



Proposal for Partnership Program Blue Deal Indonesia

*Blue Deal Indonesia*



V5 d.d. 20 July 2021

## Table of Contents

Summary	3
1. Background and history of DWA Indonesia	4
2. Starting points of the BD-Indonesia	5
3. Working approach, scope and intended results of the BD program in Indonesia and its (sub-projects)	8
4. Organization: partnership roles & tasks	13
5. Partnership Budget	14
 <u>Appendices</u>	
Appendix 1. Description and background of the sub-projects of the BD program in Indonesia	15
Appendix 2. Summary of TWA scoping study for Blue Deal Indonesia	19
Appendix 3. Confirmation letters by Mayors of Semarang and Pekalongan	24

## SUMMARY

PARTNERSHIP INFORMATION		
Country:	Indonesia	
Participating Dutch Regional Water Authorities:	HH Delfland (Penvoerder in 2021, HHD) HH Schieland en Krimpenerwaard (HHSK, co-Penvoerder) HH Noorderkwartier (HHNK) WS Aa en Maas (WAM) WS Zuiderzeeland (ZZL)	
Local partner(s):	<u>Central Java Province:</u> <ul style="list-style-type: none"> <li>- Kota Pekalongan &amp; Kabupaten Pekalongan,</li> <li>- Kota Semarang</li> </ul> <u>Banten Province:</u> <ul style="list-style-type: none"> <li>- Kabupaten Tangerang</li> </ul>	
Catchment area: ( <i>basin areas of impact &amp; thematic scope</i> )	<u>Central Java Province:</u> <ul style="list-style-type: none"> <li>• Kota Pekalongan: 45,25 km<sup>2</sup> - inhabitants: 307.000</li> <li>• Kabupaten Pekalongan: 836 km<sup>2</sup> - inhabitants: 890.000</li> <li>• Kota Semarang: 373 km<sup>2</sup> - inhabitants: 1.500.000</li> <li>• One theme: flood protection &amp; water quality</li> <li>• Potential impact: 2.7 mio people</li> </ul> <u>Banten Province:</u> <ul style="list-style-type: none"> <li>• Cirarab River (pilot area), 20.500 ha</li> <li>• A little over 1 million inhabitants</li> <li>• Two themes: flood protection &amp; clean water/ wastewater treatment</li> <li>• Potential impact: 1 mio people</li> </ul>	
Contribution to Blue Deal impact	<ul style="list-style-type: none"> <li>• flood protection</li> <li>• water availability</li> <li>• clean water/ wastewater treatment</li> </ul>	YES NO YES

## INTRODUCTION and BACKGROUND DWA INDONESIA

### 1. Background and history of DWA Indonesia

Since the end of the 20<sup>th</sup> century, Dutch Water Authorities (DWA) have been active in Indonesia with development cooperation activities in water resources management and governance. These activities varied widely: in (thematic) scope, the demand of the local partner, the role of DWA, the nature and authority of the local counterpart organization, in the extent of cooperation with other Dutch projects and in the geographical location and context.

As an example, DWA HH Schieland en Krimpenerwaard (HHSK) started its engagement in Central Java/Semarang City in 2001, with the organization of a seminar about polder development (*'Polder Systems in Waterfront Cities, as a sustainable solution for flooding'*). Ever since HHSK was active in the Banger Polder project, with a spin-off in additional activities in coastal zone management in Pekalongan. Both initiatives (Semarang and Pekalongan) were related to multiple other (Dutch) initiatives and water projects, in synergy and mutual relationships.

To strengthen efficiency and effectiveness amongst the Dutch water authorities, in recent years the projects in Indonesia were jointly set-up and planned; for approval and co-funding by the Dutch embassy in Jakarta and the NWB Fonds. This coordination was done by HHSK, under the project name of DWA Indonesia.

Three of the ongoing projects/initiatives have joined forces in 2020 to develop an Indonesia component for the Blue Deal for the period 2022-2030 (Phases 2 & 3). See below the description of these 3 projects.

	<b>Sub-Project (Province)</b>	<b>Main scope/theme</b>	<b>Status project</b>	<b>Coordinating Water Authority</b>
1	Kabupaten Pekalongan (Central Java)	Flood control	Ongoing, until 2022	HH Schieland en Krimpenerwaard (HHSK)
2	Kota (City) Semarang (Midden Java)	Flood control	Finalized in 2020, now under review	HHSK
3	Kabupaten Tangerang (Banten)	Water quality & Flood control	Finalized in 2019, follow-up project under discussion since 2019	HH Delfland

This document is characterized as an 'outline' proposal for the new Blue Deal partnership in Indonesia. It describes the key components and intended results of the new partnership program in Indonesia, with the purpose of seeking approval by the SG (Steering Group) of the Blue Deal to incorporate this partnership in the Blue Deal Program, starting 2022.

After approval of this outline proposal, a full-fledge Annual Plan 2022 and Phase 2 Proposal (2023-2026) will be made, in conformance with the procedures and timelines for all partnerships in the Blue Deal.

## **2. Starting points of the BD-Indonesia**

### **Development of this proposal**

The Blue Deal Program started in 2019 with the ambition to contribute to SDG6 by 2030 with 20 million people in 40 'basins' benefiting from improved water management. The 1<sup>st</sup> Phase runs from 2019 until 2021, with 16 projects in 13 countries. An independent external evaluation was done in 2020/2021 (MTR = mid-term evaluation), generating important lessons of implementation and recommendations on the way forward. Also, an internal review was done with all partnerships to draw lessons for Phases 2 and 3.

In the period 2020-2021, the DWA Indonesia partners have been having discussions about the envisaged BD-IND partnership. The short-term objectives were to define the outline (goals and focus areas) for a feasible and relevant BD program in Indonesia.

These discussions and explorations were held in the period mid-2020 until mid-2021. It was done within DWA partners, with the potential local partners, with the RVO local representative in Jakarta and with the Deltateam/Regioteam representatives. The advice and information from the Jakarta-based RVO-representative appeared to be very useful, just like the experiences and lessons from Phase 1 of the BD that were brought in by some of the DWA partners. The 'Programmabureau' of the BD facilitated the development of the proposal to enable a smooth alignment with BD procedures.

In Q3 of 2021, The Water Agency (TWA) was assigned to make a first, provisional context analysis, to compile relevant information about the intended sub-projects and the different local partners and to advise on the niche for the Blue Deal activities in Indonesia.

This study helped to clarify the local partners' policies, programs and position towards a new or renewed cooperation under the Blue Deal. This study served as an initial context analysis for the 3 sub-projects and helped gain direct and personal feedback on our plans. By using local Indonesian staff, TWA could get an important additional picture on the information gained through other channels.

The outcomes of the TWA study are included in chapter 3 below. Overall, it confirmed the interest of the main local partners for the 3 sub-projects (Pekalongan, Tangerang, Semarang). While the local RVO-representative could already add important contextual data and information, the TWA study provided additional and relevant information about the local perspective, in terms of interest, local policies and available resources.

Of course, the COVID-19 pandemic caused extra difficulties and some delays: planned visits for strategic discussions with the local partners could not take place during the last 1.5 years, with limited possibilities for online substitution. The DWA partners did have telephone and email contact with their counterparts in Indonesia but this appeared very sub-optimal. Moreover, the local elections that took place in Spring 2021 (electing the regional Bupati's and local Mayors) gave extra uncertainties in positions, adding difficulties and delays to the online communications. Obviously, this proposal still needs intensive dialogue and face-to-face discussions with the local partners to get confirmation on the key components of this partnership and to add further detail to this proposal.

### Starting points

Starting points for the BD Indonesia program are based on the general approach as agreed in the Blue Deal Program Framework<sup>1</sup>. Additionally, the main findings of the internal and external review of Phase 1 of the Blue Deal (the MtR from April 2021) were taken into account as well for this quick scan. This meant giving extra attention to especially:

- Alignment with partners' policies and plans, at different levels of government
- Alignment with and clear contribution to the bilateral G2G relationship with the partner country (in this case: as outlined in the new MOU between the 2 countries)
- Coherence with other ongoing or planned relevant programs in the project area with a clear added value of DWA's role

Following this, the new BD-Indonesia program and its approach have the following starting points:

- **sustainable and relevant outcomes (results) and impact:**
  - o alignment with plans and policies of the Indonesian (local) partners and strategies concerning water management of the Ministry of Public Works and Housing
  - o support to and alignment with the Indonesia-NL water cooperation, under the framework of the new Water MOU and in line with the NIWA, the Netherlands International Water Ambition
  - o compliance, alignment and contribution to regional and/or national (SDG) plans and programs in Indonesia
  - o joint agreement with Indonesian and NL partners about results and related (SDG-oriented) activities
- **efficient and effective cooperation within the DWA partners for BD Indonesia:** the DWA partners have agreed to strengthen the cooperation model with a stronger emphasis on joint implementation, sharing expertise, pooling resources and sharing costs through an integrated program plan. This will result in more integrated program management for the coordination and execution of all sub-projects, collective monitoring and reporting, arranging collectively local representation and support and pooling all expertise and experts for the different activities, across the DWA partners. This also means that all DWA partners, incl. the project leaders (penvoerders), may contribute to one or several of the sub-projects
- **long term partnership:** aiming for results in 2030, enabling capacity building and institutional development and cooperation with many other partners and programs. The Blue Deal partners have clearly expressed ownership and commitment and have allocated resources for the partnership. Seeking synergies in working with other programs and partners, incl. IFI's
- **enabling scale and leverage of program results** by a strong learning and sharing approach. Working in partnership at different levels of government, with different, relevant stakeholders and external partners. Aiming at leverage of approaches and program results in other regions and/or basins.
- **efficient & effective cooperation and organization:** from the lessons of older and on-going projects of DWA Indonesia it was concluded that significant improvements in synergy and efficiency can be made by more integrated planning, implementation and pooling of knowledge and resources. The project team for this new BD-project aims to incorporate several of the lessons from the Phase 1 of the BD and from the MTR, such as:
  - o integrated project management for the overall project including the sub-projects, using the collective DWA human resources ("pool") for several tasks and sub-projects

<sup>1</sup> See also the general Framework of the Blue Deal with stated ambition, impact and approach: <https://dutchwaterauthorities.com/blue-deal/>)

- strong local presence and representation, assisting the overall project management. This local assistance can be implemented using senior Indonesian or international consultants, YEP-ers or part-time local experts
- smart cooperation and alignment with other ongoing (Dutch/international) projects like WaL, WaterWorx, etc.

Examples of this new way of cooperation are a.o.: shared cost sharing for project preparation and management, pooling of expertise and experts for the different (sub-)projects, joined local representation, one coherent, integrated implementation plan on corresponding themes.

### 3. Working approach, scope and intended results of the BD program in Indonesia and its (sub-projects)

#### Working approach

The working approach for the new BD-Indonesia program can be characterized as follows:

- **Demand-responsive:** The new program focuses on (updated) expressed demands, problems and themes within identified projects or initiatives on the island of Java. The DWA consortium is aware that this approach may be quite different in nature and set-up than the previous bilateral cooperation projects. Yet, so far, this demand-driven approach aligns with the geographical focus and strategy of the Dutch Delta Team and with previous projects and networks. Most prominent is the proposed continuation in Central Java, with 2 sub-projects. Here, the cooperation has strong roots and the local partner sees opportunities for further continuation under the results-oriented Blue Deal approach. Also, in these areas, many other Dutch projects and initiatives are running; creating also opportunities for spin-off and efficiency. The other sub-project (Tangerang) is relative younger but it has good starting points; building on an earlier cooperation (Tangerang) in the same area.
- **Focus for impact, horizontally and vertically:** While the new program has 2 distinct geographical regions, all sub-projects work with Indonesian partners on similar governance/government level but with sometimes different contexts and thematic focus. As such, the program provides extra opportunities for cross-learning and exchange of knowledge and experiences between different basins and provinces or regions, identifying (un)successful building blocks on similar thematic issues. The objective is also to generate experiences and lessons with the Blue Deal approach for the dialogue and policy development at national Indonesian level.
- **Focus and flexibility:** while the BD Indonesia program will focus on Central Java and Banten (Tangerang) initially, the program will remain flexible for additional opportunities for impact in other geographic al areas. This is especially relevant when earlier relationships provide a good basis for renewed cooperation. Yet, it is obvious that these new opportunities need to comply fully and clearly with the BD criteria. For instance, during the development of this proposal for the Blue Deal, another sub-project in Brantas Basin (East Java) was considered strongly. In the previous two years, contacts and exchanges had been developing into a prospective new water quality project for BD Indonesia, linked to another larger project (RVO/TU Delft). However, in the final assessment it was not included because of uncertainties in the matching the Blue Deal criteria. In future, with positive developments in all aspects, we may want to re-consider including this opportunity.

#### Scope

Based on the direct dialogue between DWA partners and the local partners for the 3 different sub-projects, the main building blocks for the new Blue Deal partnership could be designed. The dialogue was severely hampered by COVID-19 and could only take place by email and telcon. Important additional information and confirmation of intent and interest was obtained by the visits of the local RVO-representative to the targeted counterparts in Q2 of 2021.

In this same period, as a second step of compiling information and obtaining confirmation, TWA staff paid visits to the counterparts' offices in all three project areas.

The new Blue Deal Indonesia partnership is characterized in below table. The proposed partnership is composed of 4 work packages (WP), of which WP0 is the overall project management. As mentioned before, the main building blocks of the partnership need to be discussed in more detail with the local partners to secure a good match between the demand, ambition and commitment of the partners with the starting points and working approach of the Blue Deal.



In addition, other important elements of the Blue Deal partnership framework need to be discussed and elaborated with the intended local partners. This is planned for the next phase of partnership development (Q3 & Q4 of 2021); aligning this with the development of Phase 2 of the Blue Deal Program. The missing elements concern especially:

- The confirmation and specification of outcomes and outputs for 2030 and 2026, and the alignment with the new water MOU between the 2 countries. This new MOU is scheduled to be signed in 2021 (exact date tbc);
- A more detailed context analysis and water governance assessment (WGA), as input for the local Theory of Change. This will determine the partnership activities and short-term outputs;
- The cross-cutting themes (climate change adaptation, gender and inclusion, innovation, sustainability and poverty reduction) also need further dialogue, detailing and prioritization;
- The learning and development program. For the Indonesia program, it is intended that the learning and development activities are set-up with the involvement DWA and Indonesian partners, local academic and educational institutes and several (Dutch and Indonesian) YEP-ers; At this moment there is already cooperation with the Sultan Agung Islamic University in Semarang which may provide a good stepping stone for further expansion;
- A detailed risk assessment, to be made jointly with partners.

Expected outcomes and results of the partnership <sup>2</sup>			
	Sub-Project (Province/region)	Main scope/- theme	Expected outcomes & results
0	Blue Deal Indonesia, programmatic aspects	Water Governance	<p><b>Phase 2 (2022-2026, outcomes):</b></p> <ol style="list-style-type: none"> <li>1. More awareness of the Dutch Water Governance Framework and sharing and utilization of expertise between different basins, government actors</li> <li>2. Increased institutional capacities with several water organizations in Indonesia</li> <li>3. Contribution to and cooperation with other programs and partners, active in water governance</li> <li>4. Business opportunities for Dutch water organizations/businesses</li> </ol> <p><b>By 2030: (impact)</b></p> <ol style="list-style-type: none"> <li>1. Protection for flooding for more than 2 mio people in Central and West Java/Banten</li> <li>2. Better Water Quality management for more than 10 mio people in West Java/Banten provinces</li> </ol>
1	Kota (City) Pekalongan Kabupaten Pekalongan (Central Java)	Flood control	<p><b>Phase 2 (2022-2026):</b> <i>(provisional, tbc in dialogue with partners)</i></p> <ol style="list-style-type: none"> <li>1. Improved knowledge transfer &amp; exchange by researching, formulating, peer-reviewing and advising solutions to cope with subsidence and the related inundations from the Java Sea and from the various rivers and canals. This will lead to more coherence and integration in the many (infrastructure) plans for the City and Kabupaten of Pekalongan. <i>(In cooperation with the province and the Ministry of PU, plans have already been foreseen for taking measures, which have been tested for effectiveness and sustainability within the cooperation by the Dutch parties, and have already been partially implemented.)</i></li> <li>2. Review, advise and support in the implementation of the organization of (regional) water management and water governance, in coordination with the province of Central Java and the MinPU. This will have a positive impact on the organization and implementation of improved water governance, at multiple levels (national, regional, local)</li> <li>3. Asset management plan ("Operational Plan") for the long-term and sustainable operations of the new and existing infrastructure to cope with the flooding risks. Main components of the plan will be the financing for O&amp;M (Operations and Maintenance) and the institutional capacities for O&amp;M at large (skills, systems, etc.)</li> </ol>

<sup>2</sup> NB: the described outcomes and results as indicated in the table are very indicative and need further dialogue between DWA partners and the Indonesian partners, substantiated by policy papers and signed agreements. This is work in progress for Q3 & Q4 of 2021.

			<p>4. Plan for communications and stakeholder engagement to secure participation of inhabitants and relevant stakeholders in the local water management.</p> <p><b>By 2030:</b></p> <ol style="list-style-type: none"> <li>1. Protection for flooding and inundations for inhabitant of the City and Kabupaten of Pekalongan, through improved local and regional water management.</li> <li>2. Improved Water Governance in the City and Kabupaten Pekalongan and Province of Central Java</li> </ol>
2	Kota (City) of Semarang (Central Java)	Flood control	<p><b>Phase 2 (2022-2026):</b> <i>(provisional, tbc in dialogue with partners)</i></p> <ol style="list-style-type: none"> <li>1. Polder management plan for Banger Polder: support in making/updating/-completing and implementation of an integrated plan with all institutional aspects (infrastructure, skills, organizational capacities, finance, maintenance). The support will be delivered by knowledge transfer &amp; exchange by researching, formulating, peer-reviewing and advising solutions to cope with inundation from the Java Sea via the various rivers and canals. This includes an 'asset management plan' for the long-term and sustainable operations of the new and existing.</li> <li>2. Contribution to the integrated water management plan for the greater Semarang area: this will contribute to improved water management and governance for the many low-lying and frequently inundated areas around Semarang. All in coordination with the province of Central Java and the MinPU. This will have a positive impact on the organization and implementation of improved water governance, at multiple levels (national, regional, local).</li> <li>3. Communications and engagement plan: to organize and secure participation of inhabitants and relevant stakeholders in the local water management. The Banger polder is a model for similar polders in the Semarang area and beyond, in the Province and in Indonesia at large.</li> </ol> <p><b>By 2030:</b></p> <ol style="list-style-type: none"> <li>1. Protection for flooding and inundations for inhabitants of Semarang, through improved local and regional water management, incl improved polder management.</li> <li>2. Improved Water Governance in the greater area of Semarang (City, Kabupaten and beyond) incl the Province of Central Java.</li> </ol>
3	Kabupaten Tangerang (Banten Province)	Water quality & Flood control	<p><b>Phase 2 (2022-2026):</b> <i>(provisional, tbc in dialogue with partners)</i></p> <ol style="list-style-type: none"> <li>1. Master Plan Flood Control Measures for the Kabupaten Tangerang. This plan should contain following</li> </ol>

			<p>components (but this needs first dialogue and confirmation with the local partners)</p> <ol style="list-style-type: none"> <li>a. Baseline status description/ data collection/-monitoring/- analysis</li> <li>b. Stakeholder analysis</li> <li>c. Flood control objective / goals</li> <li>d. Integral plan flood control/protection</li> <li>e. Review cycle</li> <li>f. Maintenance plan (incl tariffing, governance)</li> </ol> <ol style="list-style-type: none"> <li>2. (optional, tbc) Master Plan River Water Quality for the Kabupaten Tangerang. Given the important relationship with the whole basin management, this plan will depend as well on the willingness of the whole basin organization and stakeholders</li> <li>3. Execution and evaluation of several pilots and &amp; ToT (training of trainers) concepts for new guidelines</li> </ol> <p><b>By 2030:</b> <i>(tbc by the upcoming talks and dialogue with the local partners)</i></p> <ol style="list-style-type: none"> <li>4. Improved operational Water Governance in water expertise, institutional capacities and stakeholder engagement</li> <li>5. River Basin Development Plan for all basins in the Kabupaten around Tangerang</li> <li>6. Implemented Master Plan Flood Control &amp; Water Quality</li> </ol>	
--	--	--	--	--

## **4. Organization: partnership roles & tasks**

### **Specific roles of involved partners**

The 5 involved DWA partners have agreed to work closely together to enable an efficient and effective execution of the partnership program. This means that the sub-projects are positioned as an integral part of the overall partnership implementation. This will also enable effective use of available expertise and experience for the different activities. It will also facilitate integrated ('combined') monitoring and reporting. Each sub-projects will be coordinated by the designated DWA but within a coherent management structure.

The specification of roles, tasks, budgets and responsibilities for the key staff of DWA and of the Indonesian partners is not yet decided. While for the 3 sub-projects the local counterpart lead seems obvious, the challenge is to find the counterpart at partnership level. This will need first face-to-face meetings and dialogue between Indonesian and DWA partners, with probably facilitation by the local RVO representative and/or the Dutch Embassy staff in Indonesia. As for the DWA lead responsibilities, the project leadership (Penvoerderschap) will be with HHSK or HH Delfland. Management talks between the two DWA partners are currently in progress.

The new organizational set-up for the management of the partnership will incorporate the main lessons from Phase 1 and the recommendations from the MTR (2021). It is the intention that the partnership management will have a strong local representation. Several options are being explored already, like the (continued) use of local (expatriate) resident manager, a local Indonesian manager and/or the use of YEP-ers, both Dutch and Indonesian.

### **Collaboration with other programs and stakeholders**

Following the elaboration of roles and organizational structure, more elaboration can be given to the cooperation and alignment with other relevant programs and stakeholders. To prepare these talks and dialogue, a detailed context analysis will be prepared in Q3 and Q4 of 2021, building on the first draft of TWA. The information and contribution of RVO will be another important input for this analysis, just as the desk research that several KIWI's<sup>3</sup> (Young people from the Introduction of International Program for DWA-staff) will make in the coming period.

From the first reconnaissance by RVO and TWA several key stakeholders and programs have already been identified for further exploration on cooperation and alignment:

- For all sub-projects:
  - o IND: Bapeda (Ministry of Planning), MinPUPR, Dinas PU (Ministry of Public Works), Academic and educational institutes (like Sultan Agung Islamic University in Semarang).
  - o NL: Deltares, DUTEP (the Dutch Training & Exposure Program for students), Nuffic/Neso
- In Semarang: Water as Leverage, Waterworx.
- In Pekalongan: BBWS (the regional Basin Organization), DLH (Ministry of Environment)
- In Tangerang: BBWS (the regional Basin organization)

Last but not least, the Blue Deal Indonesia program and its ambition needs to be aligned with the plans and programs under the new bilateral Water MOU between the two countries. So far, several useful updates and exchanges with the Delta Team and the RVO Representative have been held, to be continued in the upcoming period.

---

<sup>3</sup> See also: <https://www.uvw.nl/publicatie/kiwi-kennismakingsprogramma-voor-internationaal-werken/>

## 5. Partnership Budget

At this stage, with Phase 2 still to be discussed and detailed with the Indonesian partners, only the budget for the year 2022 can be sensibly drafted. This budget estimate is shown in below table. The first estimates for the Phase 2 budget will be made in the year 2022, in conformance and planning with the other BD partnerships

Allocation of cost to goals	Amount 2022	WP1 + WP2	WP3	WP 0
INDICATIVE TOTAL COSTS (V6, 8 June 2021)	Totaal	Pekalongan + Semarang	Tangerang	Project coordination
Type of costs				
In-kind DWA staff	250.250	74.750	52.000	123.500
In-kind Local staff	49.000	17.250	13.000	18.750
<b>Subtotal in kind contribution by DWA &amp; partners (ideally 55% van PS costs)</b>	<b>€ 299.250</b>	<b>€ 92.000</b>	<b>€ 65.000</b>	<b>€ 142.250</b>
Travel- and accomodation expenses	114.250	62.190	27.180	24.880
Contractors (content experts)	81.100	8.200	13.400	59.500
Project expenses	35.000	5.000	19.000	11.000
Contingencies	52.329	16.739	12.458	23.132
<b>Subtotal OOP costs (idealiter 45% van PS costs)</b>	<b>€ 282.679</b>	<b>€ 92.129</b>	<b>€ 72.038</b>	<b>€ 118.512</b>
<b>Partnership costs (100%)</b>	<b>€ 581.929</b>	<b>€ 184.129</b>	<b>€ 137.038</b>	<b>€ 260.762</b>
<b>Totals (rounded)</b>	<b>€ 585.000</b>	<b>€ 185.000</b>	<b>€ 140.000</b>	<b>€ 260.000</b>
<b>Program cost (PB support, paid by Ministries)</b>	<b>€ 59.193</b>			
<b>PS costs + PB support (110%)</b>	<b>€ 641.122</b>			

Note: preliminary, WP1 and WP2 have been calculated as one budget because they are coordinated by the same DWA (HHSK)

## **Appendix 1. Description and background of the sub-projects of the BD program in Indonesia**

*(NB: separate descriptions are available for each sub-project)*

### **WP1: Protection from flooding in Pekalongan (Central Java)**

This project focuses on the technical and institutional approach to the daily and continuous flooding in the municipality (Kota) and the regency (Kabupaten) Pekalongan in the province of Central Java. Both the mayor of the municipality and the regent of the regency asked DWA-Indonesia via the Dutch Embassy in Jakarta in 2016 for help in dealing with the (daily) flooding of parts of their management areas near the Java Sea. From 2016, the Hoogheemraadschap van Schieland and de Krimpenerwaard and the Water Authority Aa en Maas - within the DWA-Indonesia project - picked up the request for help. For example, a Letter of Intent was signed in April 2017.

In a technical sense, the request for help focuses on jointly researching and formulating solutions to cope with inundation from the Java Sea via the various rivers and canals. In cooperation with the province and the Ministry of PU, plans have already been foreseen for taking measures, which have been tested for effectiveness and sustainability within the cooperation by the Dutch parties, and have already been partially implemented.

The LOI from 2017 ended in April 2019, marking the first phase of cooperation. The cooperation was reaffirmed on 23 October 2019. This phase runs from 2020 to 2022. Key components, in addition to support for the involvement of educational institutions in water management, are the organization of the governance of water system management and support in the development of the management and maintenance of the water systems (dikes and drainage) in the run-up to the transfer of these water systems from the state to the municipality and regency of Pekalongan.

This support runs along the six building blocks for good water system management, namely:

1. strong administrative organization;
2. legally embedded system of water management.
3. planning system;
4. adequate financing;
5. a participatory approach / involvement of stakeholders;
6. cooperation inside and outside water management.

This project focuses on the technical and institutional approach to the daily and continuous flooding in the municipality (Kota) and the regency (Kabupaten) Pekalongan in the province of Central Java. Both the mayor of the municipality and the regent of the regency asked DWA-Indonesia via the Dutch Embassy in Jakarta in 2016 for help in dealing with the (daily) flooding of parts of their management areas near the Java Sea. A Letter of Intent was signed in April 2017.

In a technical sense, the request for help focuses on jointly researching and formulating solutions to cope with inundation from the Java Sea via the various rivers and canals. In cooperation with the province and the Ministry of PU, plans have already been foreseen for taking measures, which have been tested for effectiveness and sustainability within the cooperation by the Dutch parties, and have already been partially implemented.

In addition, the municipality and the regency have explicitly requested that the future organization of water management be reviewed. Among other things, we explicitly look at the institutional design chosen in the Banger Polder pilot project in Semarang.

The cooperation within the Blue Deal -as a new phase after the previous cooperation- will focus especially on:

- Improved knowledge transfer & exchange by researching, formulating, peer-reviewing and advising solutions to cope with inundation from the Java Sea via the various rivers and canals.
- Review, advise and support in the implementation of the organization of (regional) water management and water governance, in coordination with the province of Central Java and the MinPU.
- Improved operations (O&M) for the long-term and sustainable management of the new and existing infrastructure to cope with the flooding risks. Main components of the plan will be the financing for O&M and the institutional capacities for O&M at large (skills, systems,
- Plan for communications and stakeholder engagement to secure participation of inhabitants and relevant stakeholders in the local water management.

### ***WP2: Water Governance (Flood control) Semarang City (Central Java)***

In April 2020, the review report of the Banger Polder in Semarang was published on behalf of the Dutch Embassy in Jakarta and the NWB Fund. This review shows that the flood control of the Banger Polder is technically successful. There has been no flooding since the polder was put into use. However, not all technical facilities have yet been implemented, so the chance of future flooding remains. The institutional aspect (governance, management and maintenance) has gained political and organizational recognition at local, regional and national level of the importance of the proper management and maintenance of water works. The Banger polder is a model for similar polder schemes in Indonesia. A recommendation from the review is to use the existing good relations between the municipality of Semarang, BBP SIMA and Schieland and the Krimpenerwaard (HHSK) to probe whether a completion of the governance of the Banger Polder is considered desirable. It also explicitly looks at the ongoing projects by RVO (including integrated urban water management and Water as Leverage) in the municipality of Semarang.

The cooperation within the Blue Deal -as a new phase following the existing cooperation in Semarang- will focus especially on:

- Improved knowledge transfer & exchange by researching, formulating, peer-reviewing and advising solutions to cope with inundation from the Java Sea via the various rivers and canals.
- Review, advise and support in the implementation of the organization of (regional) water management and water governance, in coordination with the province of Central Java and the MinPU.
- Improved operations (O&M) for the long-term and sustainable management of the new and existing infrastructure to cope with the flooding risks. Main components of the plan will be the financing for O&M and the institutional capacities for O&M at large (skills, systems,
- Plan for communications and stakeholder engagement to secure participation of inhabitants and relevant stakeholders in the local water management.

### ***WP3: Water Management Kabupaten Tangerang (Banten Province, Java)***

Since 2013, World Waternet (WWn) Amsterdam has developed a long-term vision for an integrated approach of the water cycle in the province of Banten. In 2015 WWn entered into a partnership with the Delfland Water Authority to further tackle the problems and questions from this region. Over the years there has been a shift in demand on the Indonesian side from "Drinking Water and Sanitation" to "Wastewater and Protection Against Increased Floods". In addition, the importance of sufficient and good quality water in times of drought has also become more urgent in the area. An integrated and sustainable river basin approach



must be developed for Tangerang and become an example for upscaling to sub-basins at provincial and national level.

Specifically, the activities consisted of various training courses in the field of wastewater (for laboratory employees) and in the field of flood prevention (urban drainage, integrated river basin approach based on strategic environmental management), and integrated workshops with all stakeholders from a catchment (awareness). In addition, much attention has been paid to knowledge and expertise development and increasing awareness of the need for collaboration between stakeholders and organizational commitment.

This collaboration between the partners came to an end at the end of 2018. An attempt was made to continue this collaboration with a joint draft proposal for the new Blue Deal program. WWn withdrew from the collaboration at the beginning of 2019. Delfland and the Indonesian partner then indicated that they wanted to continue the cooperation in the future. Delfland and its current partner in Tangerang are currently exploring how the issues mentioned above can be jointly addressed in a follow-up process of the Blue Deal program. Because the cooperation with Tangerang currently has no substantive track, 2021 will be used to clarify the current issues at the Bappeda Kabupaten Tangerang and to prepare a cooperation agreement to ultimately create a new integral Indonesian project proposal for the Blue Deal program with the other DWA-I partners and other regional partners in Indonesia.

Indicatively, as known at this stage of program development, the project in Kabupaten Tangerang will achieve following goals:

- **For the target year 2030**, a sustainability target is foreseen in which the Bappeda Tangerang is fully organized technically and institutionally (governance O&M) in such a way that floods and related problems can be tackled in an area-based manner and the involvement of the inhabitants in the area and thus the standard of living is to a certain extent increased.

This is expected to entail the following products for this period:

- o An integral master plan for flood prevention and the promotion of clean water;
- o An integral river basin development plan for all major rivers in the Tangerang regency.

- **For the target year 2026**, the following goals are defined:

- o Masterplan flood control measures
- o (optional, tbc) Masterplan River Water quality.
- o Pilots, incl ToT and guidelines for upscaling approaches in
  - Flood prevention
  - Waste management

In terms of activities, following topics are expected to be part of the PS program:

- Knowledge and expertise for all topics
  - o Insights in gaps of knowledge and need for training
    - X number of departments/staff trained
  - o Insight on percentage diseases related to lack of/poor sanitation
    - X percentage of households on improved sanitation system
  - o Insight effect of water quality on ecology (plants/fish)
- Institutional reform and development
  - o Improved system of enforcement
  - o Improved system of financing (O&M waste water and flood control)
  - o Dedicated HR plan to attract or educate high quality staff
- Relational aspects

- Annual seminar/workshops with stakeholders in the catchment, including the Province
- Set up collaboration plan to bond with local knowledge partners (other regencies, universities, national government, ngo's)
- Introduction to the principles of stakeholder involvement and analysis within a basin

## Appendix 2. Summary of TWA scoping study for Blue Deal Indonesia

### *Blue Deal Report – Summary of Report*

*The Water Agency, July 2021*

## 1 KOTA SEMARANG

### General:

There are existing program from the collaboration with the Netherlands: WaterWorX, ICZM, Water As Leverage (need to sharpen the concept, continue from the existing plan), with Water as Leverage: it has a roadmap where we can use this as the basis for Blue Deal, and find the gap from Water as Leverage,

Bappeda has sent PUPR (Ministry of Public Works & Housing) several water projects that already been developed into Detailed Engineering Design. PUPR will then pick which projects to fund and using which budget. All these projects however, do not have the “integrated” approach from one to another. **Blue Deal can pick one of these projects, review it and integrate it to other projects.**

According to Mr. Victor and Mr. Arief, flooding is still considered as the main problem Semarang is facing right now. The latest severe flooding occurrence on 6<sup>th</sup> and 23<sup>rd</sup> February 2021, they suspect it was caused by extreme rainfall due to climate change and the limited capacity of Semarang river. They suggested to upgrade the existing capacity of either the river or the pumps. JICA and Banger polders used to be operating well, but now Banger polder is the only one operating. Even with two polders operating, overtopping still happened. From the Banger polder study, Witteveen+Bos has suggested to build retention pond near the pump station, but it has not been realized due to funding availability of DPU Kota Semarang.

### Blue Deal:

-. It is advised that Blue Deal touches the main pillars of water resources:

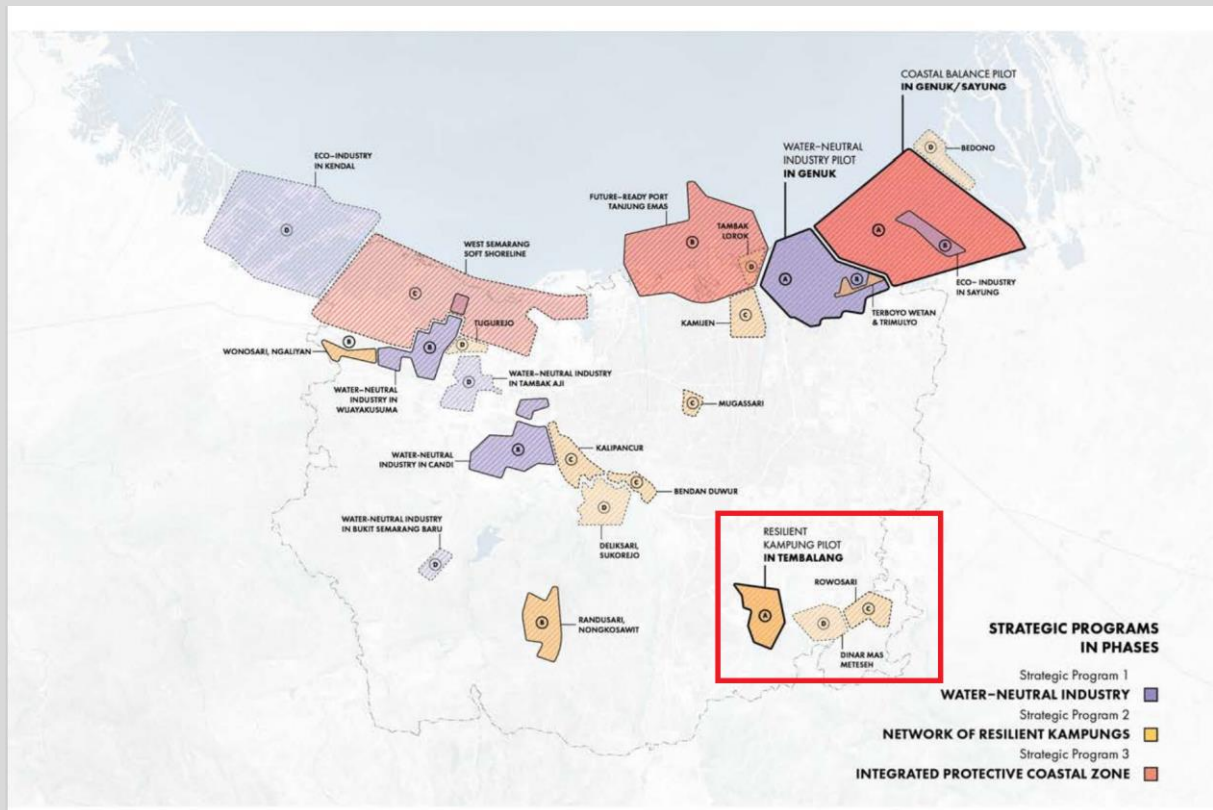
1. Conservation: spongy or any other type of retention pond or storage are important to conserve water and reduce the run-off volume. Land use should be analyzed strategically before determining storage locations.
2. Water use: ensure water availability, especially on dry season.
3. Water management: not always through technical side but also should be in line with institutional strengthening and local socio-cultural.

For example: The previous Banger polder had 2 programme, infrastructure of polder and institutional creation of SIMA Banger. The infrastructure was relatively judged as a success by Public Works of Semarang (DPU Kota Semarang), but the institutional creation of SIMA did not work as desired because of the collective contribution maintenance fee scheme (skema iuran), it went against the local culture where the locals were expected to get the infrastructure for free. SIMA also did not adhere to the local budgeting process of the city government, so it has no budget and office to run. Blue Deal is expected to take this into account.

We strongly advise DWA to work closely with BAPPEDA Semarang city since it is the key agencies to get programme from technical agencies (such as Public Work Agency) approved by the Mayor of Semarang. In the following picture, there are 5 strategic water as the results from Water as Leverage suggested by BAPPEDA (similar to the picture in the report).

The Resilient Kampung in Tembalang focuses on stormwater management in the upper area of Semarang, such as Tembalang district. We advise DWA to focus on this programme Tembalang, or generally in the southern area of Semarang due to three reasons:

- Most of the programme is focused on the northern area and it is crowded with other international institutions
- The area is close with a notable university, Diponegoro University (UNDIP), DWA could tap into the already vast amount of experts at UNDIP to work together, they are also familiar with how the Dutch works since most of the water experts at UNDIP graduated from Dutch universities, either in their master or doctorate study.



## 2. KOTA PEKALONGAN

### General:

1. There is a sluice gate in Pekalongan river, they plan to divert the flow mostly to Banger river as Banger river is designed to be the flood control channel. If the water in Pekalongan river is not contaminated heavily by pollution, the water control is enough to sustain the city.
2. Batik industries in Pekalongan are mostly home industries and widely spread, they are not concentrated into one specific locations. This is causing the wastewater to enter the channel from everywhere and not treated before entering water bodies.
3. Waste still enters body water, mostly detected as domestic waste and plastic waste. Sometimes they find furniture and mattress as well.
4. Community behavior, where the locals have poor awareness of the water quality and how their everyday behavior to dump the waste into water bodies might worsen it
5. Institutional management, PAD (Pendapatan Asli Daerah/City Revenue) does not come from batik industries, Pekalongan also does not collect dues but they help promote batik as the city's local product. Income made from batik goes into batik cooperative and association. Waste handling however is the responsibility of the city.

### Flooding:

- Based on the latest flooding in February 2021, there were only 3 kelurahan (village) out of 27 kelurahan that were not flooded: 2 in South Pekalongan and 1 in West Pekalongan. Flooding in North Pekalongan is caused by high rainfall intensity and run-off from the upstream, but in recent years they start experiencing tidal flooding as well. They have never experienced flooding by both rainfall and tidal flooding.

- December, January and February: flooding is caused by high rainfall intensity.
- June and July: tidal flooding and the effect of wind from east and west side.

The locals have adapted to flooding occurrence on the coastal area by raising the house foundation and the road. From PUPR through BBWS Pemali Juana, the tidal flooding issue has been national priority, there are plans to build dykes on both sides of River Pekalongan and River Banger. Retention basins have been proposed as well around Pekalongan River. On the coastline, in 2021-2023 BBWS is planning to build coastal dyke at the downstream of River Pekalongan and River Gabus, this project is a reaction to cope with tidal flooding.

Currently, city of Pekalongan has 2 pumping stations on River Meduri with the capacity of 2,000 lt/s and designed for return period of Q25. When the recent rain happened, the actual discharge was equivalent to Q50 and the pumps did not have enough capacity to cope with. According to BAPPEDA, this might be caused by the extreme rainfall due to climate change.

Due to socio-economy changes, most of the rice field has turned into settlement, irrigation channels turn into drainage and these channels pass through the city, sometimes causing flooding in the River Meduri. Some backwater from the coastal also enters River Meduri from its downstream.

#### **Water quality:**

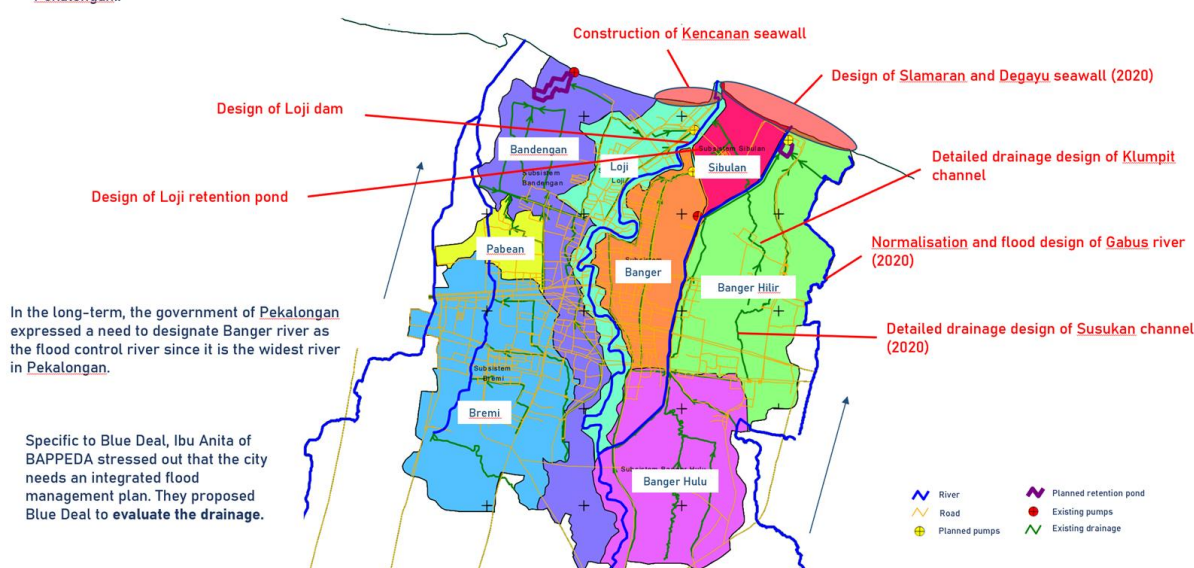
City of Pekalongan is relatively flat, meaning the wastewater cannot flow well by gravity and the waste from batik production can clog the channel. For small batik industry, the government is in charge to ensure their proper waste disposal and to treat the wastewater. DLH (Dinas Lingkungan Hidup/Environmental Agency) has offered to take up their wastewater by car and bring it to nearest wastewater treatment plant, but there is little initiative for these industries to cooperate, they prefer to dump the wastewater directly into the nearby channel.

#### **Blue Deal:**

In our visualized map below, you can find various challenges in Pekalongan. We focus the challenges on flood, not on water quality as ibu Anita had preference for Blue Deal to solve the flood challenge first before water quality, as the pollutants were mostly batik industries and they are household SMEs, she and her team thoughts the stakeholder for water quality is too many to solve at such short period.

As written in the map, we recommend for DWA to involve in flood control in various river in Pekalongan, specifically in Banger river as the city has long-term plan for Banger river to be the flood control river.

The flood management in Pekalongan depends on the primary drainage system located at Sengkarang and Kupang river, and secondary drainage system divided by 8 sub-systems (Breml, Pabean, Bandengan, Loji, Sibulan, Banger, Banger Hilir, and Banger Hulu) Currently there are ongoing design & construction works in Pekalongan.



### 3 KABUPATEN TANGERANG

#### General:

Previously, they have collaborated with World Waternet on capacity building program, which initially resulted in the use of those knowledge and experience to implement sanitation program, then it grew into other topics such as flooding and water management, as long as it has relation to water resources.

Their expectation from Blue Deal is though capacity building, they can learn the experience from the Dutch water sector and uses the knowledge to implement the project in Kabupaten Tangerang. The funds to implement the project would come from APBD (Anggaran Pendapatan dan Belanja Daerah / Regional Revenue and Expenditure Budget).

The primary challenges for Bappeda and the regency government of Tangerang in general, is all river in Kabupaten Tangerang are under BBWS authority, they can only act as operator. Normalization and other activity relating to operation and maintenance falls under BBWS, unless BBWS appoints Kabupaten Tangerang through MoU or Perjanjian Kerjasama (cooperation agreement).

#### Flooding:

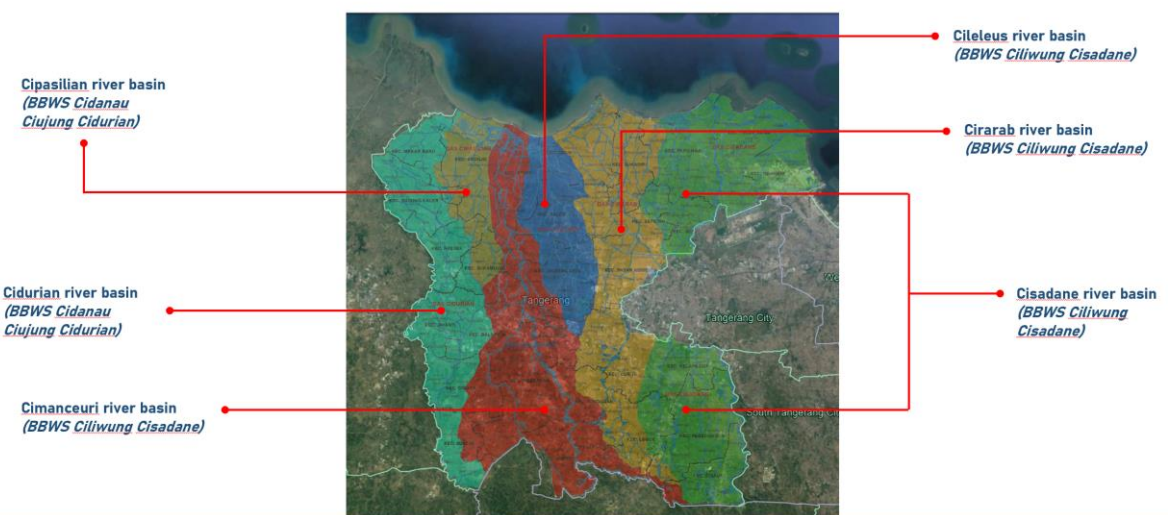
Most of the flooding in Tangerang came from the upstream of Bogor. The condition of both primary and secondary channels are clogged and not maintained, lowering the capacity and caused flooding. River Cidurian and River Cisadane are under the authority of BBWS, thus Kabupaten Tangerang can only send recommendation letter to BBWS to take actions. Since 2016, there has not been a follow up to Kabupaten Tangerang from BBWS.

Most of the channels are clogged with waste, weeds, grass and sediment, blocking the flow of water needed by the farmers on the downstream. BAPPEDA then took the initiative to use grant fund and collaborate with the TNI (Indonesian' military) to clean the rivers. In the future, they are expecting normalization in these rivers from BBWS. Dinas Bina Marga and SDA only have the authority to maintain drainage channels.

#### Key notes:

- \*) Relationship between the entire regency government towards BBWS is not positive. Several request letters have been sent so actions can be taken but BBWS had not given any meaningful response. The regency government couldn't make actions on their own as this will incite potential audit for suspicious activities.
- \*) All the local people complaints are addressed to Kabupaten Tangerang, while they are limited take actions due to institutional setting and authority. They even face some demonstration due to the floods, which they felt misdirected.
- \*) Kabupaten Tangerang has enough budget from APBD to run projects but lacked the authority to do so.

Based on the conversation with BAPPEDA Pasuruan Regency, the main challenge in handling the flood problem in Tangerang lies in the institutional challenge. There are 6 river basins in Tangerang regency, and all them fall under the authority of BBWS Ciliwung Cisadane, and BBWS Cidanau, Cijung, Cidurian.



#### Blue Deal:

We don't make top-3 issues in Tangerang since they have a singular institutional issue that needs to be prioritised. While there are several technical issue such as the meandering of Cisadane river, Tangerang has the budget to build infrastructure but they don't have the legal capacity to do it. We advise DWA to work together with Tangerang for the institutional issue first before progressing to technical issue. TO understand the nature of the institutional challenge, take a look at the following map.

During our interview with Mr. Erwin he acknowledged that Tangerang did not communicate with BBWS properly and he seek the best practice of finding common ground with upper-level institutions such as BBWS. example, in our project at East Java, the East Java provincial government work together with BBWS Brantas to use an instrument from Ministry of Public Works (PUPR) called Special Allocation Fund to build flood infrastructure in Welang river together, therefore bypassing the legal barrier where BBWS was initially not allowed to spend budget at Welang river since it is under the authority of East Java Provincial government. Does similar scheme and partnership between water agencies in the Netherland? If they do, Tangerang Regency is keen for DWA to advise or collaborate of such scheme.

===

**Appendix 3. Confirmation letters by Mayors of Semarang and Pekalongan**





## MAYOR OF PEKALONGAN

Number : 610/0987

Pekalongan City, 7th April 2021

Attachment: ---

Subject : Letter of interest in obtaining  
The Blue Deal Program

To : Chairman HHSK / DWA

in  
Rotterdam

On April 5<sup>th</sup>, 2017, the Pekalongan City Government with HHSK / DWA has signed a Letter of Intent (LoI) in the field of Strengthening Capacity Building in the drainage management system to solve the problem of tidal flooding that often occurs in the Pekalongan City area. The LoI agreed on three important things, including :

1. Organizational and technical capacity improvement of the drainage or water management.
2. Exchange information and regulations regarding drainage or water sector.
3. Collaboration with academic institutions and research as third parties.

After carrying out various activities, Regional Government of Pekalongan City and DWA-HHSK have agreed on the importance of mutually beneficial cooperation and express intention to extend partnerships in 2020 - 2022 in the following objects :

1. Conducting water management benchmarking / lectures / workshops
2. Supervision of involvement of domestic and foreign academic institutions in the preparation of applicative studies on water infrastructure management in Pekalongan City.
3. Supervision for involvement in the Blue Deal program
4. Supervision of the establishment of a water management institution in Pekalongan City.
5. Delegation exchange between from Pekalongan City - HHSK for capacity building.

Furthermore, in a teleconference through a zoom meeting among the Mayor, Vice Mayor, and HHSK on Monday, March 15<sup>th</sup>, 2021, the Pekalongan City Government received an offer for the Blue Deal program.

Following this, we hereby convey a statement of interest in joining the program with the aim of strengthening efforts to overcome the problems of flooding and tidal flooding that occur in Pekalongan City area.

Thank you for your attention.

MAYOR OF PEKALONGAN CITY

  
H. ACHMAD AFZAN ARSLAN DJUNAID, SE

Jl. Mataram No. 1 Telp. (0285) 421091 Fax. (0285) 424061 Pekalongan 51111



WALIKOTA SEMARANG

Semarang, 16 March 2021

Number : 8/1080/193/III/2021  
Subject :

Chairman of Regional Water Authority Schieland and the Krimpenerwaard  
Rotterdam

Dear Mr. Drs A.J.B van dr Klugt,

Thank you for your warmest congratulations and support for me and Semarang City. I wish under our leadership can bring positive energy between Semarang and Hoogheemraadschap van Schieland en de Krimpenerwaard Rotterdam (HHSK) on the basis of shared respect, mutual trust, and support.

In regards to your letter dated 1<sup>st</sup> March, 2021 about to exchange views of Polder Banger and to evaluate the completion of the project, I am extremely delighted to welcome the opportunity to discuss about Polder Banger Project with Hoogheemraadschap van Schieland en de Krimpenerwaard Rotterdam (HHSK).

If any detail communication please contact our staff in charge from Domestic and Foreign Affairs Mrs. Dewi Sadtyaji +6285641187733 or by email: [kerjasamasemarang@gmail.com](mailto:kerjasamasemarang@gmail.com)

I look forward to have conversation with you and team from Hoogheemraadschap van Schieland en de Krimpenerwaard Rotterdam (HHSK).

Yours Sincerely,



Hendrar Prihadi, SE, MM  
Mayor of Semarang

Jl. Pemuda No. 148 Semarang - 50132  
Telp. (024) 3540001 - 3513366

