

General Project Data

Project title: Innovative Energy Recovery Strategies in the urban water cycle
Acronym: INNERS Project number: 192G

Nationality of the Lead Partner: NL

 Start date:
 01 Apr 2010
 End date:
 31 Dec 2015

Priority 2 - Managing resources and Duration (months):

risks

Total eligible budget: € 6,579,208.15 Total ERDF funding: € 3,289,604.08

# Final Monitoring Report

(Progress report & Payment Claim)

Details on reporting period

Payment claim no: 13 Date of submission: 24 Dec 2015 Progress Report no: 9 Date of submission: 21 Dec 2015

Official deadline: 31/12/2015 Reporting period: 01/05/2015 - 31/12/2015

# Information of special interest

Congratulations for completing your project! The project is now closed. Please pay special attention to section 6 about your obligations from now on until the Programme closes.

# 1. Analysis of Progress Report

### 1.1 Quality of the report

The progress report was received on time. Its quality is good. Progress are clearly reported in all sections and main results are highlighted. A relevant set of supporting evidence has been provided.

#### 1.2 Overall progress of the project

Almost all project main outputs were already delivered at the beginning 2015. The last months of the project were dedicated to the completion of the six final events (road show) and the release of the project final report last July 2015. The last activities remaining focused on monitoring of demonstration projects and transferring of results to the target groups.

Within WP1, a report that describes the results of an investigation into the impact of recovering heat from a large sewer network consisting of approximately 3000 pipes under two different scenarios has been finalised. This developed heat transfer model has been successfully tested on simulating three different weather scenarios for the recovery of 250

KW/pipe from the insewer network of the City of Antwerp. The results of the modelling exercise indicate that up to 14 MW can be recovered from 57 locations without significant lowering of wastewater temperatures at the entrance to the wastewater treatment plant that serves this network.

All demonstration projects within WP2 were already finalised. Data monitoring results have been included into the project final report.

Within WP3, two additional WWTPs have been connected to the Energy Online System (EOS) previously developed (please refer to section 1.7 for more details): WWTP Amersfoort (by PP4) and WWTP Zwolle by PP1) both in the Netherlands.

WP4 aims at demonstrating the potential and impacts of heat recovery strategy in the urban water cycle towards decision makers, technical specialists and students. This work package is reported in section 1.4 due to greater relevance.

#### 1.3 Evidence of transnational working

The main transnational activity in the last period corresponds to the joint discussion on the lack of data within the urban water cycle. Partners had to provide more information on the data resulting from their demonstration projects measurement campaigns. These data were integrated in the EBAT tool and disseminated at regional level.

The final project report summarising all activities and main results was finalised last July 2015. All partners contributed to finalise this report.

The report explains the benefits of transnational collaboration within INNERS which enabled to:

- Contact experts to provide guidance on the development of the EBAT tool
- Achieve a wide range of data collection with possibility to compare them in a Benchmark study and to include them in the EBAT and EOS tools
- Increase the influence of the project dissemination on policy makers

The report also highlights close involvement of partners on specific themes, for example the Benchmark study and the development of the EOS has been only possible through close collaboration of PP8 University of Luxembourg, PP7 LIST, PP2 Wupperverband and PP10 SIDEN; PP6 Aquafin and PP5 University of Bradford worked closely on sewer modelling.

### 1.4 Communication strategy and publicity requirements

The completion of the six final events was already reported in the last period. They were visited by 350-400 technical specialists., policy makers and students. A final video highlighting some of the main project results was also produced. The JTS highlights the quality of this video and its educational relevance for non-specialists.

After a joint hearing at the DG Energy with EU Water Alliance, the EC produced a statement based on the project conclusions. It recognises that the new Commissioner should ensure that energy policy must be based on water quality. Also investments shall be promoted in technologies to reduce the energy use of the water sector, to recover energy from water and to develop new technologies for water-based renewable energies.

A total of 10 press releases were published in regional newspapers in the Netherlands, Germany and Belgium.

The project website has been updated with the latest news on the project and gathers the main project outputs. The choice of the partnership has been to separate the information provided on the website for three different target groups: technical specialists, future professionals and policy makers. The level of technical details derives according to the targeting group. Strategic planning schemes and general conclusions are further emphasized for policy makers.

#### 1.5 Indicators

Quantitative indicators demonstrate that the project over-reached all its targets on increasing awareness. This is due to the efficient communication strategy implemented throughout the project, based on the dissemination of the demonstration project results that were completed in 2014. All the project main outputs have been completed including the measurement campaigns and the development of energy recovery technologies in the urban water cycle.

Qualitative indicators confirm the strong level of cooperation between partners. Through the series of final regional events the partners managed to disseminate their results to other organisations involved in the management of urban water cycle, thus stimulating the development of regional networks. INNERS built on the results of the previous INTERREG IIIB project Urban water cycle.

1.6 Encountered problems and deviations from the planned activities

No major deviations reported.

1.7 Conclusions on the overall project implementation

The INNERS partners successfully addressed four questions: what is the energy potential of the urban water cycle? How to recover heat from it? How to reduce energy consumption and how to promote a transition towards a more sustainable urban water cycle?

- 1. Energy potential of the urban water cycle
- The partners jointly produced an <u>Energy Balance Assessment Tool (EBAT)</u> to get a clear picture of water related energy consumptions. To develop the tool, a review of

existing studies was conducted. The results show that the energy used in the abstraction of ground water is greater than that used for the collection and transport of surface water. However, the treatment of surface water is a more energy consuming process than the treatment of ground water. As a general conclusion derived from the application of the EBAT tool, the largest proportion of energy used in the urban water cycle is used to heat water. The EBAT tool is available for download for free and intended for water facilities organisations to identify the potential energy savings and for regional policy makers to assess the impact of specific water policies.

• A <u>Benchmark study on the energy demand of WWTPs</u> in NWE was carried out. Consumption and production data of 350 WWTPs were collected and evaluated. The evaluation showed that by use of a CHP, full thermal self-sufficiency of the WWTP can be achieved. A power self-sufficiency rate of 55%-70% is possible.

#### 2. Heat recovery demonstration projects

Prior to the implementation of the demonstration projects, a preliminary study was carried out to determine heat potential in the urban water cycle. The study concluded that a minimum and constant flow rate is necessary. The study also shows that the biggest heat potential is present directly after hot water production (household production).

Building on these results five demonstration projects were completed:

- <u>Sustainable swimming pool in Raalte (Netherlands</u>): heat from treated waste water (effluent) was recovered and used to heat a nearby swimming pool using a CHP unit. The project resulted in a yearly CO2 reduction of 137 tons and a cost saving a €25.000 per year on gas.
- <u>Dewsbury neighborhoods (UK):</u> heat was recovered from the storm water soil infiltration system and used to heat three houses. The energy used to heat these houses was reduced by 48% compared to a conventional heating system. The system is CO2 neutral so far but it is expected that as the UK de-carbonizes its electricity supply system by 2024 the system should achieve around 36% reduction in CO2 emissions.
- <u>Decentralized heat grid at Buchenhofen WWTP (Germany):</u> surplus heat at the WWTP was used to heat nearby buildings. 120.000 liters of fuel and 18.000 liters of propane gas are expected to be saved per year, for a total saving of €110.000 per year. Using the heat grid, the WWTP CO2 emissions can be reduced up to 380 Mg per year.
- Heat recovery at WWTP OVILLEO in Lille (France): an energy efficient system was installed at the WWTP to produce biogas from sludge. It is estimated that the installation will save 259.000 cubic meters of gas per year and lead to a cost saving of €112.600 per year.
- <u>Heat recovery from the sewer system in Leuven (Belgium):</u> heat was recovered from the public local sewer system to heat an apartment complex with 93 houses. First results show that the heat recovered with this system is 172 MWh per year.

#### 3. Reduce energy use at WWTPs

Investigations carried out at WWTPs in Germany show that up to 30% of the required operational energy can be saved by optimisation of the system.

• For optimisation of the energy balance, the <a href="Energy Balance System">Energy Balance System</a> (EOS) has been jointly developed by the partners. It focuses on increasing the internal production of

electricity and heat at the plants, analyzing aggregates such as blowers and pumps. A Decision Support System gives direct feedback to plant operators. The tool was tested at two different WWTPs: Heiderscheidergrund in Luxembourg and Burg in Germany. The partners in charge will still continue operating the tool by creating an example (fake plant with data) so that other WWTP operators can use it too. Future development of the system also includes the development of a comprehensive decision support service.

- New technologies can also increase the self-coverage of WWTPs. At the <u>WWTP</u> <u>Amersfoort</u> (Netherlands) a so-called DEMON reactor was installed to improve the process of deammonification, which is done to improve the released treated waste water. The installation enables the WWTP to release less nitrogen than before and to save yearly €38.000 on energy costs.
- A <u>study on the separate collection</u> of black water (from toilets) combined with kitchen
  waste and grey water (from kitchen, shower) has been conducted. The resulting
  concentrated black water waste stream, rich in organic material, can be directly
  digested for biogas production. Currently, the financial feasibility of the diverted
  system came out to be poor as the calculated payback time is longer than the life
  time of the installations.

On a larger perspective, the project estimations show that countries in North-West Europe currently consume around 7 Terra Watt hours per year (TWh/year) on waste water per year. If all the plants conform to the benchmark recommendations, a saving of 30% is achievable (4.91 TWh/year). If all larger plants would implement a deammonification system, the possible saving would increase to 45% (3.88 TWh/year). These figures confirm how high is the potential for energy reduction in NWE and how relevant is the support to technologies aiming at reducing these consumptions.

#### 4. Promotion of results

The project team was early on aware of the technical aspect of the project. The project paid special attention to implement an efficient dissemination strategy tailored for three different target groups: policy makers, technical specialists and students. To disseminate the results to technical specialists, project partners acted as ambassadors, presenting the results of the project at dedicated events. To reach policy makers, the project managed to complete all its demonstration projects early enough to show "physical proof" of the benefits of energy reduction technologies, using conferences on site, videos, site visits etc.

Therefore, the project managed to:

- Save and recover energy in the urban water cycle
- Develop new techniques to optimise energy consumptions at WWTPs
- Support the development of sustainable regional policies on water which aim at reducing energy consumption of water utilities

Overall, INNERS has been a very successful project. The demonstration projects and the three main project outputs (the EBAT and EOS tools and the benchmark study) were completed almost one year before the project end. All these outputs were implemented

jointly, mostly in tandems for the demonstration projects, building on partners' specific expertise, but also involving more partners for the other project outputs. Finishing the activities early enabled the partners to strengthen their dissemination strategy. For example, the Swedish television produced a documentary on the Leuven project. Results of INNERS were used by specialists in follow up projects such as the ENERWATER project funded by Horizon 2020. Monitoring of data will continue after the project ends and data will be used to publish scientific articles as well as for student classes. In terms of spin-off activities, the sustainable swimming pool project in Raalte inspired the implementation of similar initiatives for the swimming pools of Urk and Roermond in the Netherlands. The City of Apeldoorn (Netherlands) also implemented new ways of collecting and treating waste water according to the INNERS results.

# 2. Analysis of Payment Claim

## 2.1 Quality of the payment claim documents

The payment claim was received at the JTS on 24 December 2015. Thank you for your timely submission.

The claim amounted to  $\leq$  584,616.39 TEC corresponding to  $\leq$  292,308.20 ERDF. The previous claim's forecast for the period currently being reported on was  $\leq$  663,777.46 TEC, meaning that 88% of the forecast was achieved.

Overall the quality of the current claim was good and consistent among the partnership.

The verification of expenditure sheets (VoEs) were not sufficient and led to the queries below (see section 2.2).

All expenditure was supported by controllers' signatures. The quality of the audit work was generally good. The partner controller's declarations were clear enough and corrections were made.

#### 2.2 Queries and potential corrections

On 26 January 2016, the JTS sent some queries to the LP via email:

i. LP FLC: During the clarification phase, it was found that the auditor signing the final claim did not correspond to the current approved FLC for the project LP. A new FLC certificate was requested under the name of the new auditor signing the overall and LP claims in order to validate the costs claimed. However, on 21 March the Auditor's company contacted the JTS and requested to allow the current certified auditor Mr. MCJM Bekker RA resign the overall and LP final claims given the short timeframe to get a new FLC certificate and the closure projects deadline. The JTS accepted this proposal and received the signed documents on 22 March 2016 via OLF.

- ii. On the spot checks: PP4, PP9 and PP11 were asked to confirm if an on the spot check was carried out by their respective FLCs. PP4 and PP11 sent us a report and a document confirming the performance of these checks. While PP9's FLC confirmed that he visited the properties on 18 December 2015.
- iii. VoE sheets: An excel version of the VoE sheets were requested for PP2.
- iv. Staff and Travel and accommodation: PP8 was asked to send us the individual claim approved and signed by the LP FLC after they explained that the amounts submitted OLF system, were reintroduced from a previous correction made by the LP in PC10 (€1,819.64) in order to stay within the total project budget of the partner at that moment, but given the final expenditure the LP and LP FLC realized that this cut was not necessary after obtaining the final figures for the different project budget lines. Therefore, €1,116.64 is re-included under staff costs while €703 is also re-included under travel and accommodation budget line. The JTS accepts this re-introduction of costs after a signed document was sent by the LP FLC on 22 March 2016.
- v. External experts: PP7 was asked to confirm that VAT was deducted from the cost claimed given its VAT status. The partner indicated that there was no VAT charged as the transaction was subject to reverse charges principle as specified in the invoice.
- vi. Meetings and seminars: The LP was asked to send us pictures of some items (USBs, gadgets) claimed under this budget line. The LP confirmed that these items were given to the visitors, participants and stakeholders at the project final event, the usb and the bag contained the project final report. As the budget for the final event € 100.000 was budgeted on meetings budget line, these costs were claimed here. From the received explanation, no correction is necessary. PP2 indicated an invoice paid date for a cost claimed. Regarding PP3, a confirmation of the partner's VAT status was required, the partner explained that for some expenditure paid by MEL (Metropole Lille) are made using its general budget, and while some other expenditure is paid with the MEL sanitation budget. In the first case, they declare expenditure with VAT because they cannot recover it. And for the second case, they declare expenditure without VAT as they recover it. No correction is deemed necessary.
- vii. Publicity: Supporting evidences were requested for some items claimed by the LP and PP10, in order to check if publicity requirements were well met. No correction is applicable. The partner was also requested to confirm if VAT was deducted from the cost claimed and to send us a VAT declaration confirming the partner's VAT status. The document was received on 21 March 2016 stating that the partner cannot recover VAT therefore our internal monitoring system has been updated accordingly to a NO status. No correction is applicable to the cost claimed.
- viii. Equipment: PP5 was asked to send us a corrected version of the VoE sheet where the amount claimed matches the one submitted via OLF. The LP explained that in

the PC10, the LP FLC reduced € 173.01 to the Equipment costs presented in order to stay within the total budget of the partner. Given the fact that this is the final claim where the project partnership can claim all eligible costs, the LP decided to reintroduce this cost in the final PC13. The JTS accepts this inclusion.

ix. Administration: PP5 was asked why they were claiming costs from 2010, 2011, 2012, 2013 and 2014 under this budget line. The partner explained that the administration costs presented are actually their overhead rates, reviewed across all previous claims once the correct rates were agreed. The problem is that the total amount claimed in this final claim €70,946.53 makes the overall partner budget line exceed the 20% of the Staff costs (cumulative figures). Therefore €24.07 is rejected from this final claim at partner level.

Consequently, corrections were necessary for a total amount of €24.07 TEC.

## Summary:

Expenditure	TEC	ERDF			
Claimed by project	€ 584,616.39	€ 292,308.20			
Corrected by JTS	- € 24.07	- € 12.04			
Presented to Certifying Authority	€ 584,592.32	€ 292,296.16			

## 2.3 On the spot checks

Partners should be aware that according to Regulation (EC) 1828/2006 amended by Regulation (EC) 846/2009, all partners' First Level Controllers must perform on the spot checks at least once in the project's lifetime. According to the latest documents, all partners (out of 11) have undergone on the spot checks.

In the case of the French partner PP3 (Lille Métropole) there is no need to submit a report to the Conseil Régional Nord Pas de Calais because this has been done already for a different project having the same First Level Controller.

# 3. Progress of project expenditure

#### 3.1 Overall expenditure

The total eligible expenditure claimed so far amounts to  $\le$  6,394,029.64 which is 97% of the total project budget given in the approved Application Form. As far as ERDF is concerned,  $\le$  3,197,014.82 was claimed.

Expenditure has been incurred under all budget lines overall. The ceilings for the administration costs budget line were not respected at partner level (>20% staff costs in

the cumulative column PP5). Some budget lines are spent faster than others; for instance, 112% of the budget for investments was consumed, while only 41% for meetings was claimed. The Lead Partner indicated that investments of the LP, PP2, PP3, PP4 and PP11 resulted to be more expensive than originally foreseen, reasons were diverse but overall, the lack of similar projects (because of the innovative nature of these investments) made that the investment budgets for the application were based on an estimation only.

While the underspent for meetings is due to the distribution of the € 100,000, they had for the final event organization, under other different budget lines such as staff, external experts, travel and publicity. Another reason for the underspent under meetings budget line was that less budget was used since some of the meetings (and most of the final events) were mainly organized at the partners own locations resulting in a cost effective approach.

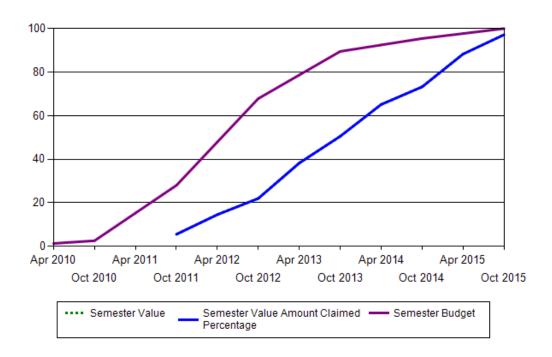
9 of the 11 partners submitted expenditure in this claim. PP4 and PP9 did not participate in this final claim because they have already claimed their total budget in previous claims.

The LP claimed 85%, PP2 claimed 106%, PP3 claimed 96%, PP4 claimed 100%, PP5 claimed 114%, PP6 claimed 101%, PP7 claimed 92%, PP8 claimed 102%, PP9 claimed 105%, PP10 claimed 107% and PP11 claimed 105%.

Please see Annex 1 for details on expenditure broken down per claim and per partner.

The graph below displays the progress of the project expenditure in blue against the figures set in the application form in purple. The spending pace has picked up with this final claim and the gap was almost closed.

#### Annual spending profile graph



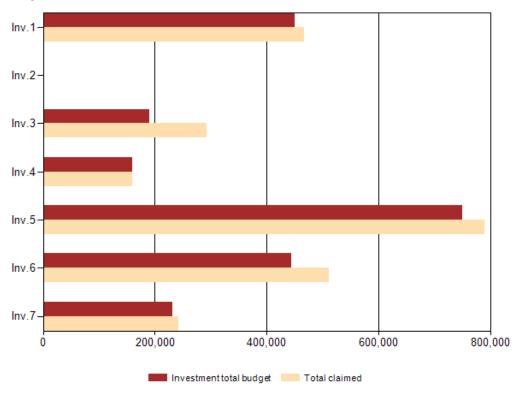
# 4. Progress of Investments

# 4.1 Analysis of investment expenditure

In the application form, investments amount to  $\leq$  2,225,400.00; they represent 34% of the total project budget. Their timely implementation was key to keeping up with the project's spending targets. To date,  $\leq$  2,462,534.40 TEC was spent, this is 11% more than the 100% budget approved in the Application Form.

All the investments were completed and pictures of the permanent commemorative plaques were placed for all investments except for the removed investment 2.

## 4.2 Progress of individual investments



Investment 1: Heat recovery from effluent WWTP Raalte by Partner n.1

Start date: January 2011

End date: December 2013

Budget: € 450,000 EUR

Spent: 466,403.38 EUR

The investment is completed since December 2013. Data were integrated by the WP1 coordinator for their modelling work. The results show that the new installation saves the swimming pool €25.000 of gas consumption. A permanent billboard following the programme publicity requirements was erected in front of the swimming pool. Visitors have access to a monitory that explains the installation and displays energy saving information in real time. This investment is widely used by INNERS to showcase the concrete results brought by the innovative technologies developed.

Investment 2: Demonstration project Deventer by Partner n.1 – a new sanitation concept

Start date: January 2011 End date: June 2014

Budget: 0 EUR Spent: 0 EUR

This investment was removed. This investment consisted of a business case that investigates the viability of separation of black water from grey water in a new housing area (400 houses) in Deventer (NL). The study was completed in August 2013 but it did not provide the project developers with enough certainty to implement the concept in the new housing area. The lack of scale to develop the project further was a barrier for implementation. Therefore there is no expenditure for this investment.

Investment 3: Implementation of decentralised heat grid at the WWTP Buchenhofen,

Wuppertal by Partner n.2

Start date: January 2011 End date: April 2014
Budget: 190,000 EUR Spent: 293,024.30 EUR

The decentralised heat grid is completed. It aims at obtaining a higher efficiency for use of the thermal energy at the Buchenhofen WWTP by connecting the sludge incineration plant with the existing heat grid (installation of a pipe and a heat exchanger). The project already recorded tangible results. An estimated €110.000 saving on gas is estimated per year, while the CO2 emissions are reduced to 380 Mg per year by the heat grid. The project reports that the investment costs to enlarge the heat grid were higher than expected.

Investment 4: Heat recovery system at the WWTP for cooling operation buildings or for drying wood chips (for the incineration plant) by Partner n.2

 Start date: January 2011
 End date: 12/2011

 Budget: 160,000 EUR
 Spent: 160,041.19 EUR

The investment is now completed. The absorption chiller was installed in 2012; it has been monitored since then and works properly after some start-ups problems. For the estimation of the heat consumption of the absorption chiller measurements units were installed in November 2014.

Investment 5: Heat recovery from sewage by Partner n.3 in Lille

Start date: January 2011 End date: June 2015
Budget: 750,000 EUR Spent: 789,662.56 EUR

The investment is now completed. The investment focuses on an energy efficient technique for sludge treatment that aims to produce more biogas. The "Exelys" system has been installed at the Ovilleo WWTP in Lille. It includes heat tanks and heat exchangers to enhance the biogas production of sludge. Implementation started at the end of May 2014 and realization was completed in December 2014. Monitoring started from the beginning of 2015. In May 2015 the JTS visited the investment as part of the INNERS final conference in Lille and could witness that the investment is properly functioning.

Investment 6: Demonstration project Anammox by Partner n.4

Start date: January 2011 End date: September 2012
Budget: 443,700 EUR Spent 510,759.74 EUR

The investment is now completed The DEMON installation was delivered in September 2012 and has been monitored since then. It is fully operational and performing well. It resulted in an energy saving of €38.000 per year an an energy saving of 172,000 kWh/a thanks to the deammonification installation.

Investment 7: Construction of a heat exchanger system in an existing combined sewer by Partner n.11

Start date: January 2012 End date: June 2015
Budget: 231,700 EUR Spent: 242,643.23 EUR

The investment was completed in September 2014 and entered a monitoring phase since then. No major problems have been encountered except small difficulties that have been solved: clogging in the filter and in the heat exchanger, adjustments to the heat pump.

# 5. Management

The relationship between the Lead Partner and the JTS was deemed to be very good. Regular communication took place between the LP and the JTS by phone, as well as by email. The Lead Partner replied relatively quickly to the JTS queries.

As far as project activities are concerned, the partnership kept the JTS informed. Press releases, invitations, deliverables were communicated in a timely manner. Thank you for your feedback about your activities.

# 6. Requirements after the project closure

The project implementation may be over but you are not finished with INTERREG IVB NWE! We would like to remind you of the following obligations arising from the Subsidy Contract or the European Regulations:

- All original documentation relating to the implementation of the project and its financing must be archived for audit purposes for at least 3 years after the last payment of the European Commission to the NWE Programme has been made. This means that all your project related documents must be retained at least until 31st December 2021 (see also Article 9 of the Subsidy Contract). For further details, please refer to General Regulation (EC) No 1083/2006 Article 90 and Commission Regulation (EC) No 1828/2006. For information in what form the documents can be kept, please refer to Article 19 of Commission Regulation (EC) No 1828/2006
- Where, at the latest three years after closure of the operational programme, it is established that an operation has generated revenue that has not been taken into

account under paragraphs 2 and 3, such revenue shall be refunded to the general budget of the European Union in proportion to the contribution from the Funds. Commission Regulation (EC) No 1083/2006 Article 55.

• Furthermore, an operation shall retain the contribution from the Funds only if that operation does not, within five years of the date of the completion of the operation undergo a substantial modification that will: a) affect its nature or its implementation conditions or giving to a firm or a public body an undue advantage; and b) resulting either from a change in the nature of ownership of an item of infrastructure or the cessation of a productive activity. Commission Regulation (EC) No 1083/2006 Article 57.

#### 7. Overall Conclusion

INNERS delivered all its expected outputs and managed to efficiently disseminate its results to the target groups. A strong transnational collaboration enabled the partnership to gain recognition among regional decision makers, water facilities operators and academics. The investments will benefit local communities on the long term and the other project tools will continue being updated by the partners.

As far as the expenditure is concerned 97% of the total budget was claimed.

In accordance with the Programme agreed procedure, the National Authorities of the partners involved in the project were asked on 30 December 2015 if the final payment could be made. By 27 January 2016, none had asked to withhold payment.

The payment claim and the progress report n°13 are approved, for an amount of € 292,296.16 ERDF. And additionally, from the PC12, €108,555.19 are added as this was blocked by the JTS once the 85% of ERDF was reached with the previous claim. Therefore, €400,851.35 will be paid to the project.

Date: 25 March 2016

Officers in charge: Aurélien Parsy, Project Monitoring Officer

Nélida Hancco Herrera, Finance Officer



General Project Data

Project title: Innovative Energy Recovery Strategies in the urban water cycle
Acronym: INNERS Project number: 192G

Nationality of the Lead Partner: NL

 Start date:
 01 Apr 2010
 End date:
 31 Dec 2015

Priority 2 - Managing resources and

Duration (months):

risks

# Annex 1: Total Eligible Cost broken down per claim, per partner.

P No.	Institution	Budget	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10	PC 11	PC 12	PC 13	PC 14	Total claimed
1	Waterschap Groot Salland	1,824,000.19	164,134.00	0.00	101,115.58	0.00	133,429.54	0.00	180,126.49	155,606.07	520,366.52	105,571.98	0.00	50,165.89	144,175.50	0.00	1,554,691.57
2	Wupperverband	828,936.60	50,891.76	0.00	230,285.18	0.00	46,419.10	0.00	99,981.27	176,343.64	187,166.89	18,078.74	-846.82	13,483.90	64,414.37	-9,148.13	877,069.90
3	Lille Métropole Communauté Urbaine (LMCU)	1,000,650.00	15,586.78	0.00	3,561.78	0.00	2,840.69	0.00	6,155.04	101,119.67	8,526.87	8,981.91	0.00	765,291.42	46,257.94	0.00	958,322.10
4	Waterschap Vallei & Veluwe	650,000.00	32,927.58	0.00	65,192.98	0.00	99,005.16	0.00	349,798.97	79,904.15	10,851.05	8,866.15	0.00	6,215.76	0.00	0.00	652,761.80
5	University of Bradford	565,040.37	38,763.26	0.00	26,593.10	0.00	71,353.07	0.00	62,112.34	106,788.70	59,800.90	49,386.28	0.00	52,716.29	178,037.70	0.00	645,551.64
6	Aquafin	480,204.10	22,846.42	0.00	84,176.06	0.00	62,325.08	-9,658.68	107,515.47	58,629.24	57,566.74	35,012.42	0.00	22,343.17	46,493.83	0.00	487,249.75
7	LIST (ex Centre de Recherche Public Henri Tudor)	567,299.27	10,125.19	-1,459.32	16,947.05	1,021.33	58,433.85	0.00	106,173.37	70,902.21	89,225.70	73,031.59	0.00	64,474.49	35,396.96	0.00	524,272.42
8	Université du Luxembourg	109,759.62	11,275.99	0.00	30,908.13	1,698.52	13,490.78	0.00	20,091.49	10,817.87	14,300.07	7,176.37	0.00	0.00	1,819.64	0.00	111,578.86
9	Kent County Council	179,818.00	3,908.90	0.00	5,730.60	0.00	7,249.69	0.00	122,317.25	48,064.20	2,240.90	0.00	0.00	0.00	0.00	0.00	189,511.54
	Syndicat Intercommunal de Dépollution des Eaux résiduaires du Nord (SIDEN)	55,500.00	6,169.85	0.00	1,559.19	-155.34	1,845.73	0.00	13,868.86	1,472.79	2,419.26	1,530.78	0.00	2,275.56	28,360.00	0.00	59,346.68
11	VLARIO Overlegplatform	318,000.00	6,119.95	0.00	26,333.26	0.00	3,422.08	0.00	0.00	0.00	9,157.91	225,698.20	0.00	23,305.60	39,636.38	0.00	333,673.38
	Total	6,579,208.15	362,749.68	-1,459.32	592,402.91	2,564.51	499,814.77	-9,658.68	1,068,140.55	809,648.54	961,622.81	533,334.42	-846.82	1,000,272.08	584,592.32	-9,148.13	6,394,029.64