Bio-Solid Refuse Fuels (bio-SRFs)

### Biofuels



Transportation fuel: Main ingredients are palm byproducts (imported) and used cooking oil (domestic)



Power generation: Vegetable and animal oil mixed with methanol/ethanol and biodiesel wastes. Includes CPO and palm derivatives

# Bioenergy Definitions in S. Korea

### Background (1): S. Korea policies on bioenergy

Various policy incentives for bioenergy has enabled rapid expansion of bioenergy

• Renewable Portfolio • Renewable Fuel Standard • Enforcement Decree of the Standard (RPS): 2012-(RFS): 2015-current **Petroleum and Petroleum** current **Alternative Fuel Business Regulates transportation fuel** Act Art.5: Defines bioenergy as producers and renewable energy importer/exporters to mix Defines alternative fuels to biodiesel petroleum Enables utilities of 500MW and over to use bioenergy to Includes Bio-heavy Oil to meet their RPS quota replace fuel oil (bunker-C) for power sector Issues renewable energy certificates to biomass and biofuels SFOC

Background(2): Korea's renewable energy depends on bioenergy

Bioenergy was single largest source of Renewable Energy Certificates (2014-2017) in S. Korea



### Source: Ministry of Transport, Industry and Energy

\* This chart excluds other renewable energy source than bioenergy, solar and wind

\* This chart excluds Solutions for Our Character Copyright © 2016 SFOC Inc. All rights reserved

# Overview of S. Korea's Biomass Production and Sourcing



# Electricity generation from biomass grew 61 times in the past 6 years

Annual growth of 160% in S. Korea



SFO°C

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# Wood pellet imports skyrocketed since the beginning of the RPS policy (2012), 26 times in 6 years

Fun fact: Korea was the world's 3<sup>rd</sup> largest wood pellet importer in 2018 (FAO, 2018)

97% imported

# Korea sources wood pellets and palm-based pellets from South East Asia and North America





Source: National Assembly Mr. Seonghwan Kim's office, 2019



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# **Overview of S. Korea's Biofuel Production and Sourcing**



# Energy production from palm oil-based biofuels



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# S. Korea biodiesel production depends on more than 60% of imported palm oil





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### Most imported ingredients of bio-heavy oil production is from palm oil and palm byproducts

More than 50% of bio-heavy oil feedstock is imported.

### Imported

- RBD Palm Oil
- Palm Stearin
- Palm Olein
- Palm Acid Oil
- Palm Oil Mill Effluent
- palm pitch oil
- · cashew nut sludge oil
- dark oil

### Domestic

- biodiesel and biodiesel byproducts (FFA)
- animal fats
- · used cooking oil
- other acid oil

## Bio-heavy oil production has risen threefold 2014-2019

KEPCO subsidiaries (Korea Midland Power in particular) depends on bio-heavy oil to meet their RPS quota.





SFOC

## Korea sources palm oil mainly from Indonesia and Malaysia





# Korea bioenergy supply chain risks

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# 1. Deforestation and biodiversity loss due to biomass sourcing – examples from North America



### 2. Bioenergy exacerbates climate change during production and consumption

Biomass and biofuel production increases land use change and forest harvesting that are linked to climate change.

Even without involving land-use change, cumulative GHG emissions from biomass is greater than fossil fuel in the first half of a century. It takes more than 100 years to see carbon benefits of biomass if whole trees are used.





Deforestation for palm production, a picture courtesy of Greenpeace

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## 3. Local environmental pollutions and health impacts

Phú Bình (Thái Nguyên): Dân "tố" Nhà máy () chế biến gỗ Hàn Quốc xả khói bụi gây ô (>) nhiễm

TIÉWG DÁN - 09:53 25/05/2019

(TN&MT) - Khoảng 2 năm trở lại đây, nhiều người đăn ở xóm Trang, xóm Trung 2, xã Điềm Thuy, huyện Phủ Bình, tỉnh Thái Nguyên (Khu Công nghiệp Điềm Thuy) thưởng xuyên phải hứng chịu khởi bụi, mài khởi của nhà máy chế biến gỗ thuộc Công ty TNHH UJU VINA Thái Nguyên. Hoạt động của nhà máy chế biến gỗ Q đà hải khỏi, bụi ra môi trường, ảnh hưởng đến cuộc sống và sức khoẻ của nhân dân.



 Local residents have filed complaints on environmental pollutions by Korean biomass companies in Vietnam.



right and a chair their three body since the strength handing, minimum (the chain of a Grang with Grang ty CP Nguyệt Andi, nói riềng không duộc xử bỳ mà thài trường. Vào màn mưa, nước từ các nhà xuông cháy ra đường thoặt giệ ở nhữm, thế mài thì thời, thế cháin. Phânh thôn các giếng nước xết đầu bị ô nhiễm không thể nà dung. Nguời dân lo sơ với tình trang năm nư thì khốt Thiết thinh Nam sẽ trở thành làng ung thư, Quả bứi nhữn làn thế nghi lần các đập khôn quyền, nginh chức năng vi những không dục giải quyết.



Các bãi tập kết dâm gỗ lộ thiền kết hợp mưa lũ là nguồn thải gây ó nhiễm mỗi trưởng tại các bến cáng ở KKT Dung Quất



# **Concluding thoughts**

- 1. S. Korea's nascent bioenergy sector has grown at an unprecedented speed due to policy drivers and incentives in the last 8 years.
- 2. Bioenergy production heavily depends on imported feedstocks (90+ percent for biomass and 60+ percent for biofuels), and there is little or no consideration on sustainable sourcing or limit setting on import volumes.
- 3. Bioenergy is largely regarded as green and carbon neutral in S. Korea. This myth is prevalent and public awareness on bioenergy supply chain risks is relatively low.
- 4. S. Korean bioenergy companies, both producers and traders, have been known to have violated local environmental laws, human rights and/or international agreements outside of Korea.
- 5. Although S. Korea's bioenergy development has shown a threatening trajectory, there is still time to fix the problem. Opportunities in climate and energy policy
- SFO°C reform are present.

# Thank you.



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Presentation2

# Understanding Vietnam's biomass supply chain and associated sustainability/legality concerns

Phuc Xuan To The Forest Trend

# Vietnam export of wood pellets

TRADE STATISTICS AND IMPLICATIONS FOR LEGALITY /SUSTAINABILITY

PRESENTED BY Phuc To, Senior Policy Analyst

24 Feb 2021



### Export volume (Mil. tons)



## Export value (Mil. USD)



Timber species in the product (% in total export volume)



## Export market by value (USD)



### Export market by volume\_(tons)



### Export price (USD/ton, FOB)



### Number of exporting companies

Year	N# company
2018	72
2019	77
2020	74

Source: Vietnam customs data, compiled by Forest Trends



## Large-scale export company(>100,000 tons) in 2020: 6

	Company	Tons	USD
1	Công Ty Cổ Phần Eastwood Energy	380,479	35,712,323
2	Công Ty Cổ Phần Năng Lượng Sinh Học Phú Tài	387,753	53,764,238
3	CôNG TY TNHH HOàNG Đại VươNG	215,581	21,607,967
4	CôNG TY TNHH LIÊN DOANH CÁT PHủ QUảNG NINH	105,500	12,907,620
5	Công Ty TNHH Một Thành Viên Năng Lượng An Việt Phát	732,701	82,728,376
6	Công Ty TNHH Nông Trại Xanh	138,707	17,749,475

Source: Vietnam customs data, compiled by Forest Trends



### Small and micro companies (<1,000 tons) in 2020: 23

	Company	Ton	USD
1	CôNG TY CỔ PHẦN LÃM NGHIỆP HÒA PHÁT	14	1,820
2	Công Ty Cổ Phần Phân Phối Và Hàng Hóa Việt	48	4,320
3	CôNG TY Cổ PHầN TIẾP VậN Và THươNG Mại THANH NAM	22	3,300
4	CôNG TY TNHH CELLMARK VIỆT NAM	384	41,553
5	Công Ty TNHH Công Nghiệp Hòa Phát	20	2,260
6	CôNG TY TNHH ĐạI AN ENERGY	18	2,430
7	Công Ty TNHH Đầu Tư Đan - Việt	255	40,800
8	Công Ty TNHH Gia Gia Nguyên	13	7,750
9	CôNG TY TNHH KIM NGHĨA	607	115,368
10	CôNG TY TNHH MỘT THÀNH VIÊN LưU NHUNG	14	2,278
11	Công Ty TNHH Sản Xuất Gia Nguyên	235	50,176
12	CôNG TY TNHH SảN XUẤT Gỗ GIA THỊNH	24	7,687
13	CôNG TY TNHH SáNG SủA VINA PLYWOOD	129	26,045
14	CôNG TY TNHH SKY CONNECT VIỆT NAM	10	2,555
15	Công Ty TNHH Sx&Xnk Hoàng Hải	176	28,132
16	Công Ty TNHH Thương Mại Fit	1,040	148,383
17	CôNG TY TNHH TOYO KIKHO VIỆT NAM	40	9,134
18	CôNG TY TNHH TTCL VIỆT NAM	1	749
19	Công Ty TNHH Xây Lắp Công Nghiệp Phương Đông Prime	252	30,794
20	CôNG TY TNHH XUẤT NHẬP KHẨU ECOVUS VIỆT NAM	21	5,100
21	Công Ty TNHH Xuất Nhập Khẩu Ngọc Min Anh	511	73,087
22	CôNG TY TRÁCH NHIỆM HỮU HẠN THÀNH VIN	26	2,794
23	CôNG TY TRÁCH NHIỆM HỮU HạN Từ VấN QUẫN Lý Mỗi TRườNG VINA-CUES	25	5,542
lietnam customs da	ta, compiled by Forest Trends		



### Medium scale export companies (50-100,000 tons) in 2020: 11

	Company	Ton	USD
1	Công Ty Cổ Phần Năng Lượng Sáng Tạo á Châu	57,910	6,735,056
2	Công Ty Cổ Phần Nguyệt Anh	82,909	11,068,352
3	CÔNG TY CỔ PHÀN SMART WOOD VIỆT NAM	79,746	7,542,478
4	CôNG TY TNHH CUNG ứNG NăNG LượNG XANH	59,272	6,053,666
5	CÔNG TY TNHH NÔNG NGHIỆP MJ VIỆT NAM	50,904	5,519,514
6	Công Ty TNHH Hoa Sen Vàng	64,712	5,760,780
7	CôNG TY TNHH MỘT THÀNH VIÊN MI SA VIỆT HÀN	95,542	8,991,327
в	Công Ty TNHH Năng Lượng Tân Phát	71,747	6,151,662
9	Công Ty TNHH Sản Xuất Thương Mại Long Hải Phát	97,519	9,869,030
10	CôNG TY TNHH THươNG Mại SảN XUấT XUấT NHậP KHẨU GOOD WOOD	56,905	5,025,080
1	Cty TNHH Hoàng Đại Vương	64,961	6,495,746

### Some large importers in DEC 2020

- 1. ENERGY AT CO., LTD-BRANCH OFFICE IN KOREA
- 2. PRINWORKS CO., LTD.
- 3. SEOUL FOOD RESEARCH AND DEVELOPMENT CO., LTD.
- 4. JUNE GLOBAL CO., LTD
- 5. SEOUL FOOD RESEARCH AND DEVELOPMENT CO., LTD.
- 6. UJU ELECTRONICS CO., LTD
- 7. CELLMARK ASIA PTE LTD
- 8. MITSUI & CO., LTD
- 9. T BBQ STATION
- 10. ITOCHU CORPORATION TOKWN
- 11. M&M BIOMASS PTE.LTD
- 12. SUMITOMO CORPORATION
- 13. MARUBENI CORPORATION
- 14. M&M BIOMASS PTE.LTD
- 15. GS GLOBAL CORP.

Source: Vietnam customs data, compiled by Forest Trends



### Implications for legality /sustainability

- CERTIFICATION: ACACIA (YES, BUT LIMITED), RUBBER, PINE, AND OTHERS: NONE
- SIGNS OF FRAUDULENT FSC-CERTIFIED PERMITS
- SMES ARE DOMINANT IN EXPORT (ALSO IN PRODUCTION?)
- ABSENCE (OR LOOSE) LEGISLATION IN CONTROLLING THE LEGALITY OF WOOD MATERIAL
- THE SECTOR IS NOT CONSIDERED AS IMPORTANT FOR VIETNAMESE GOVERNMENT
- SCANT INFORMATION ABOUT THE SECTOR INCLUDE SUPPLY CHAINS AND EXPORT MARKET





Thank you!



Presentation3

# Understanding biofuel supply chain risks and the impact of Korean businesses in Indonesia

Christopher Wiggs Aidenvironment



### **Chain Reaction Research**





# aldenvironment





### South Korean companies are significant leakage players





Posco, Korindo, and Deasang all cleared forest and peat after January 1, 2016



- No Deforestation, No Peat, and No Exploitation (NDPE) commitments increasingly cover the global palm oil industry.
- But non-compliant growers continue to leak unsustainable palm oil into international markets.
- As non-compliant palm growers: Posco International, Korindo Group, Samsung C&T, Daesang Corporation, LG Corporation, and JC Chemical.
- As non-compliant palm buyers: JC Chemical, Dansuk Industrial, GS Global, AK Holdings, LG Corporation, and SK Eco Prime



Six South Korean corporations operating oil plantations in Indonesia

CHAIN REACTION RESEARCH

CHAIN REACTION RESEARCH



Company	Subsidiaries	Concession area (ha)/Location	NDPE policy?	Reported annual CPO production (tons)
Korindo Group	PT Papua Agro Lestari PT Gelora Mandiri Membangun PT Dongin Prabhawa PT Berkat Cipta Abadi 1 and 2 PT Tunas Sawaerma 1A, 1B, and 2	133,126 / Papua and North Maluku	Νο	No public information Estimate > 300,000
Posco International	PT Bio. Inti Agrindo	34,184 / Merauke, Papua	Yes (but not yet implemented)	80,000
LG Corporation	PT Parna Agromas PT Tintin Boyok Sawit Makmur PT Tintin Boyok Sawit Makmur Dua PT Grand Utama Mandiri	31,513 / Sekadau, West Kalimantan	No	<u>150,000</u>
Samsung C&T	PT Gandaerah Hendana and PT Inecda Plantation	21,703 (RSPO: <u>23,830</u> <u>ha</u> )/ Pelalawan & Indragiri Hulu, Riau	No	100,000
Daesang Corporation / Miwon Indonesia	PT Sintang Raya and PT Miwon Agro Kencana Sakti (no concession)	11,212 / Kubu Raya, West Kalimantan	No	<u>35,000</u>
JC Chemical	PT Niagamas Gemilang	3,774 (JC Chemical: <u>7,200 ha</u> ) / Kutai Kartanegara, East Kalimantan	No	45,000
Total		235,512 ha		710,000

Source: Compiled by Aidenvironment, based on concession data (e.g. HGU, cadastrol map) and corporate websites

Korean growers have significant non-compliance linked to environmental, social, and human rights issues

- Korean NGOs APIL and KFEM link 6 growers to numerous environmental, social, and human rights issues in Indonesia
- Korindo and Posco have the highest amount of deforestation of all six
- They are also linked to human rights abuses and the loss of High Conservation Value areas (HCVs).
- **Daesang Corporation** cleared 347 ha of peat in 2017 and 2018.
- Samsung C&T's plantation subsidiaries associated with land disputes, water pollution, compensation, and labor issues.
- LG Corporation has seen land disputes and pollution issues at its three mills and four plantations
- JC Chemical is allegedly involved in waste dumping

### Korindo's subsidiary PT Papua Agro Lestari





### Peat clearing by Daesang Corporation in West-Kalimantan between 2017-2018





# Korean growers continue to find a market for leakage palm oil despite suspensions

### **KORINDO GROUP**

- Korindo Group was suspended by NDPE traders between 2016-2018
- In response Korindo 1) entered biofuel market in 2019 and 2) continues to leak to non-NDPE refiners Emami Agrotech and 3F Industries
- Korindo also reportedly supplier of unsustainable timber to Tokyo Olympics

#### **POSCO INTERNATIONAL**

- Norwegian Sovereign Wealth Fund and ABP divested from Posco in 2015 and 2018
- Also, POSCO's palm oil is being shipped to Indian non-NDPE refineries Emami Agrotech and 3F Industries

### LG CORPORATION

LG Corporation also supplied palm oil to non-NDPE refiners in India







Emami and 3F Industries are among the world's largest (Indian) processors without an NDPE policy









### South Korea: rising palm oil imports & consumption (2/2)




## Only 5 buyers accounted for 78 percent of imported palm oil from Indonesia to South Korea in 2019

CHAIN REACTION RESEARCH

Korean buyers – Exporter groups	Palm oil imports (tons)	Korean buyers – Exporter groups	Palm oi imports (tons)
JC Chemical	59,392	AK Holdings	30,166
Incasi Raya	22,899	Tunas Baru Lampung	13,250
Astra Agro Lestari	25,539	PT Perkebunan Nusantara (PTPN) (in 2020)	
Musim Mas	5,954	Royal Golden Eagle	6,000
Wilmar International (in 2020)	-	Musim Mas	2,031
Kuala Lumpur Kepong (KLK)	5,000	Salim Group (in 2020)	
Dansuk Industrial	56,559	Astra Agro Lestari	3,000
Musim Mas	39,043	Wilmar International	2,994
KLK	6,999	KPN Corp	2,000
Royal Golden Eagle	5,000	Cahya Nusantara Lestari	500
Astra Agro Lestari	3,500	Sinarmas Cepsa	391
Incasi Raya (in 2020)	-	LG Corporation	19,802
Sinarmas Cepsa	1,900	Astra Agro Lestari	12,999
Bakrie Sumatera Plantation	117	Musim Mas	3,194
GS Global	46,496	Wilmar International	2,109
Astra Agro Lestari	21,000	KLK	1,499
Incasi Raya	7,499	10000-500	
Musim Mas	12,999	Other buyers (27)	60,555
Wilmar International (in 2020)	-		
KLK	4,998	Grand total	272,970

Source: Retrieved Indonesian trade data. PFAD and the role of main buyer SK Eco Prime were not included as it based on different shipping data.



Korean growers have significant non-compliance linked to environmental, social, and human rights issues



 Samsung's C&T Corporations Trading and Investment Group completed the acquisition of two palm plantations in Indonesia in 2008, aiming for a steady supply of palm oil for its biodiesel business.

Korean growers have significant non-compliance linked to environmental, social, and human rights issues



 JC Chemical, a Korean biodiesel producer, is allegedly involved in waste dumping through its subsidiary PT Niagamas Gemilang. JC Chemical's subsidiary PT Niagamas Gemilang operates a plantation and mill in Kutai Kartanegara, East Kalimantan. It produces CPO and Palm Kernel Oil (PKO). While Aidenvironment/Earth Equalizer measured a 3,774-ha concession area, JC Chemical refers to a planted area of 7,200 ha. In 2017, the Environment and Forestry Office of Kutai Kartanegara <u>suspected</u> PT Niagamas Gemilang of dumping waste water in the Jembayan river, leading to water pollution and the death of fish

#### Conclusions



- Korean-owned and Korean-linked growers have a significant deforestation footprint.
- South Korea becoming an important market for palm oil exporters.
- The largest South Korean buyers do not have NDPE policies.
- South Korea is therefore a key leakage market for growers/ exporters not compliant with NDPE policies.



#### Questions

FOR MORE INFORMATION, PLEASE CONTACT:

#### **Chris Wiggs**

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#### South Korean Companies Have Outsized Impact on Palm Oil Leakage Market

#### December 2020

South Korean companies are significat developers of plantations and buyers of p international markets. Six South Korean plantation overants have all issues linked to environmental, social, and ha international. Korindo Group, Samung CAT,

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### Presentation4

# Bioenergy supply chain risks – lessons learned from the EU civil society perspective

Almuth Ernsting Biofuel Watch Biofuels and Forest Biomass: Lessons from Europe Almuth Ernsting, Biofuelwatch 24<sup>th</sup> February 2021



# EU renewable energy policy heavily relies on bioenergy





of EU renewable energy.

### Drivers for the rapid expansion of forest biomass energy in the EU



From NRDC report about EU biomass subsidies, November 2019

- EU Renewable Energy Directive allows almost all bioenergy to count towards Member States' renewable energy targets.
- Member states therefore include forest biomass in renewable energy *subsidies, tax breaks and other incentive schemes*;
- Under the EU Emissions Trading System, bioenergy is *considered 'zero carbon*'. Energy companies burning coal or gas can thus save on carbon tax/permits by burning biomass, too.

### Most EU palm oil now used for biofuels



# Renewable Energy Directive associated with major intensification of logging in EU



+ 49% increase in logged forest area and 60% increase in biomass loss over Europe for 2016-18 relative to 2011-2015;

+ Average 37% increase in size of forest clearcuts

Graphics: Abrupt Increase in Harvested Forest Area Over Europe, G. Ceccherini et.al., July 2020



Estonia and Latvia are the EU's biggest pellet exporting countries. As demand for biomass goes up, so does the rate of logging. Forest birds are declining at a rate of 50,000 breeding pairs a year in Estonia every year.



### Growing imports, especially from North America





Pinnacle Pellet mill, Strathnaver, British Columbia

Stand.earth Report: "This investigation reveals with absolute certainty that wood pellets are being made from whole trees in British Columbia....Pellets are likely being made with wood from threatened species habitat, and a growing wood pellet export sector puts additional strain on endangered species like woodland caribou."

# Why burning "only forest residues" is not the answer

- The terms 'low-value wood' and 'forestry residues' include roundwood and can make up the majority of trees felled;
- Logging intensity driven by large-scale demand for 'low-value wood';
- Large-scale brash/slash removal harms soils, biodiversity and climate;
- Wood processing residues traditionally used to provide energy for sawmills, as well as for other purposes (e.g. panelboard) – no spare supplies available to justify renewable energy subsidies for such wood.



Truck taking what industry calls "residues and low-grade timber" to Enviva pellet mill in North Carolina, which supplies power plants in Europe. Photo: Dogwood Alliance

"Even if forests are allowed to regrow, using wood deliberately harvested for burning will increase carbon in the atmosphere and warming for decades to centuries —as many studies have shown —even when wood replaces coal, oil or natural gas. The reasons are fundamental and occur regardless of whether forest management is "sustainable."" *From a letter to the European Parliament signed by 800 scientists, January 2018* 

# Palm oil biofuels: Severe direct and indirect impacts on climate, forests and people







As biofuels push up the global demand for vegetable oils, palm oil becomes more profitable, and plantations expand – regardless of where a particular company gets its biofuels from.

# Why biofuel and biomass sustainability standards are not the answer - 1

Biofuel and large-scale forest biomass depend on renewable energy subsidies and other incentives for climate change mitigation.

Neither large-scale forest biomass nor biofuels from dedicated crops (including palm oil) are compatible with the need to limit warming to 1.5 or even 2 degrees.

So they inherently have no justifiable role to play in renewable energy policies.

# Why biofuel and biomass sustainability standards are not the answer - 2

No evidence that they can work:

The EU has had mandatory sustainability and ghg standards for biofuels since 2010, and several EU countries have had mandatory standards for biomass for many years.

There is no evidence that any of those standards have prevented even the worst types of biomass and biofuel sources.

# Why biofuel and biomass sustainability standards are not the answer - 3

Problems include:

- No credible way of independently auditing and verifying complex supply chains (e.g., major fraud in the Netherlands, involving 'Used Cooking Oil' biofuels more likely made from virgin palm oil);
- Certification and standards are not designed to address indirect impacts, which can be worse than direct ones;
- Impacts of logging and of monoculture tree and crop plantations on local communities, including Indigenous Peoples, are invariably ignored

### Conclusion

The only way to prevent large-scale climate, environmental and social harm caused by biofuels and forest biomass energy is to exclude them from the scope of renewable energy and other 'green' policies and to stop any subsidies for theme.

Sustainability standards are not a credible tool, even for damage limitation, as experience in Europe shows.

### Panel discussion

# Major issues of bioenergy supply chain risks and civil society responses in S.Korea, Indonesia and the United States

Shin-young Chung APIL



### Who are in the Palm Oil Supply Chain?





- Oil palm growers: oil palm plantation
- Refiners: refine crude palm oil (CPO) into various "palm derivatives"
  - Formula, palm olein, palm stearin, palm kernel oil, palm oil and its fractions...
- Manufacturers: manufacture varied products, foods (ramen), cosmetics, biodiesel, etc. by using a variety of refined palm oil
- In 2019, of 648,496 tons of import, 155,290 tons were used to make ramen (2019 food industry's raw materials consumption survey / 75.2% of foods using palm oil)
  - Increasing demand for bioenergy

Source: Oil palm and biodiversity (IUCN)

### Who are in the Palm Oil Supply Chain?

- Actors related to Korea along the palm oil supply chain that the civil society eyes
  - <u>Oil palm growers</u>: Companies which have plantations in Indonesia. Directly involved in environmental destruction and human rights violations
  - Government: The Ministry of Agriculture, Food and Rural Affairs (MAFRA) and the Korea Forest Service (KFS) have policies to support development of overseas agricultural/forest resources. Support plantation companies.
  - Financial institutions: National Pension Service (NPS), government agencies (the KFS, the MAFRA), Export-Import Bank of Korea (KEXIM) public funds // other private funds
  - Product manufacturers: processed foods such as ramen and snack, cosmetics, bioenergy feedstock - no campaign by company
  - Distributors: No domestic supply chain monitoring mechanism in place + campaigns targeting distributors are limited as palm oil is used as feedstock for consumer goods in various forms

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### **Showing Forests and People**

· Production of reports, videos, etc. based on local survey

- In 2016, as part of local survey of Korean companies in Indonesia, visited Korean companies' plantations in Riau and West Kalimantan and conducted survey. Violations of human rights/labor rights, complaints about environmental destruction issues. (2016 Local Survey Report on Korean Companies Abroad – Indonesia/ Korean Transnational Corporations Watch)
- In 2018, visited plantations in Central Kalimantan, Indonesia, and conducted survey through meetings with the Indonesian civil society. Published a report disclosing overall problems of the palm oil industry. (Does Spring Come to Stolen Forests / Korea Federation for Environmental Movements (KFEM), Advocates for Public Interest Law (APIL))

• In 2020, visited Korean companies' plantations in Papua, Indonesia and disclosed problems of human rights violations and environmental destruction through meetings with local residents and civil society. (The Last Hunt / APIL, KFEM)

### **Calling on Companies**

- Had press conference and campaigns in alliance with domestic and foreign organizations against major deforestation companies
- Filed a petition on human rights violations and environmental destruction of palm oil plantation companies in Indonesia with OECD NCPs
- Demand through investors requested responsible investment regarding environmental destruction and human rights violations (including suppression of local human rights advocates) happening in companies in which the NPS holds shares
- Put pressure through various media

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# **Calling on the Government**

- Against the MAFRA and the KFS, raised the question of lack of screening standards of environment/human rights violations in the process of their supporting overseas resources developments
- Against KEXIM, raised the question of lack of screening standards of environment/human rights violations in the process of its supporting overseas projects
- Called on the NPS to play an active role. Demanded it add deforestation, human rights violations, etc. to the socially responsible investment standards
- Used the UN processes induced recommendation through the Committee on the Rights of the Child and the Committee on Economic, Social and Cultural Rights

1. Establish a legal obligation for Korean companies abroad to exercise due diligence (regarding companies' activities and decisions, the duty to identify, prevent and avoid the risks of violations of human rights with due diligence to ensure they do not happen, and if such violations have occurred, to mitigate and account for the negative impact thereof), including those in the supply chain on which such Korean companies can have influence (subcontractors, suppliers and franchisees). 2. Public financial institutions should not recklessly invest in, provide loans and grants to, or give overseas development assistance to, Korean companies abroad which are involved in human rights violations. 3. Act upon allegations of violations of human rights by Korean companies abroad without turning a blind eye and ensure that victims can claim judicial or non-judicial remedies (E/C.12/KOR/CO/4, paragraphs 17, 18, 19 and 74)

# **Challenges Going Forward**

- Awareness of problems about increased palm oil use in the course of implementing the bioenergy promotion policy as part of the efforts to tackle the climate crisis. Need to raise a question about it.
- Absence of law/systems that can cover the overall supply chain campaign to enact the bill on supply chain monitoring and the bill on mandatory human rights due diligence
- Attention to the role of financial institutions. In particular, request public financial institutions establish investment standards that take into account environment and human rights
- · Need to amend the laws on overseas resources development

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### Panel discussion

# Major issues of bioenergy supply chain risks and civil society responses in S.Korea, Indonesia and the United States

Kurniawan Sabar INDIES



#### UNDERSTANDING ON LAND MONOPOLY AS THE SOCIAL BASIS AND SOURCE OF THE SOCIAL AND ENVIRONMENTAL PROBLEM IN THE DEVELOPMENT OF PALM OIL PLANTATION IN INDONESIA

Webinar Meeting "Understanding Bioenergy Trade and Supply Chain Risks" 24 February 2021 Organized by: Solutions for Our Climate (SFOC), Korea Federation of Environmental Movement (KFEM) and Advocates for Public Interest Law (APIL)





- Indonesia is the largest archipelagic country in the world with 13,466 islands, 1,922,570 km2 of land area and 3,257,483 km2 of water area
- Consists of 34 Provinces, 416 districts and 98 cities, 7,024 sub-district, and 81,626 villages.
- There are more than 1,340 nation tribes and 300 ethnic groups (the largest Javanese tribe 41%). More than 721 Local languages.
- The population is 270,054,853 million in 2018 (the 4th largest in the world)



#### Land Monopoly as the Social Basis of Economy

- Indonesia is the semi-feudal country under domination of the US imperialist. Indonesian economy is highly dependent on the backward-agricultural system which rely on large scale of land monopoly, backward technology, and export oriented of cheap raw material and agricultural commodity.
- Majority of land controlled by the big-landlords, mainly corporations (foreign and domestic) and the State which directly linked to the international monopoly of capitalism. These land (including forest) is used to develop and extent the plantations (timber, palm oil, sugar cane, rubber, etc.), mining, and mega-infrastructure.
- Land monopoly is the basis to create power and control in economy, politic, and cultural. By large-scale monopoly of land, corporations gain super profit and free to determine which land they want to acquire whether abandoned land or already own by people. They can even get power over the regulations, State, security protection, labour, and even control the knowledge. This is the real situation occurred throughout the country.
- Land monopoly has become the basis for land rent system which has plunged Indonesian people into the abyss of suffering. As consequences, Indonesian people not only lose of land, forest and natural resources, but the most dangerous condition is life-dependent on loan and usury, lose of sovereignty in production, distribution, and determine the price of commodity, even lose of right to develop the knowledge.
- In Indonesia, development of large-scale palm oil plantations is relying on this unjust system. Therefore, agrarian problem, conflicts, deforestation, human rights violations sustain and extend along with the existence and expansion of the palm oil plantation in many region.

# INDIES

#### Land Monopoly and development of palm oil plantation

- Indonesia has the biggest palm oil plantation area in the world. But very low productivity.
- Palm oil plantation companies have obtained permits of HGU (cultivation rights) to 26 million (or 29 million) hectares.
- 13 million (or 14 million) hectares have been planted (larger than South Korea). Mostly in Sumatera and Kalimantan/Borneo Island.
- There are 5.1 million hectares of oil palm plantation controlled by 25 big private corporations like Wilmar, Sinar Mas, IOI, Raja Garuda Mas, Batu Kawan, Salim, among others (Tuk Indonesia).
- New areas for palm oil plantation: Sulawesi, Maluku, and Papua.
- 70% of the total population is peasant. Approximately 56% of them just owned 0.5 hectares of land. Landlessness are increasing every year.
- 1,000 hectares of palm-oil plantation just can absorb average 200 workers. It means that every 1 person responsible to cultivate and manage of 5 hectares of palm plantation area with heavy workload, but without sufficient tools, technology and safety equipment.

#### Land Grabbing Actors; Monopoly of land and forest

Sector Driver	1980-2001	2004-2011-2014		2014-2025
Logging	72 Million hectares	25 Million Hectares		26,2 Million Hectares
Tree Plantation	2,1 Million Hectares	9,8 Million Hectares		12,5 Million Hectares
Palm Oil	4,1 Million Hectares Palm Oil + Cacao + Sugar + Coffee Plantation	6,2 Million Hectares	12,35 Million Hectares, by forest converted	26,3 
Mining	352.953 Hectares	3.2 Million Hectares		3.2 Million Hectares
Total	78,2 Million Hectares	38 Million Hectares	56,55 Million Hectares	80,5 Million Hectares
Sour	ce: WALHI, 2015			5
Legenda Provinsial Boundary Line 	Large scale i Kalimantan Palm oil = 4.111.2 Afining = 3.872.829 Cimber/Logging = 4	nvestment in ( 55 Ha (332 unit) Ha (875 unit) .894.408 Ha (89 uni	Central t	



#### Land Grabbing and Human Rights Violations

- The easier way to obtain the land/area for palm plantation is grabbing the land of people, peasants, and indigenous people.
- Obtained Legal permit doesn't mean that the corporation passed the right way to obtain the land.
- In 2013, over 3,000 conflicts occurred between palm oil companies and local communities according to the Indonesia land agency
- Intimidation, criminalization and torture of people is the part of practices of palm plantation companies to grab, extent, and sustain their plantation area.
- Recent research of agrarian conflict in Central Kalimantan shown that 80% of the conflicts (182 conflicts) occurred due to land acquisition problem by the corporations which majority of them are palm oil plantation companies (KITLV – WALHI Central Kalimantan, 2020)



#### Deforestation, Forest Fire, and Carbon Emission

- Aside of deforestation occurred in Kalimantan and Sumatera, new expansion of palm oil plantation will target mainly rainforest in Sulawesi, Maluku, and Papua.
- Destruction of rainforest and peat land functioning as a huge carbon tank leads to enormous emission of carbon dioxide.
- What is worse, fire is routinely used in the process of clearing lands for cultivation, which is the cheapest and easiest of land clearing in the peatland and forest. In 2015, large-scale fire occurred nationwide, and many of them are from the site of palm oil companies. Forest fire brings about serious air pollution. Haze having occurred in 2015 in Indonesia spread to Malaysia, Singapore and Thailand, which resulted in 19 deaths. 500,000 suffered from respiratory diseases.
- In October, 2015, the GHG emission due to the forest fire of Indonesia exceeded that of US due to economic activities (about 16,000,000-ton GHG emission a day).



### Lost of Biodiversity

- Lost of many important plasma nuftah as an impact of deforestation
- The main cause of biodiversity loss used to be logging to gain timber in the past but is now plantation-building for palm oil production.
- In the recent 16 years, 100,000 orangutans have disappeared in Borneo of Indonesia.
- 69% of the elephant habitats have been destroyed in a generation, and less than 100 rhinos are left in wild.
- 200 kinds of mammals and 500 kinds of birds including endangered species such as orangutans, elephants, rhinos, tigers live on Borneo and Sumatra in Indonesia whose biodiversity is being threatened because of large-scale plantations.



### **Problems of Palm Oil Plantation Worker**

- Heavy workload but paid with very low wages and unfair deduction of wages
- Lower wages for women labor
- Unpaid labors: women and children (Kernet workers)
- Inadequate safety equipment; labor has to provide the safety equipment by them selves
- Using the deadly toxic materials; Paraquat, Round up, Gramoxone without information and adequate education from the management of companies

### Thank You,...



INSTITUTE FOR NATIONAL AND DEMOCRACY STUDIES

### Panel discussion

# Major issues of bioenergy supply chain risks and civil society responses in S.Korea, Indonesia and the United States

**Rita Frost** Dogwood Alliance

# Forest, Climate, and Justice risks of wood pellet biomass



Rita Frost Campaigns Director rita@dogwoodalliance.org Dogwood Alliance

 Dogwood Alliance's mission and campaigns
Our wood pellet campaigns
Goals, target, strategy and tactics





# **Our Mission**

## Dogwood Alliance mobilizes diverse voices to defend the unique forests and communities of the Southern U.S. from destruction by industrial forestry.

- ≻ Transforming the Paper Industry
- > Our Forests Aren't Fuel: Challenging Industrial Scale Biomass
- ➤ Wetland Forests Initiative
- > Forests and Climate Thought Leadership and #Stand4Forests





## **Forests and Climate**



# Ground zero for a Global Debate Southern US

- > World's Largest Wood Product Producing Region
- > World's Largest Exporter of Biomass Wood Pellets
- ➤ Forest Disturbance Rates in the US South 4X that of South American Rainforest
- In the past 60 years, we have lost over 33 million acres of natural forests in the Southern US.
- In that same time period, industrial pine plantations have grown from 0 to 40 million acres.
- Communities on the frontlines of forest destruction are also on the frontlines of climate impacts

# Shifting from markets campaigns to political campaigns: Considerations

Shifting resources and attention from corporate accountability campaigns and political campaigns
Long-term political strategy
Developing an inside game
Understanding our targets
Working in coalition

≻Learning as we go

# **Examples from Dogwood Alliance's work**

≻European policy

- EU level, member state level
- ≻US domestic politics
  - Local level: city/county resolutions
  - State level: cultivating legislator champs, targeting Governor Cooper admin, Natural and Working Lands Group, influencer politics
  - National level: Stand4Forests platform and Week of Action
- Permit challenges agency engagement, public pressure, frontline community organizing













**\$** FORESTS SEP 24, 2018

Declan Foraoise



In the wake of Hurricane Florence and wildfires that have swept the country, over 200 organizations, scientists and elected officials – including 40 mayors from across the country – have endorsed a new effort to slow climate change by protecting US forests.



The initiative, called the <u>Stand4Forests platform</u>, comes as a new report called "<u>Seeing the Forest:</u> <u>Nature's Solution to Climate Change</u>" focuses on the high climate impact that burning wood for electricity has – namely, releasing up to 50 percent more carbon dioxide per unit of electricity than coal

Richmond County ....pdf ^ Submitting Public ....pdf ^

### **Connecting to our long-term strategy**



# Examples

**Goal:** EU Renewable Energy Directive Excludes Biomass from Subsidies

Target: EU Environment Commission

**Strategy:** Convert swing votes on the Environment commission through overwhelming opposition from key experts and influencers

**Tactics:** Direct advocacy and briefings, coalition letters (EU/US groups, climate scientists), media visibility and op-eds

# **Examples**



Goal: Pass a Stand4Forests resolution in a NC county

Target: County Commission

**Strategy:** Demonstrate public support and leadership opportunity for county to be first in the state to pass this resolution

**Tactics:** Public comments at county meetings, letters to the editor and op-eds, direct advocacy to county commissioners, grassroots mobilization - petitions

# Examples

Goal: Permit for Enviva wood pellet facility rejected

Target: Dept. of Environmental Quality

**Strategy:** Demonstrate widespread public pressure and opposition to industry, aligning with legal case against permit

**Tactics:** Coalition organizing, influencer politics (get legislators/important folks to contact DEQ), public comments and petitions, LTEs and op-eds, rally/visibility

# What if you don't get what you want?

- ≻That happens... a lot!
- Demonstrates structural and systemic injustices
- ≻Important to keep on keeping on
  - Example: EU 2030 plan > shift to member state focus, increased attention on increasing domestic political power
  - Example: Richmond County > legal strategy around air quality, push back against expansion





# **QUESTIONS? TAKEAWAYS?**

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**OUR FORESTS. OUR STRENGTH.**