

Promoting Positive Environmental Behaviour Change at Crossrail – lessons learned from implementing the Green Line recognition scheme

Appendix 1

Green Line interviews with Contractor representatives

C405 CSJV PADDINGTON STATION- Kenny Hills, Environment Manager

Kenny felt that the scheme was a success with good levels of support from senior management and set them a goal with a focus.

Due to the Green Line being an agenda item it allowed for a good level of resource allocation and it was achieved at an important time in the project when the team were mobilising.

The scheme generated discussions within the C405 team, meetings were held to discuss environmental issues, and it did change behaviour with staff members asking what they needed to do to achieve it, often acting as a prompt to get people thinking about environment. It also allowed for a healthy competition between different team e.g. between the piling and deconstruction teams. There was also healthy competition between the CSJV contracts to achieve the Green Line.

The Green Line provided a good platform for environment to be elevated as a discipline on site with more directors, middle management and site management talking about environment and it was easier to put in place a strategy for everyone to get on with. There was real recognition that one person couldn't deliver all the environment requirements and that it needs a team leading along with champions.

Kenny and the CSJV team wanted to demonstrate to Crossrail management and the CSJV senior management that they were best in class, achieved recognition of individuals and the whole team and many doing more than they would normally do in their regular job.

Kenny found the scheme to be really helpful in trying to manage nuisance and helped to focus the team at a critical time and build strong stakeholder relations. Kenny used the Green Line scheme to set the groundwork for the Supplier Performance Process, awards and wider sustainability (BREEAM, carbon etc) so he could address sustainability issues whilst knowing environment was being supported by the site teams.

Kenny said he wouldn't change too much with the scheme but commented that it needs to stay current to the nature of aspects and scope of works. It is hard to get people to do things when they can't see why they are doing it but the team could really see the benefit of the Green Line in mobilisation.

The scheme needs to keep momentum during the longevity of a project and Kenny suggested there should be different stages/levels for different contracts so that it is a progressive scheme.

He thinks that including it in the Supplier Performance Framework would be something to explore to see if they can be merged whilst including extra items to the framework such as leadership and behaviour change.

He also feels there should be a level of presentation from the senior construction team e.g. PM or PD as part of the application process.

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Kenny stated that he would apply again if the scheme existed on another future project.

C610 ATCV SYSTEMWIDE MAIN WORKS – Marcelle Hornshaw, Environment Manager

Marcelle noted that achieving Green Line was the first environmental award achieved by ATC. This set a benchmark and genuinely raised the environmental profile for the project and it strengthened engagement across all levels of management and operatives.

Marcelle feels that the scheme works very well which requires a significant amount of work and preparation. This is only a positive as it strengthens contracts overall environmental engagement and performance across all key disciplines. The only change she would suggest is the assessment to be conducted as a face to face audit rather than a submission package. This would reduce the time taken to prepare for essentially a blind audit and adopting a face to face audit should allow for better delivery of each contractors achievements.

Marcelle confirmed she would definitely apply again if the scheme was available on a future project

C310 HMJV THAMES TUNNEL - Phil Bailey, Environment Manager

Phil thought the Green Line was a good scheme and found it useful. It was a good way to get 'buy-in' from senior management and project directors who sometimes may favour low cost solutions over new innovative technologies or initiatives that cost more even though they have lower impact and can provide cost savings over time. It was easier to gain 'buy-in' as the scheme was tangible. Having to benchmark against other contractors with the competitive nature of having achieved it or not was good. Phil confirmed he liked the hoarding and artwork associated with the scheme.

Achieving the Green Line was good for reputation as a good new story and was used in tenders. Phil believes the scheme did improve behaviours, knowledge and attitudes amongst the project team. The process was straight forward and it was easy to apply.

Phil noted that they started their submissions about half way through the contract which was a bit late and therefore a bit harder to change behaviours as although teams were already working well they were working in particular ways. Phil felt it was hard to measure success of some improvements and innovations and that they weren't necessarily down to environmental behaviour improvements. Incidents decreasing could have been through changes of behaviour but it also could have been due to a number of other changes such as changes in work management or work type so it is very hard to measure.

Phil suggested that an environmental awareness module/test during induction process then reassess staff 6 months later could quantify behaviour/engagement improvement.

Phil confirmed he would definitely apply again if the scheme was available on a future project.

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Phil added that it was good to have the Commendation Level as a step up for any contract who achieved the Green Line. He felt that after 12/18 months as 12 contracts had the Green Line it was easy to sit back and stop striving for gains if there was not the next level up to set the bar.

Phil noted applying for the Green Line commendation drove them to apply for it as no-one had achieved it so being the first to achieve it was extra kudos and perhaps if others had achieved it first then it may have lost its appeal. Phil commented that if there was a 'Gold' level on the Supplier Performance framework then it would add weight as the Project Manager and Project Directors are heavily involved in the Supplier Performance process and would be a more powerful driver if tied in with a scoring scheme.

C305 DSJV EASTERN RUNNING TUNNELS –Bruno Guillaume, Environment Manager

Bruno started by commenting that for any behaviour change on a contract the key factor is the make-up of the contractor team and how it can be ensured that any requirements are cascaded down the supply chain. The C305 contract applied for the Green Line scheme as the Crossrail PM committed to it and expected it to be achieved. Bruno felt that as a structure for assessing where the contract was in terms of environmental awareness it was a good scheme and provided discipline for the team that was measurable. Bruno commented that when a contract had achieved the Green Line he felt that the scheme provided limited incentive to invest further on improvements. He also felt it was very hard to 'compare' project even against tunnelling contracts such as C300 as they faced very different challenges during works. He thought that to further improve the scheme a different form of competition could be introduced and contractors encouraged to focus on risk specific campaigns.

He added that the Green Line structure to include senior management worked well and on C305 all managers supported the scheme. He noted that the scheme was voluntary and not included in the Crossrail Works Information. Therefore the involvement of senior managers demonstrated a commitment.

With regards to environmental champions Bruno felt that these should be selected with care and not appointed arbitrarily by managers. Having 'stretching environmental objectives' as an area of the scheme didn't lead to any stretching objectives being implemented and on C305, the targets were only increased when the Contractor was confident they could be achieved.

As part of the scheme the C305 used the TV screens in their offices and posters which Bruno felt was a good way of providing relevant environmental information to the site teams. The best way to communicate was site specific Toolbox Talks and not to lecture operatives. They required specific Toolbox Talks for example on C305 with regards to handling tunnelling additives, such as foaming agents. Bruno did note that with regards to waste management it was very difficult to change behaviours when the site teams are not held accountable and gave the example of the yard foreman often having to deal with mixed waste from the nightshift.

Bruno felt that he couldn't say he had the evidence to demonstrate behaviour change from achieving the Green Line however it did provide a framework to assess against where the contract was in terms of environment awareness and behaviour. He commented that by having an integrated team of contractor

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and client with a common purpose then it would allow for a better level of competition between teams within the overall project.

Bruno confirmed that he would apply again if the scheme existed on another major project.

C422 LOR TOTTENHAM COURT ROAD – Ashley Webb, Environment Manager

Ashley commented that the main goal for the project for achieving the Green Line was to improve environmental performance on site. But there is a bigger element to this too – they saw it also to improve the competitiveness of Laing O’Rourke (LOR) for future work winning. They also saw an opportunity to support the wider goals of sustainable development including social benefits through community and staff participation in the scheme they were able to promote the efficient use of resources, reduce waste and thus reduce costs. It has given them the opportunity to raise the environmental awareness of their staff for all staff not just engineers but also site operatives as historically they are missed out. Ashley felt that the Green Line scheme helps a framework to support LOR corporate sustainability goals.

Ashley felt that the kick off meeting run by Crossrail at the start of the Green Line process was key to gauge commitment from senior management as some can lose sight of the ‘softer’ issues and when the kick off meeting is held it reaffirms the clients commitments to environment.

Ashley didn’t have any suggested changes from the practical side of the Green Line but felt LOR could have had more synergy with their projects on Crossrail and had a more joined up approach and do the same things on site. He suggested perhaps making the 3 pillars of sustainability a more visible part.

He felt the commendation was a good as there is a danger of contractors sitting back when they achieved the Green Line however the commendation level provides a contractor the opportunity to demonstrate they are still improving.

Ashley confirmed that he would absolutely apply again on a future project and was looking forward to seeing what the Green Systems scheme looks like.

C360 CSJV INTERMEDIATE SHAFTS – Simon Taylor, Environment Manager

Simon felt that the Green Line scheme gave the team something that they could be proud of and gave something more tangible and meaningful which enable him to have the input from the works managers and to get buy in with the operatives. He felt it works in a similar way to their subcontractor league board which was successful for the contract. The Project Director pushed the team to achieve it and there was an element of competitiveness with obtaining it with other CSJV contracts as well as other high achieving Crossrail contracts. The team were always asking for updates at weekly team meetings. The senior leadership buy in meant the commitment trickled down to the guys on site and achieving an award from Crossrail was good for the parent companies to use in their internal communications.

The Crossrail team were very collaborative especially the Crossrail environment advisor who provided help and support. The CSJV construction team including the Project Manager would ensure they had identified upcoming works and asked Simon to identify the environment risks so the foreman could brief this to the

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workforce. In terms of site decision making, Simon was expected to be present at all the progress meetings to ensure environment was considered when planning works.

Simon commented about how tough it was to pull all the information together for the Green Line submission but appreciated it couldn't be too easy for the scheme to be successful. He identified that at C360 there is an initiative to gain leadership 'buy-in' by having a member of leadership team lead on a certain pillar of the Gateway scheme and felt something similar could be applied to the Green Line scheme. He identified that similar to Gateway perhaps the team could have come in at Silver level and then for longer projects had time to work on improving to achieve Gold level. He commented that if a similar approach to Gateway was used such as pillars then getting senior leadership buy in could be a challenging pillar to achieve.

Simon confirmed that he would apply again due to the way parent companies looked at achieving the scheme as a real success and encouraged buy in from leadership.

The Site foreman was also present for part of the interview. He received the Crossrail Sustainability Champion in 2015 for his work supporting community relations and environmental matters on the project. He commented that the Green Line scheme worked well and gave people more awareness of environment even if it was just down to them raising dust issues and segregating waste. He felt that initiatives like Gateway and Green Line encourage more senior members to come to site and provide an extra set of eyes.

C412 CSJV BOND STREET STATION – Melissa Wellings, Environment Manager

Melissa noted that C412 applied due to their being an element of competition between the Crossrail contracts and they wanted to write about all the things that they were doing that they felt were benefitting and helping to improve environmental performance of site. The Green Line scheme pushed them to demonstrate how they achieved correct behaviours and ensure they implemented environmental behaviour improvements. It was beneficial for the parent company in order for them to promote the achievement.

She felt the scheme supported with the trialling of lots of initiatives and helped to highlight issues where needed to improve awareness raising. Melissa felt that 'buy-in' depended on the senior management – achieving it was seen as a good success however applying for the Green Line did not necessarily improve environmental 'buy-in' from senior management.

Melissa felt that improvements to the scheme could include senior management having to do a certain number of environmental inspections joint with the Crossrail Project Manager and complete a presentation for those assessing the scheme application. She commented that in order for some improvement initiatives to be implemented it required money and proposed that there could be an incentive within the Green Line scheme to win something to further address environmental behaviour.

Melissa confirmed that she would apply again if the scheme was available on a future project