

10. Better investment planning (“IPAC”)



Situation

The Investment Planning and Costing Tool or IPAC system allows third parties acting on behalf of NI Water to build up Project Costs in a standardised way. Previous Price Control submissions were subject to external consultancies utilising their own cost information data to price up whatever projects they were assigned. This leads to varying approaches being taken, and differing costs being used within the single Price Control submission.

Action

To meet regulatory expectations, NI Water set out to develop a tool which would implement a common set of data in a standard way no matter who the end user was. IPAC works as a front-end interface to a single set of cost curves owned by NI Water and is developed and hosted internally with a secure external interface.

The master cost curve list includes 503 capital cost curves, opex and carbon algorithms. During the build-up of a project within IPAC the user not only develops the capital cost, but also the opex cost (for example Power, Labour, Goods & Services and Chemicals) requirements as well as the embodied and operational carbon. The outputs include the production of the whole life cost and carbon (embodied, operational and whole life in line with our developing Climate Change Strategy. NI Water can update the cost curves as new data comes in following the completion of capital schemes or to apply inflation indices and special factors if required to uplift the original scheme costs. NI Water can update the cost curves as new data comes in following the completion of capital schemes or to apply inflation indices and special factors if required to uplift the original scheme costs.

This IPAC interface simplifies and standardises the methodology for pricing up a Capital Project, working in a similar way to online shopping where several items are selected and sized. This will then give Total Capital Cost, Whole Life Cost, High Level Carbon Cost and so forth.

Proj. No.	Project	Owner	Price Control	Status	Reg.	Env.
1028	Change (Hydroflow) ...	Michael McCrean	PC21	Complete	Yes	0%
1010	Pumpovers WWTW	Michael McCrean	PC21	Complete	Yes	0%
1048	Purification WWTW	Conor Morgan	PC21	Complete	Yes	0%
1025	Longleisure Treatment ...	Amy Black	PC21	In Progress	Yes	0%
1022	Ready Armagh DA Appr...	Conor Morgan	PC21	Complete	Yes	0%
1003	Ballinacorney DA Upper	Conor Morgan	PC21	Complete	Yes	0%
1006	Wick DA Working End	Conor Morgan	PC21	In Progress	Yes	0%
1005	Downside DA - Broomf...	Conor Morgan	PC21	Complete	Yes	0%
1002	Cullinane DA - Ingham...	Conor Morgan	PC21	Complete	Yes	0%
1004	Tomasson DA Cloon	Conor Morgan	PC21	Complete	Yes	0%
1007	Downside DA Tyke	Conor Morgan	PC21	Complete	Yes	0%
1008	Arkie DA Mullabrock ...	Conor Morgan	PC21	Complete	Yes	0%
1015	Warrinpoint WWTW P...	Michael McCrean	PC21	Complete	Yes	0%
1022	Rathfriland Dumbough	Conor Morgan	PC21	Complete	Yes	0%
1077	Upgrade to 40 litres/s	Amy Black	PC21	In Progress	Yes	0%

Results

As IPAC has been used to cost up all PC21 Capital Projects it has the additional advantage of allowing benchmarking to be carried out, as evidenced in the recent Batch 1 of Regulatory Scope Certainty projects. The individual elements of each project which were submitted within the Business Plan were directly compared to the most up to date project data, highlighting changes and increases in the scope, as well as the resultant change in costs. This tool was described by the NI Water Board Assurance Team as ‘as good as they have seen in the industry.’ Going forward, IPAC is to be used for pricing up all Capital Works Projects, delivering a Baseline Target Cost to which efficiency challenges would be applied and may be further developed to better meet the changing needs of NI Water.