

Parallel Session C: Climate Change Impacts
C3: Implications for renewable energy
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A Study on Civic Engagement into Energy Transition since Fukushima and its Impact on Renewable Energy Policy in South Korea

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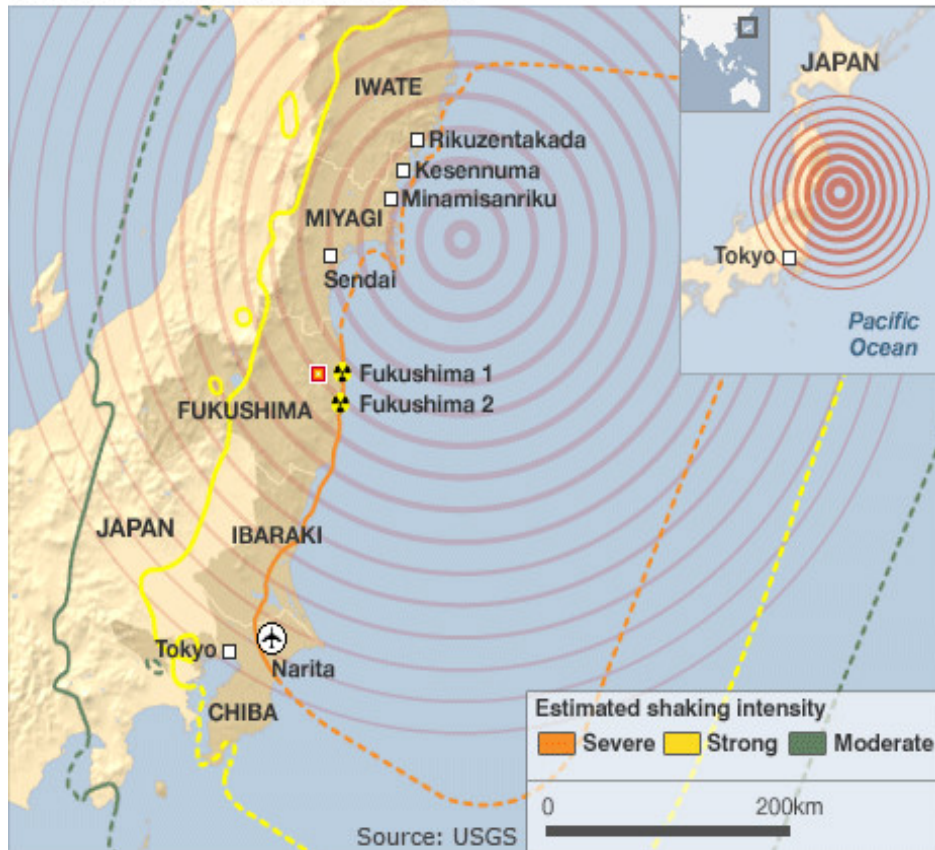
Seoul National University Asia Center

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1. Fukushima Shock and Its Impact

Areas affected by the quake



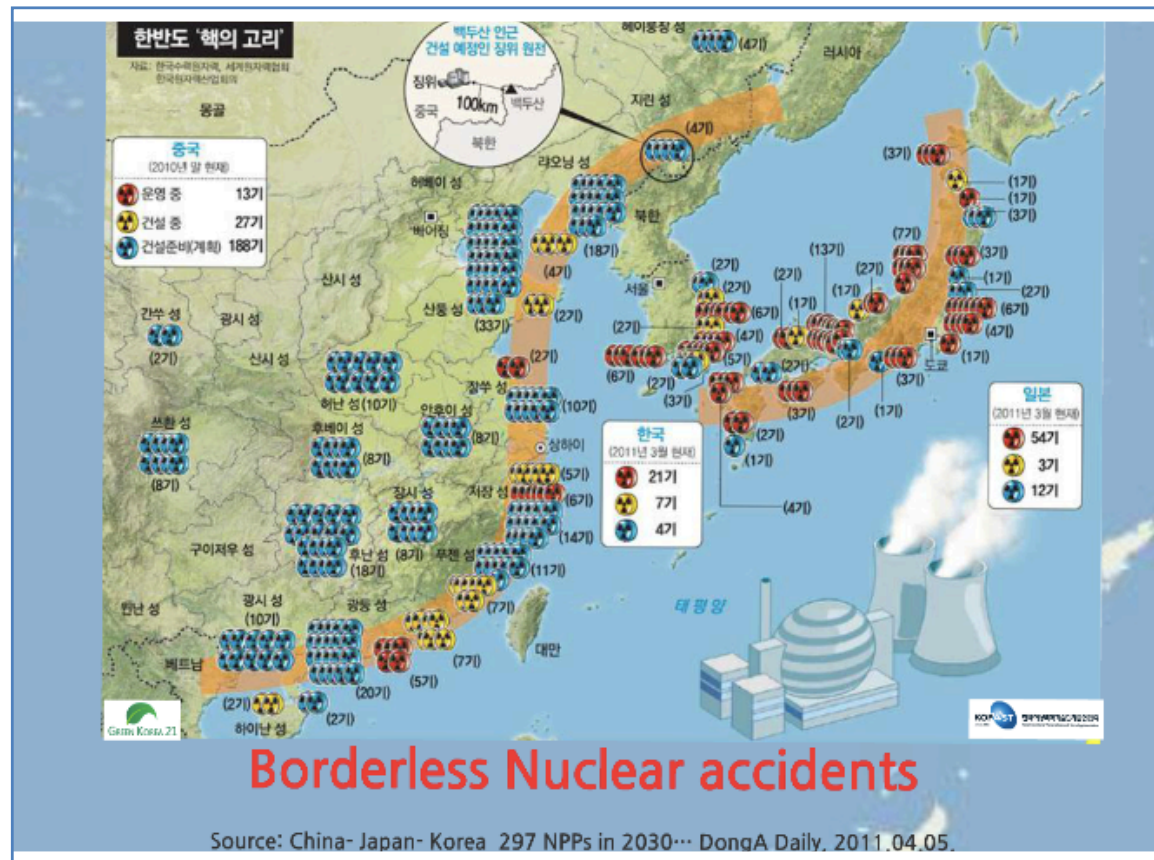
Source: Hiro Komae / AP

Fukushima Incident: Human Disaster, Not Natural one

1) Risk Society in Asia

	China	Japan	Korea
Running	38 (2018)	54(2011. 3)	24 (2018)
Construction	20	3	7
Planning	188	12	4

→ 297 NPPs by 2030



Nuclear Power Plants in Northeast Asia

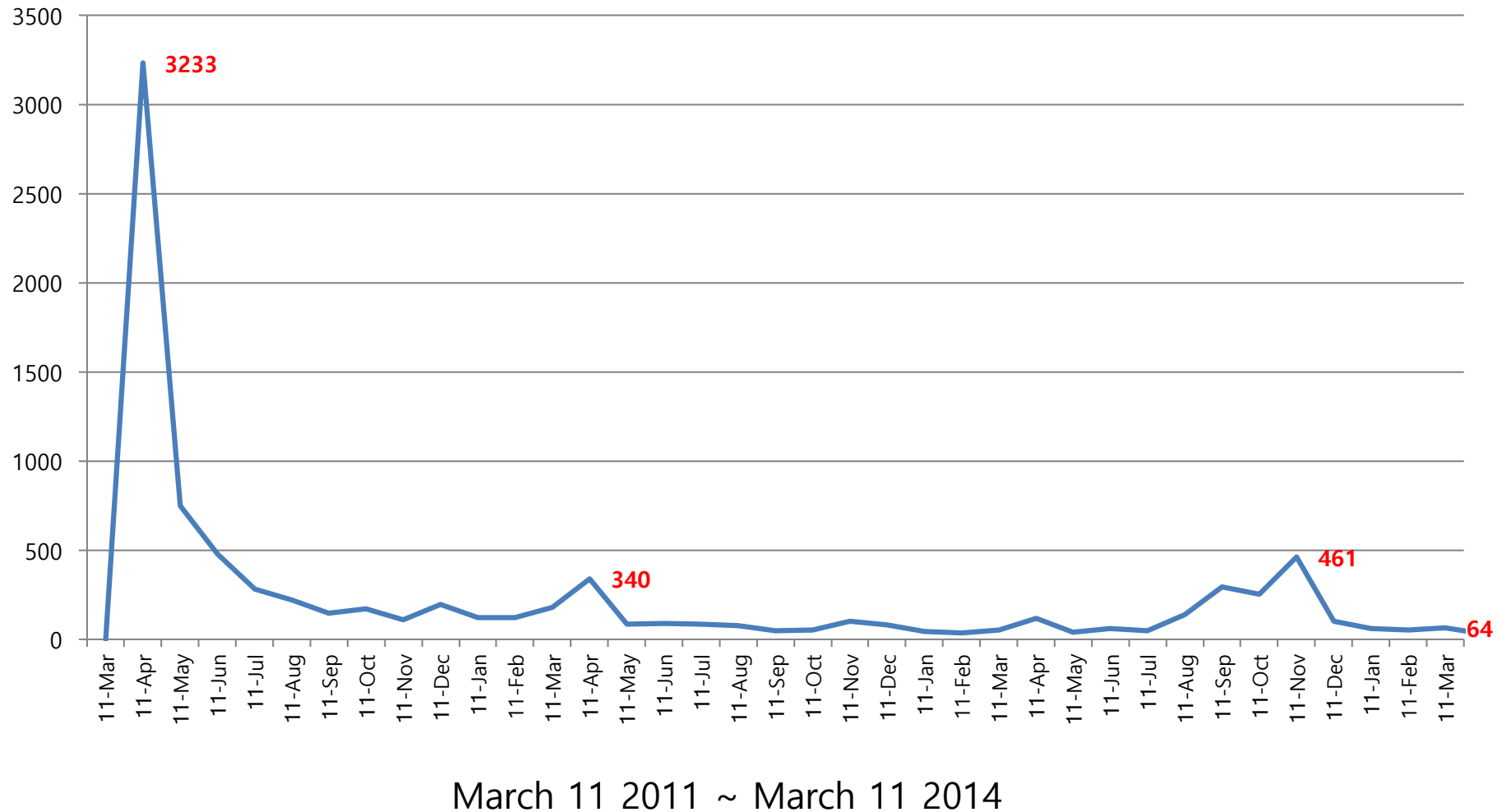
In 2018, China keep 38 nuclear power reactors in operation, about 20 under construction, and more about to start construction.



Source: <http://www.world-nuclear.org/information-library/country-profiles/countries-a-f/china-nuclear-power.aspx>

2) Post-Nuke Discourse: Rise and Fall

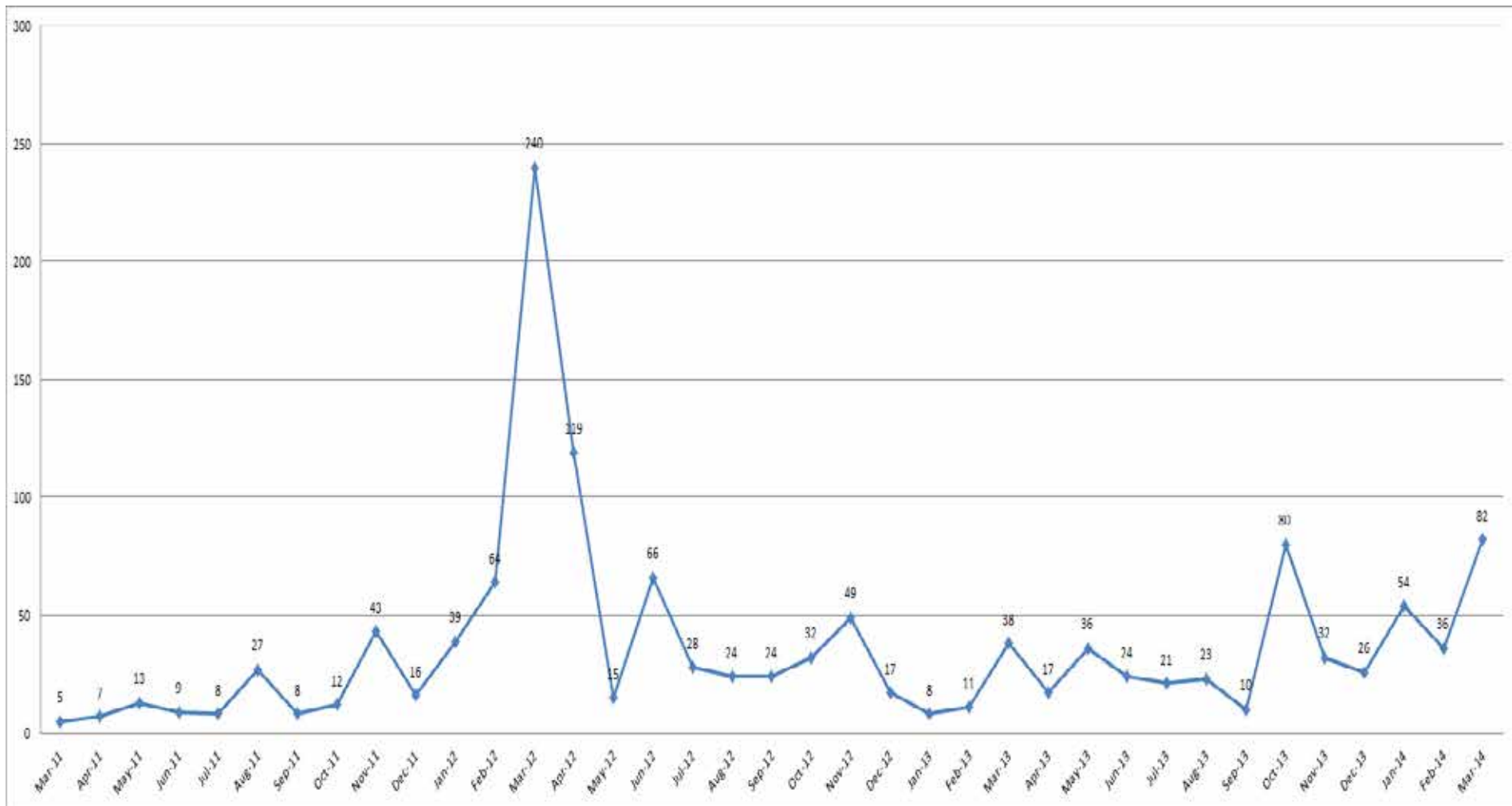
➤ *The number of four main newspapers' articles quoting "Fukushima"*



Source: KINDS (Korean Integrated Newspaper Database System, www.kinds.or.kr)

Post-Nuke (脱核) Discourse (2011-2014)

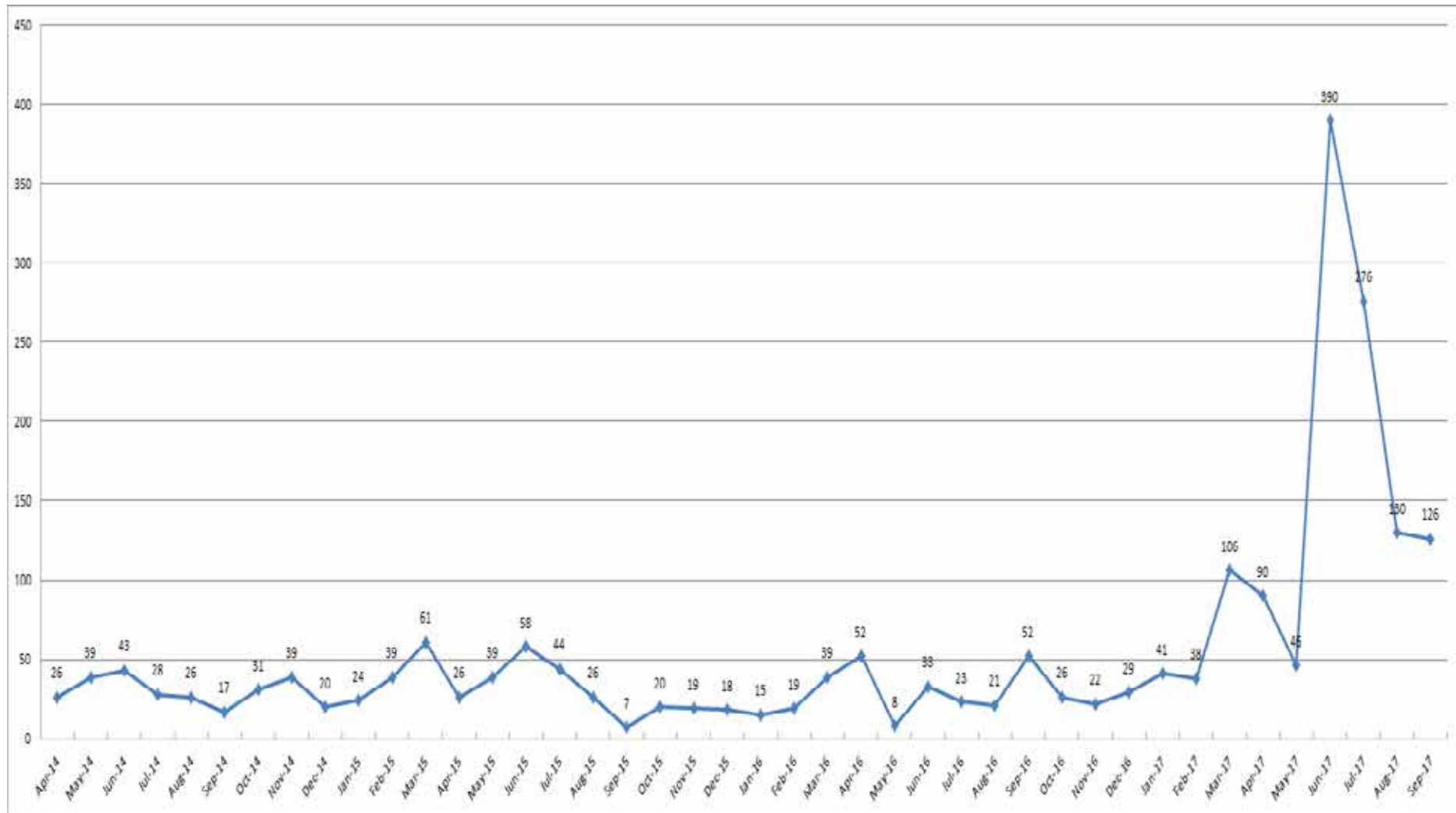
➤ *The number of four main Korean newspapers' articles quoting "Post-Nuke"*



Source: <https://www.kinds.or.kr/>

Post-Nuke Discourse (2014-2017)

The number of four main Korean newspapers' articles quoting "Post-Nuke"



<https://www.kinds.or.kr/>

2. Developmentalism in South Korea

1) Strong NUKE Industry



Rushed to Industrialization for Catch-up

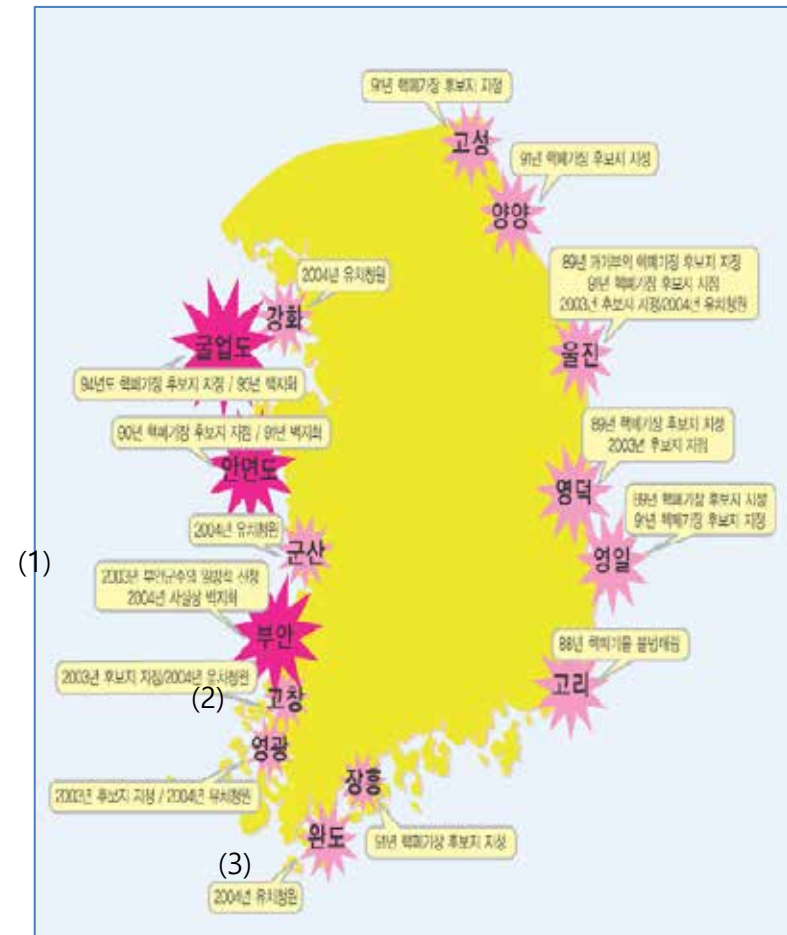
Promoting National Nuke Industry

Source: www.epj.co.kr

2) Value Conflicts

- Economic Value vs. Ecological Value

- ***Industrialization First, Democratization Later!***
- **‘Rushed-to Industrialization’ needs cheap and efficient energy like Nuke**
- **Isolated Local Activism in the 1990s and then hibernated**



Source: <http://nonukesnews.kr/>

“Winning the battles But Losing the War”

3. New Political Opportunity Structure

1) Policy Changes

- President Moon vowed to end Nuclear power plant Gori 1 reactor on June 19th, 2017 to increase renewable energy ratio.
- Public Deliberation Committee on Shin-Gori Nuclear Reactors No. 5 & 6, after the public hearings, decided to continue the construction on October 20th, 2017.



<Anti-Nuke Activism: Stopping Gori reactor 1>

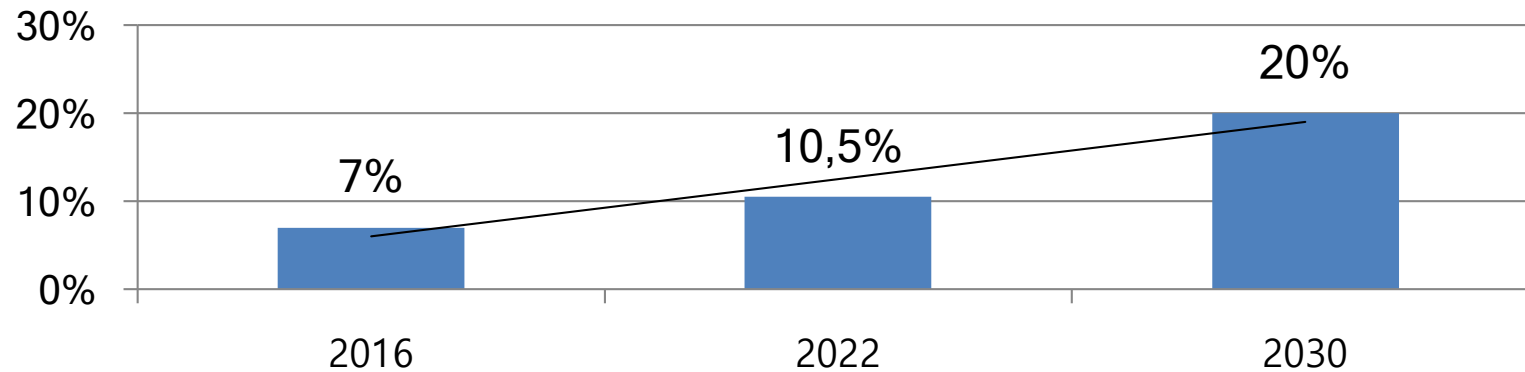


<Shin-Gori Reactors 5 & 6 under construction>

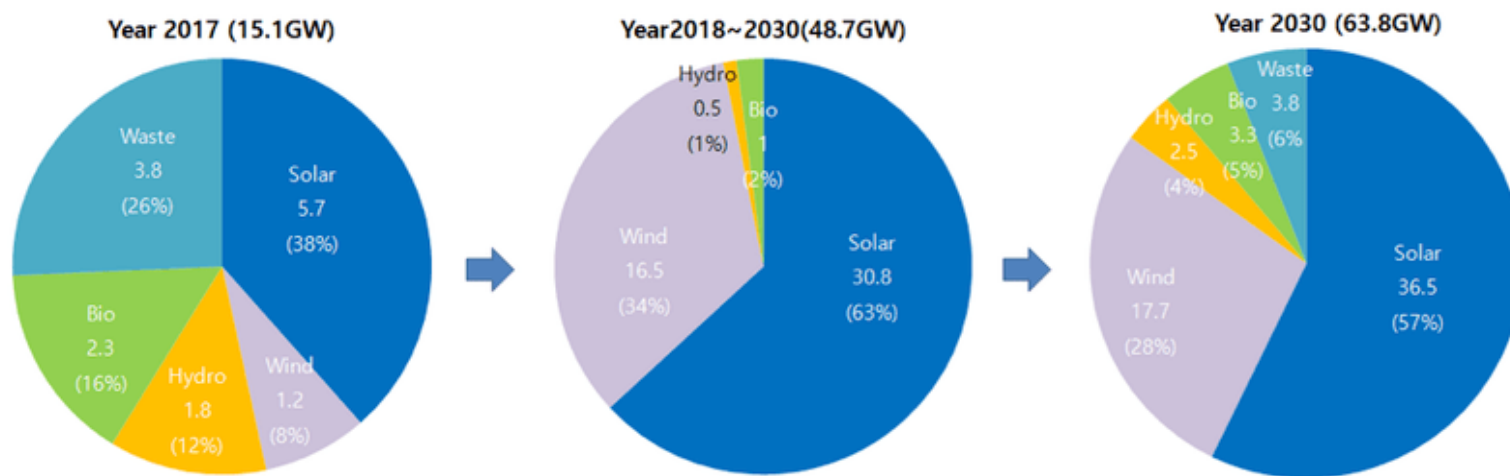
National Deliberative Poll for Nuke (2017)

- ✓ *Favoring NUKE for electricity
Yes 59% vs. No 32%*
- ✓ *Opponents increased 8% since
2011 of Fukushima incident*
- ✓ *61% women of the
respondents think Nuke as
dangerous*

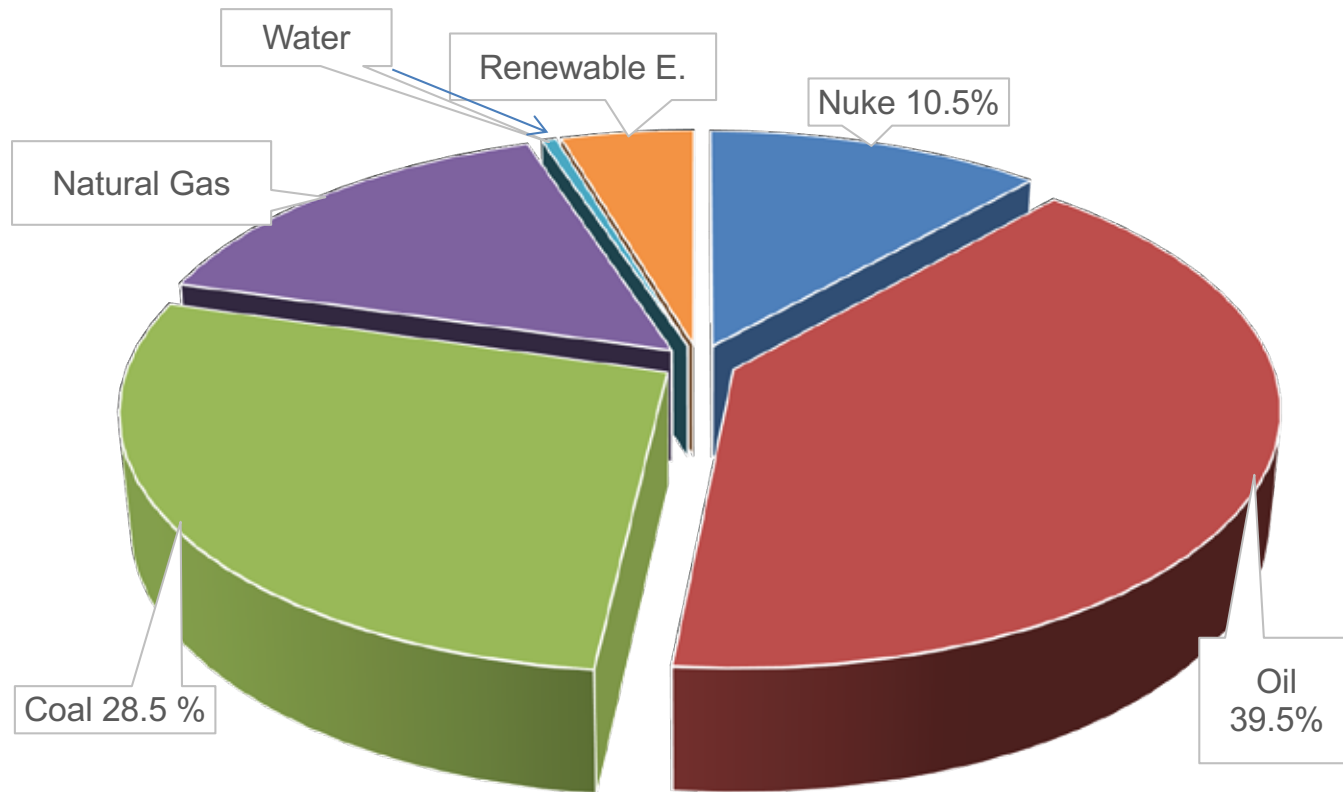
Korean Government Renewable Energy Policy: Action Plan 'RE 3020'



"Increasing the RE ratio by Largely Focusing on Wind & Solar Energy"



2) Energy Market Changes



**Energy Market in South Korea
(2017)**

SOURCE: KOREA ENERGY ECONOMICS INSTITUTE/ WWW.KEEI.RE.KR

Renewable Energy Plants in South Korea



Solar Energy @Yeongwol (40MW)



Wind Power @Young-Kwang (79.6MW)



Biomass Plant @Dangjin (105 MW)

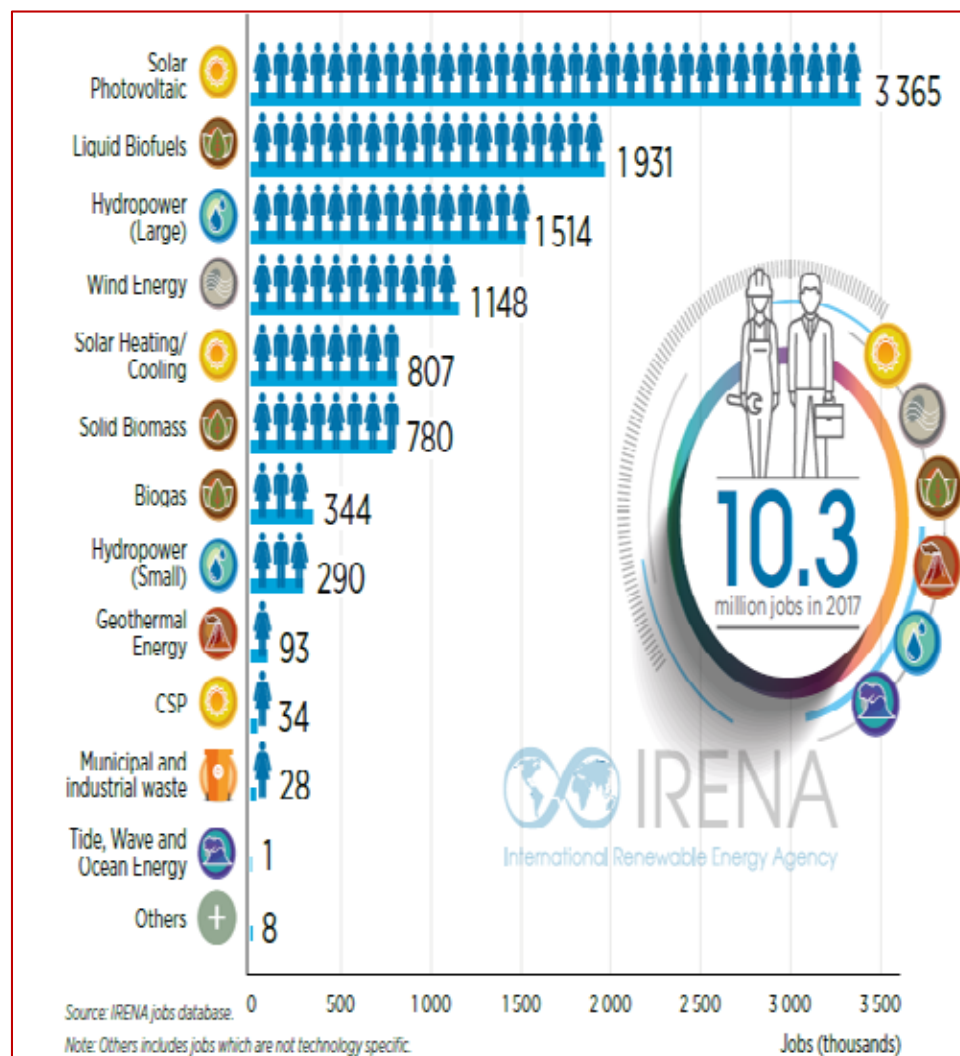


Sihwa Lake Tidal Power (254 MW)

Source: <http://www.yeongwol-news.com/news/articleView.html?idxno=8573>; http://m.cnews.co.kr/m_home/view.jsp?idxno=201904051402313800185#췁;
<https://www.gseps.com/kor/biz/biz1.aspx>; http://www.cpbk.co.kr/CMS/news/view_body.php?cid=672386&path=201702

New Jobs in Renewable Energy Industry

- *Creating Jobs in RE*
- *Clean and Safe Energy thru RE*
- *Preparing the society after Peak-Oil*

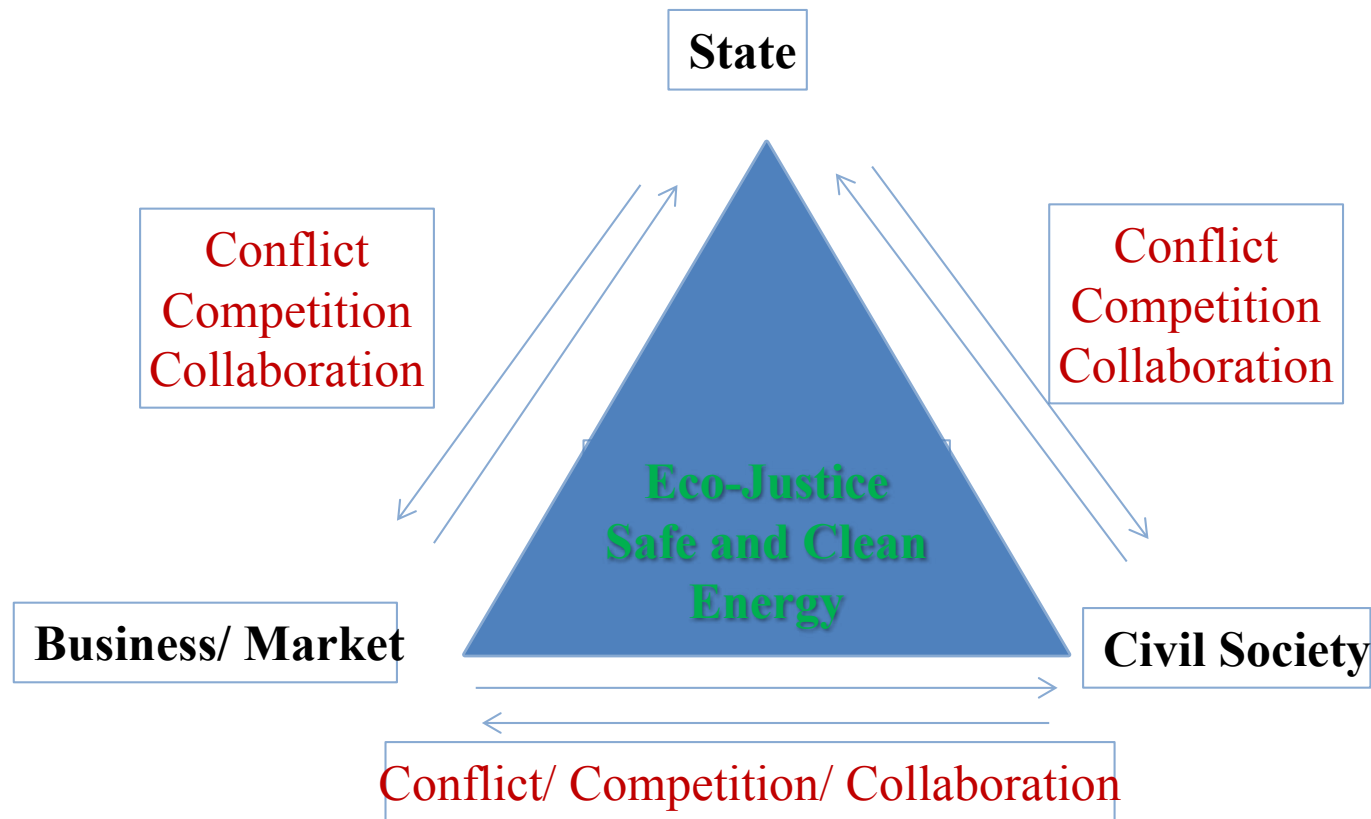


SOURCE: IRENA ANNUAL REVIEW 2018

4. Global Framing and Civic Engagement

- Global Framing (Sidney Tarrow, 2005)

“After Fukushima disaster, divergent movements in Korea are more likely to converge on justice through post-Nuke with expanding their activism beyond locality, movement sector, gender, and generation.”



Source: Lim & Kong (2006, revised)

1) Civic Engagement into Energy Transition

Civic Awakening Towards Energy Transition



**Coop Campaigns
for Solar Energy**



All Religious Groups' Engagement



**Young Moms Appeal for Future
Generation**

Learning, Campaigning and Collaborating: Citizens' Active Engagement



Post-Nuke Workshop @
Nursing Home



YWCA Campaigns



Solar COOP

Mobilizing and Participating: Government, Party, & Professionals



45 Local Governors' Networks for Post-Nuke, 2012



National Assembly No Nuke Group, 2016



National Council on Climate Change and Air Quality, 2019



Energy Transition Forum, 2019

2) Radical Frame Shift and Contention

- KEIA Case-

Korea Nuclear Energy Promotion Agency (KONEPA)

- As a sincere keeper of the Nuclear energy Culture since its establishment in 1992
- Promoting Education Program on Nuclear Safety Culture (ex) College Students majored in Nuclear Energy and Kids Cultural Events on NPPs



Advertising NUKE



Fukushima



Advertising RE

*Energy Education and Culture aligned to
Energy Transition*

Korea Energy Information Culture Agency (KEIA, 2017)

Framing Contention

- Mobilizing Mojos (Power Individual Journalists) and Influencers at Social Media
- Struggling with Fake News and Counter-frames
- Global Climate Strike against **Global Warming of 1.5°C**



5. Challenges Ahead

1) Domestic Challenges

- Institutional and legal arrangements
 - Value changes towards ecological values
- Civic campaigns
 - Not RE plants but energy saving and reduction
- Social Business
 - Specialty and competence in RE Social Enterprises
- Top-down national projects for RE without deliberative process at local level
- Rural Sprawl and reckless development with RE facilities

2) Regional Challenges

- Tokyo Olympic in 2020
 - ✓ Planning to dump radioactive water into Pacific
 - ✓ Food Security Issue: Providing food produced at Fukushima region to the Olympic participants
 - ✓ Soccer, Baseball, and Softball games will be held near Fukushima
- Fukushima is our great teacher!
 - ✓ Absence of Japanese Civil Society in Global Solidarity Movements against the Abe administration and IOC.
 - ✓ Remember the Chernobyl disaster and Make a good example of energy transition for global civil society.
 - ✓ Scoping out Regional Collaboration towards Energy Transition to Renewable Energy

Q & A

