

The Potemkin Village of Green Governance of An Export-Oriented Island Economy in East Asia

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Abstract

Driven by the transition pressures from downstream end-users, manufacturing waste management has emerged as an existential issue for corporations. Primarily, regulatory baselines must not be breached, as facing punitive fines or operational halts imposes catastrophic impacts on businesses. Moreover, the extent to which circular economy practices are integrated critically affects the enterprise, directly dictating waste disposal expenditures and the profit margins of resource recovery. However, within a certain export-oriented island economy in East Asia, a series of paradoxical dynamics generates severe operational strains for enterprises. While one would theoretically expect an export-reliant economy to cultivate a highly business-friendly environment, the reality is quite the opposite. Grassroots environmental organizations, emerging in tandem with the region's democratization, have weaponized the Environmental Impact Assessment framework and referendum mobilizations to establish themselves as a pivotal third-party force, profoundly dictating the political and economic trajectory of the economy. Employing an outcomes-based analytical lens, this research deconstructs the Potemkin Village model of public governance in this economy—a systemic façade collaboratively erected by executive authorities and legislative bodies under the intense pressure of grassroots environmental advocacy and electoral politics. This study concludes that the façade of superficial compliance—erected upon the foundations of electoral politics and draconian penalization—drastically escalates the transaction costs for commercial activities, ultimately undermining the sustainable economic development of the region.

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1. Introduction

1.1 Nature of the Enterprise

Within the global paradigm of the circular economy and fighting climate change companies in an island economy in East Asia that depends a lot on exporting have to make changes. These companies are pushed by the needs of their customers outside their country. They have to meet the expectations of sustainability, which includes social and governance standards to stay in business for a long time.

The rules about the environment in this economy have changed a lot. At first the rules were about cleaning up after pollution. They made sure factories didn't pollute much by setting strict rules on what they could put into rivers or air. This was like a 'pollute then control later' way of thinking. Then because of politics and different groups trying to win the rules changed to focus more on not making waste in the first place. The government made rules that made companies responsible for recycling their products. Now the rules are moving towards an economy. This means trying to keep resources in use for long as possible rather than just using them once and throwing them away.

For a place that depends on bringing in materials and sending out products it's not possible to have a full circle of recycling. So companies have to create a circle by only focusing on the waste they make themselves not the waste made by their customers. This is done by following rules like those from ISO 59004:2024, which means they only recycle what they make in their factories.

There's also a problem with who pays and who benefits. The companies that make the products have to spend a lot on being green but the ones that sell the products get the rewards. Big brand companies, at the end of the supply chain make their suppliers follow rules. These rules make the companies pay for checking their carbon footprint buying energy and making their processes cleaner. These are costs that the companies have to take on even if they don't get money for it.

Furthermore, the companies that pay for the changes are the ones who don't get the benefits. The brand companies sell products that are seen as green and charge more which makes them more money. The companies that make the products can't charge more for their work. This makes it hard for them to cover their costs. Because of this companies end up pretending to be green just to stay in business. They do this to look good without making real changes.

2. Literature Review

2.1 Waste Disposal Act Article 30

When an enterprise commissions clearance and disposal of its waste, it shall take up joint liability with the commissioned agency for the clearance of the waste. If the commissioned agency fails to properly clear the waste and the commissioning enterprise does not exercise its due care, the commissioning enterprise and commissioned agency shall be liable for joint environmental clearance and improvement in terms of the waste.

Enterprises have an unchangeable responsibility for handling and getting rid of the industrial waste they create. Many companies believe that just sending waste to a government-approved and legally allowed company for disposal—through a business contract—keeps them safe from any problems that come later. According to strict rules in Article 30 of the Waste Disposal Act Ministry of Environment (2017) and other laws, that idea is very risky.

If a company that is allowed to handle waste does something while moving or getting rid of the waste—like throwing it away illegally to the company that made the waste is not free of blame. The law says that the company that made the waste and the company that handles it share responsibility. If the company that made the waste only followed the rules on paper and didn't really check what happened next—like not making sure the waste was tracked not checking the papers that show who had the waste or not checking the company regularly—they will be found guilty of not doing their job. If that happens the company won't just get fines. The people who run the company and the people in charge of the environment might face charges. Also the company will have to pay for cleaning up and fixing the environment along with the company that caused the problem. The idea behind this rule is to stop companies from thinking they can buy their way out of responsibility. It makes companies make sure they control where the waste goes and how it is handled.

When companies that are allowed to handle waste do things it makes the companies that hired them take on all the costs and risks. This is not fair. It also means the government is not doing its job. The government must check these companies share information and warn people, about problems. It is not right for the government to make companies pay for everything while not doing its job. This unfair situation makes companies create ways to look like they are following the rules. This is how they stay in business.

2.2 Criminal Code of the Republic of China Article 190-1 & 190-2

Ministry of Justice (2023). A person who throws, abandons, drains, releases or uses other manner allowing a poisonous substance or any other substance that may harm health to pollute the air, soil, or rivers or other bodies of water and thereby causes harm shall be sentenced to imprisonment for no more than five years, detention, or a fine or combined with a fine no more than ten million dollars. Statutory frameworks dictate that, if someone dumps or releases things into the air, soil or water it is a crime. This is true even if it does not cause any danger. By doing this the state makes it easier for itself to prove that a crime was committed. This does not mean the costs just go away. Instead, the state makes companies pay for these costs. This way of doing things is very strict and the same for everyone. It is so strict that even smoking outside could be considered a crime if it is seen as polluting the air.

This is true even if no one is actually hurt by it.

1. The state is making companies responsible for things that might not be their fault.
2. This can cause problems for companies because anyone can report them for doing something even if they did not really do anything wrong.

In effect, the state shifts the responsibility for addressing problems that fall within its own regulatory and institutional domain onto private enterprises. By externalizing these compliance burdens while simultaneously failing to upgrade centralized infrastructure, the regulatory framework projects an aura of enforcement severity without offering systemic solutions to industrial waste deficits.

The state requires private enterprises to cooperate with government authorities in fulfilling environmental protection objectives. However, when government-certified vendors subsequently engage in illicit operations, shifting the entirety of governance costs and legal risks onto enterprises that lawfully contracted with them creates a severe asymmetry of liability. Furthermore, this practice constitutes a gross abdication of the public accountability inherent in state administration.

While corporations undeniably bear an obligation to exercise due diligence in the selection and oversight of their contractors, the state is equally obligated to establish robust auditing procedures, transparent information-disclosure mechanisms, and early-warning systems to mitigate the systemic risks associated with illegal dumping. Consequently, it is fundamentally inequitable for the state to disproportionately externalize the costs of environmental governance onto the private sector while neglecting its post-approval supervisory and enforcement duties. Ultimately, this structural externalization of costs perversely incentivizes enterprises to construct "Potemkin Village" compliance façades as a survival mechanism for maintaining long-term corporate viability.

Criminal Code of the Republic of China Article 190-2, Ministry of Justice (2023). A factory or business proprietor, supervisor, agent, employee or other personnel who commits the offense set forth in the preceding paragraph in the performance of his occupation shall be sentenced to imprisonment for no more than seven years and may be combined with a fine no more than fifteen million dollars.

The law says that people like agents employees or other practitioners are included in rules. This is a problem because it is not clear what is expected of them when it comes to issues. This has caused a lot of worry among executives and a lot of fear among people who work on environmental issues. They are afraid of being sued for something they did not mean to do. Because of this many people who are good at their jobs do not want to work on issues for companies. The thing that is more worrying is that people are just pretending to follow the rules so they do not get in trouble. They are making it look like they are doing the thing but really they are just trying to protect themselves. Environmental professionals and corporate executives are both affected by this. Environmental professionals are scared and corporate executives are worried. This is all because of the law and how it includes people like agents, employees or other practitioners.

2.3 Municipal Solid Waste Incinerator

For island economies that focus on exporting and have little land and a lot of industry putting up big projects that hurt the environment often causes a lot of 'Not In My Back Yard' protests. In this situation improving projects is not just about engineering. It becomes a problem about trust between people and politics.

In this kind of economy groups that care about the environment start because of votes and politics. These groups were meant to check the government and businesses. Over time, however, this initially constructive approach has generated unintended consequences, as these groups have increasingly demonstrated resistance to further improvements, in technology. They use words and political power to stop new projects from being built. This way of fighting makes it look like they won by stopping pollution. It actually causes a big problem. Old and not working trash burners have to keep going because there are no ones. This leaves the businesses with a problem of how to deal with trash.

2.4 Nuclear Power Plant

Consider the highly contentious 'Lungmen Nuclear Power Plant' as a paradigmatic case. Despite the staggering sunk costs of public funds already invested in the facility, the competent authorities capitulated to populist resistance, opting for institutional abdication and compromise. By halting the mid-construction infrastructure and revoking its permits, the government engaged in a performative display of political correctness to 'defend the environment,' while turning a willfully blind eye to the deteriorating energy crisis. Meanwhile, grassroots environmental organizations accrued substantial social influence and political capital through policy paralysis; they bask in the halo of 'environmental pioneers' without bearing any policy accountability for the ensuing energy deficit.

2.5 Petrochemical Case

The Kuokuang Petrochemical case institutionalized a golden formula for environmental resistance in this economy: the transmutation of objective engineering and scientific complexities into moral dichotomies and electoral leverage. Throughout this controversy, public discourse was entirely bereft of any capacity for 'pragmatic negotiation.' For instance, rational inquiries—such as whether a sustainable equilibrium could be achieved by downscaling the project or integrating state-of-the-art pollution control technologies—were systematically marginalized. Under immense electoral pressure, the Environmental Impact Assessment (EIA) committee forfeited its professional independence, culminating in the highest political leadership unilaterally issuing a 'death warrant' for the project. This profoundly corroborates our preceding thesis: the EIA framework has devolved into a mere instrument for radical advocacy and political calculus, effectively asphyxiating the potential for the iterative upgrading of critical infrastructure. Ultimately, this flagship joint venture, once heralded as the next-generation beacon of the economy's petrochemical sector, was effectively dissolved.

2.6 The Absolute Demand for Zero Pollution Inherently Translates to Zero Production

The way grassroots environmental groups talk about pollution issues in a way significantly escalates the associated transaction and compliance costs. Williamson (1985), when people believe in moral rules they see fair deals and technology solutions as helping the bad guys. This makes it really hard to talk and work together. It stops things from getting done. To break this situation we need to go back to basic economic ideas. Using things like carbon prices making companies pay for the damage they do and clearly saying who owns what can help make environmental problems part of the cost of running a business. By changing the way we talk about the environment—instead of saying it's good or bad we should talk about costs and prices—can we make things better and get real green projects built. This research says we need to stop pretending there's a rule-based cover. We should look at the effect on the environment from not making decisions and from slow policies. Later parts of the research will look at the problems from politics getting in the way of the environmental impact assessment and the problems from not agreeing on rules from the waste disposal law and the criminal code. The goal is to build a theory, for fixing these problems and find a way to help the regions green projects move forward.

3. Research Methodology

3.1 Environmental Impact Assessment Act Article 14-1

Ministry of Environment. (2023). The industry competent authority may not grant permission for a development activity prior to the completion of an environmental impact statement review or the authorization of an environmental impact assessment report; permission granted in violation of this regulation shall be invalid.

3.2 Basic Environment Act Article 24

Ministry of Environment (2002). The central government must establish an environmental impact assessment system to prevent and mitigate the adverse impact of government policies or development actions on the environment.

The Primordial Green Transaction: An Attempt to Make Environmental Problems Part of the Plan. The main idea of Solid Recovered Fuel technology is to turn waste plastics and biomass into fuels that can replace coal. This is a way to reduce carbon that many countries agree on. To deal with the problem of getting rid of industrial waste the Ministry of Economic Affairs allowed three private groups to build Solid Recovered Fuel facilities in the Guanyin Industrial Park in Taoyuan. If we look at this situation using the ideas of Institutional Economics we can see that it is an example of companies and the government working together to make a deal. These companies put in a lot of money. manufacturing waste management used advanced technology to reduce pollution trying to make the environmental problems part of their plan through the market.

If this had been done with regulation and compensation for the community it would have been a win-win situation solving problems for companies and helping the local economy.

3.3 Moral Hijacking and Very High Transaction Costs

However this project happened at the same time as a big national election. Groups that advocate for causes and local politicians got involved, creating a very divided and emotional situation. They made people think that Solid Recovered Fuel facilities were the same as incinerators, which is not true. They called it "green energy" and said it was bad for the community. When the conversation changed from being about science and risk to being about right and wrong it was no longer possible to have a discussion. Any suggestions for making things better or compensating the community were seen as trying to bribe people. This way of thinking made it impossible to talk about the technology in a way.

The consequentialist endgame is not the best outcome and punishing companies looking at what happened to the solid recovered fuel projects in Taoyuan we can see that the effects on the environment and society are very bad. This failure shows up in two ways: The Not-so-Good Outcome: After the Solid Recovered Fuel facilities were stopped the industrial waste did not just disappear. It went back to being burned in incinerators that are not good at reducing pollution or it was put in open-air landfills. This actually made carbon emissions and pollution worse not better. Companies Leaving and Having to Pay a Lot: The companies that were affected were very upset. Asked the government for a lot of money about NT\$18 billion. This has made foreign investors lose confidence in the countrys ability to handle issues and it has made them take their money away.

3.4 Causing a Regulatory Crisis

The lack of ways to get rid of waste has caused a big problem making waste treatment costs go up a lot and making the industry more illegal. Companies that make waste are now at risk of being punished even if they did not do anything wrong. Environmental officers are also in a position with no good options for getting rid of waste and at risk of being punished.

In the end this situation shows us that advocacy and political decisions even if they seem morally right do not actually reduce pollution. They can actually make things worse, by stopping the use of green technology leading to big economic problems, regulatory issues and environmental damage. The solid recovered Fuel technology is still an idea and it can help reduce pollution if it is used correctly.

4. The Internal Potemkin Village: The Nominal Governance of Environmental Compliance Officers

The problem of information being created under the pretense of following the rules is a big issue. When companies have to follow rules and also cut costs their environmental officers are forced to make things look better than they are. They might hire companies that offer low prices but have a high chance of breaking the rules. They might even change documents to hide what's really happening. This shows that when big improvements are stopped by people who don't care about the thing to do companies end up making things up to survive. Even though companies say they are following the rules in their reports the truth is that they are building an image on top of real problems and lies.

Table 1: The Self-Reinforcing Cycle of the Internal Potemkin Village

	Core Phenomenon	Systemic Outcome
Policy Paralysis	Advocacy groups weaponize regulations to block new infrastructure	Stagnation of legal disposal capacity
Capacity Contraction	Waste is diverted to obsolete, inefficient facilities	Deterioration of overall system efficiency.
Market Distortion	Hyperinflated disposal costs create economic incentives for evasion	Proliferation of illegal dumping and black markets
Internal Scapegoating	Executives force cost-cutting; frontline staff falsify data and bear the blame	Erection of the Internal Potemkin Village
Feedback Loop	The scapegoating obscures the root infrastructure deficit	Stricter regulations and renewed resistance

When groups that want to change things stop the ways to build new facilities it causes a lot of problems. This makes it really expensive to get rid of waste and ends up in a situation where no one can get rid of waste for any price. Company leaders, who want to keep making money and stay in business use hidden ways to make the people who handle the rules fix the problem at the cost. These people are stuck between the pressure from their bosses to save money and the risk of getting in trouble with the law. They are also scared of rules like certain parts of the law that punish people for lying, as demonstrated by the structural dynamics outlined in Table 1. Because they need to stay in their jobs some of these officers make up numbers in the reports or ignore the companies that might break the rules. When the police find out about waste the company leaders usually don't get in trouble. They say that other people were in charge or that they couldn't have known. The people at the bottom who sign the papers end up being blamed. They face the punishment when the system fails. Companies make it look like they are doing the

thing by having environmental teams and getting special certificates. They show they are following the rules in their reports. This is not real. It is used as a way to avoid problems. The government makes it look like they are taking action by punishing the people at the bottom. The company leaders keep their image by blaming these workers. This way both sides hide the issues with their systems. The big problems with the way things are built end up causing problems inside the company.

This process constitutes a self-reinforcing cycle in which regulatory constraints, infrastructural deficiencies, and institutional responses progressively intensify one another. Initially, groups seeking to alter existing arrangements may employ regulatory and procedural mechanisms to oppose the construction of waste-management facilities. While such opposition may arise from legitimate environmental or social concerns, the resulting constraints on infrastructure development can reduce the system's capacity to manage waste effectively. As disposal capacity becomes increasingly inadequate, waste is redirected toward less efficient or inappropriate facilities and sites, further increasing operational pressures and systemic inefficiencies. These conditions may subsequently increase the economic costs of lawful waste disposal, thereby creating stronger incentives for regulatory circumvention, including illegal dumping and the development of informal waste-disposal networks. Rather than addressing these underlying structural problems, governmental institutions may respond to the resulting failures by attributing responsibility to private companies and frontline actors. This displacement of institutional responsibility onto individual organizations and workers not only obscures the structural origins of the problem but may also reinforce the conditions that generated the failure in the first place. The resulting cycle illustrates how regulatory intervention, inadequate infrastructure, informal practices, and the externalization of institutional responsibility can become mutually reinforcing, thereby contributing to the formation of what this study conceptualizes as an Internal Potemkin Village.

5. Equal Consideration

National Assembly (2005). Additional Articles of the Constitution of the Republic of China Article 10. Environmental and ecological protection shall be given with economic and technological development.

While this economy is not unique in mandating an "environmental compliance officer" regime, the practical execution of this framework has mutated into a globally anomalous mechanism defined by a "profound asymmetry of power and accountability" and systemic "risk externalization. The law is a weapon. Enterprises must leverage constitutional guarantees to hold stakeholders accountable, demanding that the deployment of new commercial investments no longer be paralyzed by moral hijacking and political coercion. Ultimately, such constitutional pushback is imperative to prevent the entire nation from degenerating into a systemic Potemkin Village.

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