



Republic of the Philippines  
**Department of Environment and Natural Resources**

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**MEMORANDUM**

**TO :** **THE DIRECTORS**  
Biodiversity Management Bureau  
Ecosystems Research and Development Bureau  
Mines and Geosciences Bureau

**THE ADMINISTRATOR**  
National Mapping and Resource Information Authority

**FROM :** **THE UNDERSECRETARY**  
Finance, Information Systems, and Climate Change  
DENR Permanent Representative to the NTF-WPS

**SUBJECT :** **REQUEST FOR COMMENTS ON FLOATING  
PLATFORM DEVELOPMENT FOR THE WEST PHILIPPINE  
SEA**

**DATE :** 1 July 2021

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This refers to the letter of the Office of the President-Office of the Chief Presidential Legal Counsel (OP-OCPLC) dated 03 May 2021 regarding floating platform development for the West Philippine Sea.

The floating platform development was raised by Mr. Bert Ginamos on 30 April 2021 thru electronic mail to Secretary Panelo and is included as attachment to the mentioned letter of OP-OCPLC. May we request for your comments on the floating platform development raised by Mr. Bert Ginamos, to be submitted within seven (10) days from receipt of this Memorandum

For your appropriate action.

  
ATTY. ANALIZA REBUELTA-TEH

MEMO NO.2021-511

**Let's Go Green!!!**

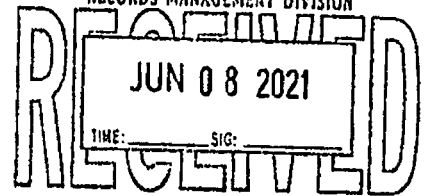


Office of the President  
**OFFICE OF THE CHIEF PRESIDENTIAL LEGAL COUNSEL**  
4th floor, New Executive Building, Malacanang, Jose P. Laurel Street, Manila

May 3, 2021

**MR. ROY A. CIMATU**  
*Secretary*  
Department of Environment and Natural Resources  
National Ecology Center, East Avenue  
Diliman, Quezon City

DEPT. OF ENVIRONMENT AND NATURAL RESOURCES  
RECORDS MANAGEMENT DIVISION



Re. : **Floating Platform Development for the West Philippine Sea**

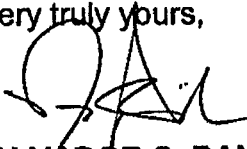
Dear Secretary Cimatú:

We write to refer the electronic mail of Mr. Bert R. Ginampos on April 30, 2021 anent his concern relative to the above-captioned subject. A copy of the said communication is attached as Annex "A" for your reference.

Pursuant to the President's commitment for good governance, transparency and immediate action on matters that affect the welfare of the people, we respectfully refer this matter to your good office for your evaluation and whatever appropriate action you may want to undertake in accordance with pertinent laws, rules and regulations. We kindly request that your good office update us of any development with respect to the same for record purposes and for whatever action this office may want to undertake consistent with law and the policy of the President on efficient public service.

Thank you for your usual prompt attention. I remain

Very truly yours,

  
**SALVADOR S. PANELO**  
*Chief Presidential Legal Counsel*

KFR

**Floating Platform Development for West Philippine Sea, Bridge, Farms etc**

1 message

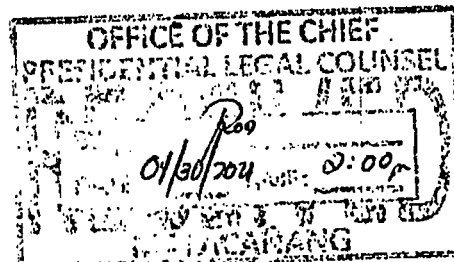
Bert Ginampos パード ギナンポス <bertg23@gmail.com>  
 To: ocplc.neb@gmail.com

Fri, Apr 30, 2021 at 3:46 AM

Hon. Sec. Panelo,

Great day!

Bert once again...



This time, I would like to share and introduce to the Office of the President an exciting, efficient, eco-friendly and sustainable innovation called **FLOAT (Flexible Land on Aquatic Territory)** from my Dutch contact, Koen Olthuis, a world renowned in Floating platform development to be used as an alternative solution to land-fill based reclamation, fast structure deployment in West Philippine Sea for military outpost, seaport and air strip or airport, Bridge for build, build, build projects, Agri Farms, Off-shore Wind & Solar Power plants etc .

*Koen Olthuis has over 300 hundred projects in Europe, Miami, Japan, China, Saudi Arabia, Bahrain, Maldives and more. In 2007, he was chosen as one of Time Magazine's list of most influential people in the world. The French magazine Terra Eco named him as one of the 100 green persons that will change the world in 2011. He was also featured in New York Times, CNN, BBC, ABC, National Geographic, Discovery, TED, Inhabitat and more.*

Floating development technology has no major impact to the environment and the right solution to the rising seas. What differentiate Koen's floating platform development is its unique proposition of a 'scarless' development that moves with the context of a static city to one that is dynamic, environmentally friendly and recyclable. "Scarless Development" - meaning during as well as after the lifespan of the structure, the building will not leave any physical footprint or carbon footprint or damage to seascape/waterscape, fish, corals and environment.

Floating structure developments have no major environmental impact other than a shadow on the seabed. This shadow is in places with a lot of sun location where sea creatures can find shelter. Floating platforms give the water environment an extra ecological dimension by providing protection for fish and other aquatic resources. You can grow mussels underneath the floating structure by hanging strands.

In tropical nations like the Philippines, floating islands or cities will play a significant role in improving water quality and habitat for fish in a sustainable way. As an example in Maldives where corals are damaged by the effect of sunlight. This phenomenon is called coral bleaching. It is a condition that can cause serious damage and the entire coral reef will die as a result. Corals contain microscopic algae, which provide coral with food and give it a striking colour. If the water temperature rises, the coral is affected by stress, which keeps out the algae. If this process continues, it ultimately leads to the demise of corals. A rise of only 1°C above maximum temperature during summer can be enough to cause the corals to bleach.

*Great Barrier Reef in Queensland, Australia also suffered coral bleaching and the worst one happened in 2002 where more than 60% of the 2,000km length of corals was*

*severely damaged.*

Floating City is a new and unique concept and if implemented in the Philippines would become a world-class real-estate development attraction and favourite living, working, shopping and leisure destination.

Floating green landscapes represent a huge potential for improving visual image. Floating boulevards, parks and beaches can replace inland facilities such as green public spaces and sports fields situated in expensive neighbourhoods, thereby freeing up those locations for commercial purposes. This concept can be used for the New Manila Bay.

Floating gardens or farms in urban areas is nothing new. Dutch company Nautilus makes floating green quaysides called Aqua-Flora Floats. Nautilus is also building 4 square kilometers of Floating Nursery for Eco-City in China which not only provide visual greenery to the city but also serve as a water purification facility.


Here's how the Floating City in Manila Bay can be accomplished.

 Floating City Manila.jpg

 Possible Research Program.jpg

### **Advantages of Floating Platform Development over traditional landfill reclamation:**

1. Cost-effective - no need to haul millions of cubic meters of sand and tons of stones.

 Moored structure.jpg

2. Does not require a long curing period before you can start building structures. Property Developers can jumpstart construction anytime with floating development.

3. Environment-friendly - floating foundation will not damaged the marine eco-system, or silt-up deep harbours or disrupt the tidal/ocean currents

4. Fast & easy to construct - no need to dig deep foundation, flatten the surface. Floating foundations and building structure are built in the yard and moored to the desired location.

 Floating Construction1.jpg

 Floating Construction2.jpg

5. Easy to expand and removed and can be relocated to other areas.

6. Facilities and structures are protected from earthquakes.

7. Does not suffer differential settlement due to reclaim soil consolidation.

8. Constant surface water position with no soil erosion.

Floating structures are like large cruise ships (example: Royal Caribbean Oasis of the Sea) or giant facility cargo ship (The Prelude FLNG of Shell) the largest ship in the world but without harmful emission.

 Shell Prelude.jpg

**Floating platforms can be used also for Solar & Wind Power Plants.**

**For the bridge requirement of the Floating City and Build, build, build bridge projects linking Luzon, Visayas and Mindanao, here's a Floating Bridge solution from Koen Olthuis engineering partners who are currently working on the Norwegian floating bridge projects for 6 fjords crossings.**

**Some illustrations.**

image004-2.jpg

image005.jpg

unnamed-4.jpg

**There are several solutions that can be applied for the Floating City and other Philippines bridge projects under build, build, build that could be possible crossing above water or several meters underwater all of which have been studied as a part of the Norwegian floating bridge projects.**

**The main differences will be the road/tube positioning (above or below water) and the anchoring systems.**

**The anchoring system will be designed based on the constraints imposed by the bridge and the seabed conditions.**

**There are several anchoring solutions that can ensure movement is reduced. These solutions are mostly from the offshore oil and gas off-shore platform rigs. An industry where they have vast experience in.**

**In theory, a floating bridge should not cost more than a conventional bridge and perhaps it should be cheaper.**

**High-level floating bridge benefits are as follows:**

- **Off-site construction – bridge sections can be built away from site where it is cheap and towed to position ready for anchoring**
- **Suitable for deep water and long spans**
- **Anchoring technology from oil and gas off-shore platform rigs**
- **Small interference with seabed**
- **Floating bridges could be considered faster construction due to the anchoring system and off-site construction possibilities**
- **Anchor system is quicker and cheaper to install than conventional methods.**

**All in all, floating bridge technology is of course not as widely used as conventional methods and this can affect its cost.**

**However, they have the perfect opportunity to use the 6 fjord bridges they are building in Norway as a starting point and reference for the Floating City and Build, build, build**

bridge projects of the Philippine government.

### **Latest projects of Koen Olthuis**

#### **Luxury Floating Home in Miami, FL**

<https://youtu.be/k58GhBzPJz4>

#### **Floating City Maldives**

<https://maldivesfloatingcity.com/>

For company info, you can visit Koen Olthuis websites:

[www.waterstudio.nl](http://www.waterstudio.nl)

[www.dutchdocklands.com](http://www.dutchdocklands.com)

If the Philippines government and concerned agencies have any questions, comments or would like to discuss with Koen Othuis, please let me know!

Thank you!

Best,

Bert R. Ginampos

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