Chapter 4 – The Renewable Heat Team: resources and lack of project management

4.1 It quickly became evident to the Inquiry that one of the central themes that permeated all aspects of the story of Northern Ireland's RHI scheme was the capacity of DETI to develop and operate a scheme of this kind. The scheme was destined to last some 20 years-plus, and, given that was so, the mechanisms that were, or ought to have been, put in place to properly manage the scheme, when resources were scarce and staff would inevitably change, was an important consideration for the Inquiry. These issues are examined in this chapter.

Resources

- 4.2 Concerns about resources, in terms of the time, people and expertise needed to develop initiatives on renewable heat, were present amongst some officials involved with the development and delivery of the RHI scheme in Northern Ireland from an early stage. The Inquiry heard evidence from many witnesses about the pressure on resources in Northern Ireland, particularly in relation to staffing levels, and how these pressures affected what work was done and how it was delivered.
- 4.3 In a submission in September 2008 to her then Minister, Ms Foster, concerning the next stage of policy development on renewable heat, Ms Pyper advised against attempting to include Northern Ireland in the 2008 Energy Act, which paved the way for the GB RHI. However, while suggesting that "it would be useful to use the greater resource that BERR has", there was no reference made in the submission to serious resource concerns about developing an independent NI RHI scheme. The serious resource concerns had been documented by Ms Martin in an earlier draft of the September submission, but, they were, significantly, omitted from the final version sent to the Minister. The earlier draft had contained the following paragraphs, which the Minister did not get to see:²⁶⁵
 - "18. DETI cannot hope to develop this area of work with current resources, but will come under increasing pressure to say what it is doing in response to announcements from the EU and BERR in this area.
 - 19. To help deal with lack of resource at least on renewable heat, we are working to develop contacts in BERR so that they will remember that this issue is transferred to Northern Ireland and keep us informed, although this can be time-consuming of itself. We are also trying to be creative in moving this area forward by creating a stake-holder group to make recommendations about what is needed to develop renewable heat in Northern Ireland."²⁶⁶

Further to the omission of these paragraphs from the submission, Ms Pyper requested follow-up advice in relation to this issue from her colleague Ms Martin and this was duly supplied on 8 November 2008. Ms Martin informed Ms Pyper that DECC (which had taken over renewable heat from BERR in October 2008) had committed significant resources to the area of renewable heat, led by a grade 5 with policy responsibility and 20 staff.²⁶⁷ They were shortly to be

²⁶⁵ DFE-25263 to DFE-25268

²⁶⁶ DFE-25306

²⁶⁷ DFE-25683 to DFE-25686

augmented by six grade 7 officials. Ms Martin commented at paragraph 10 of her advice: "I know we cannot expect anything like this type of resource." ²⁶⁸

4.4 In a subsequent submission to the Minister on 30 April 2009 Ms Pyper did touch upon the issue of resources, stating at paragraph 19:

"Development of renewable heat in Northern Ireland would require significant policy and legislative resources (including for a Bill team in 2010/11) over the short-medium term if we are to have any impact in the 2020 timeframe." ²⁶⁹

She also referred to DECC and the relevant Department in Scotland having committed significant resources, adding in respect of DETI that:

"The Department has limited resources and expertise to devote to managing work in this new policy area. As a result significant consultancy support will be needed to provide the evidence base and economic analysis required to underpin a Renewable Heat Bill starting in 2010/11."²⁷⁰

- 4.5 In response to a Section 21 notice from the Inquiry, Ms Pyper was unable to recollect the actual reasons why in the final version of her 22 September 2008 submission she had removed the two paragraphs drafted by Ms Martin with regard to resources, speculating that the submission was on the long side or that she had felt that it was not appropriate to deal with operational issues in strategic advice.²⁷¹ She did confirm that, subsequent to Ms Martin's further review of resources in November 2008, she had raised her concerns with her line manager, Mr Thomson, then Deputy Secretary and Head of DETI's Policy Group and that, in late 2009, she instigated a full divisional workload review resulting in a comprehensive memo to Mr Thomson on 15 January 2010 detailing the resource situation for each work area across Energy Division.²⁷²
- 4.6 After delivery of the final report from the consultants AECOM/Pöyry in July 2010 confirming the potential for development of renewable heat and the need for Government financial support, Ms Hepper, Ms Pyper's successor as Director of Energy Division, formed the view that the subsequent work could not be managed appropriately without a level of resource which was focused more directly on renewable heat.²⁷³ Ms Hepper herself had less than a year of experience in post with no prior energy background, although she had already led a division elsewhere in DETI. At that time the Energy Division comprised three branches: the Energy Markets Branch, Energy Co-ordination Branch and the Sustainable Energy Branch, the latter being re-named the Renewable Heat Branch in May 2011 and the place where policy work on renewable heat was developed.
- 4.7 The renewable heat team, such as it was, included the grade 7, Alison Clydesdale, who also worked on seven or eight other policy areas. Her job thus required frequent prioritisation of work, sometimes on a daily basis. Ms Clydesdale was replaced in May 2011 by Joanne McCutcheon.

²⁶⁸ DFE-25685

²⁶⁹ DFE-26828 to DFE-26834

²⁷⁰ DFE-26832

²⁷¹ WIT-09965

²⁷² WIT-09966

²⁷³ WIT-15027

Whereas Ms Clydesdale worked 28-32 hours per week,²⁷⁴ Ms McCutcheon worked 24 hours a week during term time only.²⁷⁵

- 4.8 Peter Hutchinson re-joined DETI in July 2009 as a deputy principal; he had previously worked in DETI between July 2005 and June 2008. He worked full time. From June 2010, until he left DETI in May 2014, he worked on renewable heat, reporting initially to Alison Clydesdale and then, from May, 2011, to Joanne McCutcheon. He had no renewable energy or economic background, although he was soon heavily involved with the commissioning and delivery of the consultancy work by AECOM/Pöyry. He attended some training courses but, essentially, 'learned on the job' as he worked full time on the RHI scheme, soon reaching the point where most submissions were drafted by him although submitted in Ms Hepper's name.²⁷⁶
- 4.9 The Inquiry acknowledges that the evidence confirmed that the vast bulk of the work involved in the creation of the non-domestic RHI scheme seems to have been performed by Mr Hutchinson, which was reflected in a special bonus form in relation to him dated 2 February 2012.²⁷⁷ During the development process, the foregoing individuals constituted the core staff working on the NI RHI scheme.
- 4.10 The GB RHI scheme, by December 2013, was resourced by 77 people including three senior civil servants and six grade 6 policy officials, albeit this was to support a scheme covering England, Wales and Scotland.
- 4.11 However, in Northern Ireland lack of adequate resources proved to be a perennial problem adversely affecting the optimal development and management of the RHI scheme. Mr Thomson confirmed in oral evidence that DETI was aware from an early stage of the staff resource devoted to the GB scheme, a level of staff that could never have been expected in Northern Ireland.²⁷⁸ The Inquiry found no evidence to indicate that staffing levels were discussed in any detail between officials from the respective jurisdictions. Mr Thomson agreed that, at the time of the introduction of the scheme, DETI was "badly under-resourced" with 13 key objectives for DETI in the Programme for Government which had to be prioritised.²⁷⁹ He recalled that there had been a moratorium on NICS recruitment in the time of recession and austerity after the 2010 general election. These resource pressures within DETI continued throughout the life of the NI scheme and were acknowledged by Dr McCormick who noted in respect of his period as DETI Permanent Secretary from the middle of 2014 onwards that: "We were facing a situation of constraint and reduction ..." Nevertheless the decision was taken to proceed with a Northern Ireland RHI scheme.
- 4.12 Mr Thomson also noted in evidence that, when departmental restructuring took place in 2010-11, Energy Division had been the most stretched in terms of resources and he was aware in 2012-13 that the whole Department had resource problems. At the same time there were competing pressures within the Department and a wide-ranging policy agenda. For example, he recalled discussions in 2010 with Minister Foster about whether to proceed with all the objectives in the Strategic Energy Framework, which included the targets for producing

²⁷⁴ WIT-12515

²⁷⁵ PWC-04547

²⁷⁶ TRA-01472 to TRA-01475; WIT-06033 to WIT-06034; TRA-01977

²⁷⁷ DFE-430499 to DFE-430500

²⁷⁸ TRA-05658 to TRA-05659

²⁷⁹ TRA-05642 to TRA-05643

²⁸⁰ TRA-12078

renewable heat, and it was agreed to pursue all the objectives. Mr Thomson was referred by the Inquiry to the 10 October 2010 letter from HM Treasury that included the offer of £25 million for the period up to 2015 for an RHI scheme and asked whether such an attractive offer influenced the decision to proceed with a renewable heat incentive in spite of the Department's limited resources. He agreed that this 'ring fenced' funding, outside the NI block grant, offered by HMT was an "attractive" and a "significant" offer, 283 although he also made the point that much of Energy Division's workload was dictated by EU directives and EU targets. He also accepted that Ms Hepper had contacted him on a number of occasions between 2010 and 2013 asking for further resources.

- 4.13 The risk of "inadequate resources" was thought at the time that the scheme was developed in 2012 to be sufficient for it to be recorded as a specific risk on the scheme's risk register, with business implications of this risk identified as including inadequate monitoring and auditing, failure to fully implement scheme and delays in launch date.²⁸⁵ Unfortunately, as discussed in further detail later in this Report, that risk register was never updated from its first inception.²⁸⁶
- 4.14 Mr Thomson's assurance statement to the Permanent Secretary for the period ended 30 September 2012 included the statement:

"The biggest current risk to achieving the PfG (Programme for Government) and departmental objectives is staffing constraints." 287

- 4.15 Ms Hepper stated that whilst she was in post as Director of Energy Division up until November 2013, quite apart from her supervision of the work on renewable heat, she had responsibility for an extensive, diverse and complex portfolio of other energy matters. Overall she estimated that she spent a maximum of 10% of her time on renewable heat.²⁸⁸ She was apparently unaware at the time that project management disciplines had been applied to the GB RHI scheme.²⁸⁹ She accepted in evidence to the Inquiry that DETI's resources were limited, especially in contrast to the resources available to DECC, and that staff had to work extremely hard. Long hours were worked for sustained periods, including evenings and weekends. She raised the issue of staffing resources on a number of occasions in discussions with her line manager, Mr Thomson, and the then Permanent Secretary, Mr Sterling, alerting both of them to mounting pressures and the volume of work across the Division.²⁹⁰ In the course of her evidence to the Inquiry Ms Hepper observed that re-prioritisation took place on an "almost daily basis."²⁹¹
- 4.16 The Inquiry also saw evidence that, some two years later, the pressure on resources continued. On 30 April 2015 Mr Mills, then Head of Energy Division and Ms Hepper's successor, sent a sixmonthly assurance statement to Mr Stewart, then the Deputy Secretary and his line manager, which contained the following:

²⁸¹ TRA-05641 to TRA-05643

²⁸² TRA-05643

²⁸³ TRA-05637 to TRA-05643

²⁸⁴ TRA-05639

²⁸⁵ DFE-398623; TRA-05646 to TRA-05648

²⁸⁶ TRA-05644 to TRA-05647

²⁸⁷ DFE-265835 to DFE-265837

²⁸⁸ WIT-16637

²⁸⁹ WIT-16654

²⁹⁰ WIT-15028 to WIT-15029

²⁹¹ TRA-01787

"The Domestic RHI Scheme was launched by the Minister on 9 December 2014. The Business Case for the scheme included an initial additional admin resource of one SO (year 1) and a further additional resource (1SO & 1AO) in years 2 and 3 as the number of RHI applications and payments build up. To date no additional staff resource has been provided for administering the Domestic RHI Scheme. This has meant that site checks/visits for assurance purposes have had to be reduced and processing of applications is taking longer. The temporary re-location of one SO within the Division has helped however this has ended and a permanent resource is required urgently." 292

- 4.17 At that point, Mr Mills was particularly exercised about the fact that a commitment had been made to provide additional staff for the implementation of the domestic RHI scheme but that these new staff were not provided and the commitment to provide additional staff was withdrawn. His evidence was that this: "extra, un-resourced work arising from implementation of the domestic scheme effectively reduced resources to clear [sic] with RHI in totality." As well as indicating the effect this had on dealing with RHI generally, Mr Mills used this episode as an example of how, at that particular time, there was difficulty in obtaining additional resource.
- 4.18 Mr Mills' written evidence to the Inquiry also stated that Energy Division was generally over-committed in terms of resources and that he did not have sufficient resources, for instance, to fundamentally review the non-domestic RHI scheme.²⁹⁴ Similarly, in his oral evidence, he said that the division was under-resourced and that RHI was "the worst example" of this. Mr Mills said that at least with hindsight he did not see how one could say anything other than that the resources devoted to RHI were "clearly inadequate"; although he also candidly accepted that he did not appreciate the risk which lack of resources gave rise to at that time.²⁹⁵
- 4.19 Minister Foster recorded in her written evidence that, "Energy was a small team with limited resources." Nevertheless, the perception amongst officials seems to have been that they just had to get on with it.²⁹⁷
- 4.20 For his part, Mr Sterling told the Inquiry that he had been conscious that Energy Division was overstretched and under pressure and that there were requests for additional resources.²⁹⁸ He explained that DETI's Resources Group, comprising himself, Mr Thomson and Colin Lewis, had done a lot of work to find additional resources. With hindsight, he expressed the wish that he had been "more inquisitive" about seeking assistance from the Strategic Investment Board in establishing effective programme and project management. Mr Sterling said that none of the officials had spoken to him directly about the problems but he considered the officials concerned to have been "hard working" and perhaps reluctant to ask for such help.²⁹⁹ They were proud of what they achieved with a 'can do' outlook. He could not remember any instance of advising a Minister that something could not be achieved because of lack of resources or

DFE-312463 to DFE-312464, also annexed to Mr Mill's first witness statement to the Inquiry at WIT-14889 to WIT-14890. Although Mr Mills later agreed to amend the wording of another part of this assurance statement, the portion quoted above remained unchanged.

²⁹³ WIT-14541; and see TRA-09509 to TRA-09510 and TRA-09515 to TRA-09516

²⁹⁴ WIT-14534

²⁹⁵ TRA-09507 to TRA-09510

²⁹⁶ WIT-20585

²⁹⁷ TRA-04850

²⁹⁸ TRA-06060

²⁹⁹ TRA-06066 to TRA-06072

expertise; an alternative being to advise that it was very difficult and to try an alternative that would take significantly longer.

4.21 Minister Foster also confirmed in evidence that she raised her concern about DETI's apparent lack of resources a number of times with the Permanent Secretary, Mr Sterling, as well as referring it to Sir Malcolm McKibbin, then Head of the Civil Service, and his predecessor, Sir Bruce Robinson, during their annual appraisals of the Permanent Secretary. She observed that the Energy Division of DETI was constantly having to 'fire-fight' and re-prioritise the workload.³⁰⁰ She told the Inquiry that:

"I do think that the officials worked long hours, probably longer hours than some of their colleagues in other parts of the Civil Service...You can't expect officials to keep working long hours all the time or there will be a consequence to that." 301

- 4.22 Sir Malcolm McKibbin agreed that the evidence as to lack of resources was not satisfactory but he thought that "people hadn't fully realised the need for additional expertise in the energy field." He expressed the view that when taking on a project such as RHI "there has to be a candid discussion between senior members of the Department and the Minister on the issues of risk and capacity." He recalled conversations with both Mr Sterling and Minister Foster about the resource pressure in Energy Division, but these were more with regard to a possible increase in workload from EU directives without any specific mention of RHI. 303
- 4.23 This issue was also addressed in some detail in the evidence of Mr Sterling's successor (from June 2014) as Permanent Secretary in DETI, Dr McCormick. In his oral evidence, albeit with the benefit of hindsight, he told the Inquiry that, "I think it's impossible to defend the resourcing levels." However he also took the view that it would not have taken a vast level of resource to have identified some of the difficulties with the non-domestic RHI scheme. He considered that under-resourcing was a contributory factor to the difficulties with the scheme and that better resourcing would have reduced the risk materially in relation to some of the things which went wrong with the RHI scheme. He also indicated that he was not getting a clear message about lack of resources in this particular area at the relevant time, speculating that more resources might have been able to be found if it was realised that this was essential. Dr McCormick also recognised that the resourcing issue was about quality and expertise as well as simply staff numbers. The sum of the sum of the sum of the properties as well as simply staff numbers.
- 4.24 Dr McCormick's deputy on the policy side, Chris Stewart, gave evidence to similar effect. In his written evidence he said that resources in Energy Division were stretched.³⁰⁸ In his oral evidence to the Inquiry he explained that, although he had not previously been of this view, having reflected on the evidence which he had seen in the course of the Inquiry up to that point, he now took the view that resources in Energy Division had been inadequate.³⁰⁹ He

³⁰⁰ WIT-20595 to WIT-20596

³⁰¹ TRA-08523

³⁰² TRA-16783

³⁰³ TRA-16784

³⁰⁴ TRA-12055

³⁰⁵ TRA-12055; TRA-12067; TRA-12097

³⁰⁶ TRA-12075 to TRA-12078

³⁰⁷ TRA-12076

³⁰⁸ WIT-11527

³⁰⁹ TRA-11523

also now considered that resources in the RHI team had been inadequate³¹⁰ although, as other witnesses did, he emphasised the resource constraints under which the Department as a whole was operating at the time³¹¹ and that he was not conscious of the level of risk being carried by reason of resources being inadequate at the relevant time.³¹² Notwithstanding this, his evidence was that what had been done to try to address resource pressures "was modest and was patently not enough."³¹³

4.25 Mr Stewart also explained to the Inquiry his view that there had been a "great deal of evidence of mistakes being made by small teams working under pressure", with the logical conclusion being that:

"Had there been greater resource, less pressure on teams, then, quite probably, there would've been fewer errors and we might at least have had a better chance of not being where we are today." 314

Lack of project management

- 4.26 Another subject on which the Inquiry heard extensive evidence was that of project management and whether, at successive stages of its existence, the RHI scheme could or should have been organised using project management practices and disciplines.
- 4.27 In GB the RHI scheme had a clearly defined governance structure managed within DECC according to 'PRINCE' project management principles. PRINCE (Projects in Controlled Environments) is a process-based method for effective project management. The principles underlying PRINCE, and indeed of all good project management methods, have been developed to assist in the planning, execution, control and completion of a project.
- 4.28 While widely used on capital and IT projects, PRINCE and other project management methods are flexible and capable of being adapted to the particular circumstances of any project, from the simplest to the most complex. In order to determine whether project management is appropriate, a 'project' is generally defined as a specific activity, different from 'business as usual,' that often involves change and innovation such as a new building, the development of a new product, or the introduction of a new initiative or process.
- 4.29 In government, 'PRINCE' project management principles are one of a number of methodologies used for managing projects. All good project methods contain at their core some fundamental elements. A suitably qualified team should be assembled; project objectives defined and a budget established. There should be a bespoke project plan, with mechanisms to ensure that the plan may be adjusted and/or refined to take account of and manage relevant contextual changes over time. Also essential is a clear and easily accessible system for the collection and storage of records and information. An appropriate formal structure would establish a Senior Responsible Officer (SRO) at Senior Civil Service level, a Project Board, a Project Manager, a Project Team, a Risk Register (to be updated as necessary), an Issues Log and a Benefits Realisation Plan.

³¹⁰ TRA-11524

³¹¹ TRA-11525

³¹² TRA-11529

³¹³ TRA-11526 to TRA-11527

³¹⁴ TRA-11524

- 4.30 In respect of the GB RHI scheme there was an overarching Heat Reform Programme Management Board; project processes were the subject of formal consideration; and, an RHI Project Board met monthly to consider the reciprocal working arrangement with Ofgem. A Risk Register was in place, a monthly risk review meeting was convened in advance of RHI Project Board meetings and risks could be escalated as necessary. The Heat Reform Programme and RHI Project Boards had formal terms of reference and monthly meetings of the Project Board were minuted.³¹⁵
- 4.31 In Northern Ireland, central guidance on good practice in project management was available within the NICS on the Central Procurement Directorate website and was circulated across Departments in 2009.³¹⁶ One of the key recommendations contained in paragraph 1.34 of the DETI Corporate Plan initiated in April 2010 was that:

"Project management techniques should be applied to the initiation, development and implementation of all major pieces of work with project teams drawn from across the department and its NDPBs." 317

- 4.32 In contrast to that objective, some six years later, when reporting on the closure of the RHI scheme, the Department for the Economy (the new name for DETI from May 2016) Internal Audit report of August 2016 recorded that a recognised structured programme/project framework would have been beneficial...there should have been a programme oversight board providing a challenge role on delivery of outcomes; a project plan with milestones and key decision points;...a project budget with project risks; key actions, dates and an assurance mechanism.³¹⁸
- 4.33 Ms Hepper told the Inquiry that, during her time as Director of Energy, she did not consider the application of a formal project management structure to the RHI scheme was practicable in the context of the number of other projects that also required attention and the limited resources available.³¹⁹ In her evidence she stated that the focus was "on delivering the Scheme" and the general approach seems to have emphasised delivery, i.e. "Get on with it."³²⁰
- 4.34 In her written evidence Ms Hepper has also said that no formal decision was taken by DETI about whether or not to use formal PRINCE methodology. She has said that she explained to Mr Thomson how the scheme was to be managed on a proportionate basis in view of the lack of resources. She was unable to say whether that explanation had involved a specific decision not to employ any formal methodology, PRINCE or otherwise.³²¹
- 4.35 Ms Hepper nevertheless told the Inquiry that the key "overarching principles" of project management were in place: "de facto" members of the team included herself as the "Senior Responsible Owner," Ms McCutcheon as the "Project Director", and Mr Hutchinson as the "Project Manager"; that she regularly met the team and they operated in a "proportionate way."
- 4.36 This may be contrasted with what Mr Hutchinson said in oral evidence, namely that he did not recognise the description of him by Ms Hepper as being the Project Manager although he

³¹⁵ WIT-175019 to WIT-175020

³¹⁶ WIT-03282

³¹⁷ DFE-262383

³¹⁸ DFE-216657 to DFE-216659

³¹⁹ WIT-15041; TRA-05330 to TRA-05331

³²⁰ WIT-15041

³²¹ WIT-15041 to WIT-15044; WIT-16651; TRA-02385 to TRA-02386; TRA-05328 to TRA-05342

accepted that it was possible that he was regarded as a 'manager'.³²² He attended a general training course in "Practical Project Management", although that was in 2013 or 2014, after the NI RHI scheme regulations had been developed and implemented, and he told the Inquiry that he did not have any practical experience of the procedures. Subsequent to his service in DETI he said that he had encountered some relevant procedures in the Department of Education, including the benefits of a Project Initiation Document, Project Manager, Project Board, risk and document logs and key actions. None of these arrangements were applied or effectively implemented in respect of the RHI scheme either at the start or at any of the key phases of implementation.³²³

- 4.37 In the course of his evidence to the Inquiry Mr Hutchinson agreed that, given the extent of the funding made available, the unpredictability of demand, the novelty of the project and the financial risks in relation to the RHI scheme, there could be "no question" about whether a formal management procedure would be followed today and that "it should have been then".³²⁴
- 4.38 Mr Thomson, told the Inquiry that the lack of project management was a "corporate failing." Dr McCormick also adopted, to use his words, "a clear position" in his evidence to the Inquiry that there should have been formal project management structures in relation to the RHI scheme and he considered that project management was one of the things which would have prevented things going wrong. 326
- 4.39 Again, Mr Stewart's evidence was to similar effect. He said that "the absence of project management for RHI has been well remarked on and acknowledged";³²⁷ that it ought to have been employed in relation to the RHI scheme;³²⁸ and that, in following the evidence to the Inquiry, he had seen that "time and again, it was shown just where project management could've made a difference."³²⁹ Indeed, he told the Inquiry that one of the lessons which has been learned from the RHI scheme right across the Northern Ireland Civil Service is that: "unless there's an obvious reason for not adopting a project management approach, then it really ought to be the default."³³⁰

The possibility of a Gateway Review in 2012

4.40 The evidence provided to the Inquiry indicates that Sandra Thompson of DETI's Energy Coordination team, raised the question in May 2012 of subjecting the RHI to the Gateway
procedure.³³¹ This provides for a series of independent peer reviews at key decisions or stages in
the lifecycle of a project reflecting the commencement, delivery and closure of the project. The
purpose is to ensure, as far as possible, that important decisions are reviewed and necessary
arrangements are in place before proceeding to the next stage, for example, whether there are
adequate resources available to develop and manage the project or initiative.

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322 TRA-01486 to TRA-01487; TRA-05329 to TRA-05330
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³²³ WIT-06034; TRA-01472 to TRA-01478

³²⁴ TRA-01483 to TRA-01486

³²⁵ TRA-05691

³²⁶ TRA-12054 to TRA-12056

³²⁷ TRA-11513

³²⁸ TRA-11516

³²⁹ TRA-11517

³³⁰ TRA-11518

³³¹ DFE-37393 to DFE-37395

- 4.41 Typically in the NICS the Department Assurance Co-ordinator (DAC) meets the Senior Responsible Officer (SRO) and the project team to make arrangements for a Gateway Review and the review/project team would hold an evidence-based review if required. That initial meeting would typically last 1-2 hours and the review would take 2-3 days. If the full Gateway Review process is considered to be not readily applicable, due to the characteristics of the project, a more flexible assurance review, known as a Project Assessment Review (PAR) is available managed by Central Procurement Directorate (CPD).
- 4.42 In the context of a Department with a "can do" commitment to delivery, involved in a new and highly unpredictable scheme, driven by a need to secure funding for Northern Ireland with what was believed to be a ministerial 'preferred direction of travel', such an independent assessment at a number of key stages of the RHI would have ensured an impartial check as to whether the project continued to be fit for purpose.
- 4.43 The apparently limited interpretation that Ms Hepper placed upon the need for formal project management, may be evidenced by a comment made by her on 16 May 2012 in the course of an email exchange with Ms McCutcheon about the question in Ms Thompson's email of potentially applying Gateway to the RHI scheme. Ms Hepper advised that such a procedure was unnecessary for RHI, writing that:

"I don't think we need Gateway for RHI. We have the project finished and moving into implementation"

and

"so probably too late in any case."332

- 4.44 Mr Thomson told the Inquiry that the project, involving a sizeable sum of public money, should have gone through Gateway.³³³ He believed that, in accordance with NIGEAE, the Gateway process, should have been applied and would have added value to the project.³³⁴
- 4.45 Mr Sterling told the Inquiry that, had he been a party to the discussions about the issue at the time, he would have challenged the view that a Gateway review was not needed because the scheme was 'up and running' and would have advised that serious consideration should be given to such a possibility.³³⁵
- 4.46 In his evidence, Dr McCormick indicated that "an appropriate governance process" now "increasingly needs to include Gateway reviews, which were conspicuous by their absence in this case." Although he was not the Permanent Secretary at the time when the RHI scheme was developed and introduced, Dr McCormick's evidence was also to the effect that DETI "absolutely" should have undertaken a Gateway Review even as early as 2011, at the stage of policy development for the scheme, to ask whether the Department was capable of taking it on. 337

³³² DFE-37393 to DFE-37395

³³³ TRA-05674

³³⁴ DOF-60171 to DOF-60355; TRA-05666 to TRA-05674; TRA-05691

³³⁵ TRA-06088 to TRA-06092

³³⁶ TRA-12026 to TRA-12027

³³⁷ TRA-12097 to TRA-12098; TRA-12058

Risk management of the RHI scheme

- 4.47 The routines of identifying, tracking and acting to reduce risk are a core component of project management. A document known as a 'Risk Register' is used to record risks as they change over time and enables all the people responsible for a project to have a shared understanding of risk and what needs to be done and by whom to reduce it. As noted earlier, the GB RHI scheme had a risk register that was reviewed monthly at its RHI Project Board.
- 4.48 In Northern Ireland, the RHI scheme Risk Register was produced in March 2012, at the time of the consideration of the scheme by the Casework Committee, and was drafted by Mr Hutchinson.³³⁸ Ms Hepper in the course of her evidence explained that it had been reviewed on a quarterly basis in the course of her meetings with Ms McCutcheon and Mr Hutchinson.³³⁹ However, the Inquiry was not provided with any contemporaneous documentary evidence to confirm that it was reviewed on a quarterly basis; and no further written update, additions or amendments relating to risk were recorded.
- 4.49 Even when the later CEPA report of June 2013 indicated that the target set for renewable heat in Northern Ireland was no longer going to be met, no update was made to the Risk Register to reflect this. No signatures were added to the front sheet to confirm consideration upon any particular occasion. Ms Hepper told the Inquiry that it should have been signed off at "head of branch level" by Ms McCutcheon, by herself or Mr Hutchinson simply to signal that it had been reviewed. In summary, while discussions about risk may have taken place within Energy Division, the actual RHI scheme Risk Register first created in 2012 was never updated.

The prospect of a joint DETI-Ofgem Project Board

- 4.50 In December 2011, Ofgem provided DETI with a study into the feasibility of Ofgem taking on the administration of the NI RHI. At paragraph 6 of the Feasibility Study, Ofgem recorded that DETI had expressed some concerns around the need for controls to be developed to ensure that the costs of the NI RHI scheme remained within budget. In the Feasibility Study Ofgem also proposed that a joint DETI-Ofgem administration board should be established to oversee the development of the NI RHI scheme, make decisions around key issues that might arise and manage the contingency fund.³⁴¹ The Study also suggested that the board could help guard against the risk of administrative failures, a precaution that had been included in the Risk Register attached at Appendix 5 to the Study with a risk assessment as "High".³⁴²
- 4.51 The Feasibility Study proposed that, after the development phase, the board would continue as an operational board to monitor scheme operations and review scheme expenditure, uptake, technologies and capacities of installations. The Feasibility Study described the proposed board in the following terms:

"The purpose of the joint NI RHI Administration Board is to take decisions regarding development and delivery of the project, monitor key risks and issues and act as a change control mechanism for covering any items previously out of scope. We envisage that this Board will initially meet fortnightly throughout the development

³³⁸ DFE-79909 to DFE-79921

³³⁹ TRA-02363 to TRA-02365

³⁴⁰ TRA-02364

³⁴¹ DFE-79801

³⁴² DFE-79921

stage before moving to a monthly cycle once the scheme had been established. At this time we should aim to have a face-to-face meeting at least quarterly with the Senior Responsible Owners from both organisations."³⁴³

As discussed earlier in this chapter, such a board had been created in relation to the GB RHI scheme.

- 4.52 The idea for such a board was discussed when Ofgem's Ms McArthur, the author of the Feasibility Study, and Mr Harnack, the Director of New Scheme Development, met Ms Hepper, Ms McCutcheon and Mr Hutchinson in Belfast on 2 November 2011.³⁴⁴ Ms Hepper and Mr Harnack were suggested as joint chairs.³⁴⁵ Ms McArthur told the Inquiry that it was a joint responsibility of both organisations to set this up.³⁴⁶ However, as discussed later in this Report, despite the undertakings given later in 2012 by Energy Division officials to the Casework Committee and incorporated into the DFP business case, such a board was not set up.
- 4.53 As to why this may have occurred, Mr Hutchinson suggested in oral evidence that the lack of resources in DETI, together with the slow initial uptake on the scheme, might have contributed to the failure to set up the board. He also acknowledged that a board would have been a benefit even though there was relatively frequent contact between DETI and Ofgem.³⁴⁷
- 4.54 Another rationale for not setting up the joint board which was put forward by DETI officials was that regular meetings of such a body were not really needed, with informal teleconferences being seen as a practical alternative. The Inquiry notes that these informal contacts were not regular and that, after the scheme became operational, no formal or agreed minutes were kept of DETI-Ofgem meetings or teleconferences until November 2015. With regard to Ofgem, Chris Poulton, who in 2014 became the Managing Director of E-Serve the arm within Ofgem that administered the RHI accepted that this was an administrative oversight and that, while there were emails and conversations, one or other of the bodies should have kept formal objective records.³⁴⁸
- 4.55 Dr Ward of Ofgem agreed that the omission to set up a joint DETI-Ofgem Project Board was a missed opportunity and he told the Inquiry that he had never seen an explanation as to why the board had not come into being. In his view it would have been a useful and helpful mechanism, which would have encouraged dialogue at working level and escalation of issues at senior level and quarterly review. He also acknowledged that the absence of a joint board might have been to blame for the absence of joint risk and issues registers for the scheme.³⁴⁹ Dermot Nolan, Ofgem's Chief Executive, (up to 31 January 2020) also accepted in his evidence to the Inquiry, that the omission to establish such a board was a failing.³⁵⁰
- 4.56 Dr Ward accepted that he had not enquired as to why the joint DETI-Ofgem Project Board had not been set up and he had not asked whether anyone else had made such an enquiry. He also accepted that it was not until April/May 2014 that a monthly telephone conference was

³⁴³ DFE-79800

³⁴⁴ OFG-124012 to OFG-124013

³⁴⁵ DFE-79800 to DFE-79801

³⁴⁶ TRA-03728

³⁴⁷ TRA-02021 to TRA-02022

³⁴⁸ WIT-282545; TRA-09725 to TRA-09726; TRA-09743

³⁴⁹ TRA-06556

³⁵⁰ TRA-14850

instituted with DETI.³⁵¹ When asked why he had not alerted DETI to the significant differences between DECC and DETI with regard to project management, board meetings, reviews etc. Dr Ward told the Inquiry that his focus was on the GB scheme and "it never came up."³⁵²

Handovers and continuing lack of project management 2014-15

- 4.57 One of the other key issues which has emerged in relation to management of the NI RHI scheme, and which spans the themes of resources and project management which are discussed in this chapter, is that of staff handover. As is discussed in further detail later in this Report, there was an unprecedented change, at virtually every level, in the officials responsible for the RHI scheme in late 2013 to mid-2014. Consequently, the Inquiry has had to consider carefully the adequacy and effectiveness of the arrangements for relevant and important knowledge to be passed between officials where personnel move on; and the implications of a lack of any formal arrangements in respect of handover.
- 4.58 Among those involved directly with the scheme, reliance seems to have been placed, to some degree, upon largely informal contacts such as the ability to visit each other's offices for conversations. According to Alison Clydesdale, there was no agreed policy covering staff handovers and the procedures varied over different divisions. She was unsure as to whether she provided any formal handover file to Ms McCutcheon. However, she emphasised that she was "available to discuss any issues" in her office located in the same corridor and that: "RHI issues could be discussed at Grade 7 level" at monthly Head of Branch meetings.³⁵³
- 4.59 Mr Sterling gave evidence that during 40 years of service he had never encountered two similar handovers. He stated that, as a result, issues which some people considered important subsequently were not considered important by others.³⁵⁴
- 4.60 Ms McCay, a deputy principal in Energy Division, who was temporarily promoted to act up as the RHI team grade 7 for seven weeks in the summer of 2014 following the departure of Ms McCutcheon, read and made notes on a hard copy of Mr Hutchinson's handover note which she passed to Mr Hughes. Mr Hutchinson's handover note is dealt with in greater detail in chapter 18 of this Report. In her written evidence Ms McCay told the Inquiry that:

"Project Management documentation had not been developed for the Scheme i.e. a risk register, decision log, issues log, project plan etc. Had this been done there should have been a full record of key information relating to the project, including the nature of the funding arrangement, its budget, the assumptions and modelling underpinning its design, important dates and milestones and important action points. As it was there was a handover note with references to some information and links to some key documentation." 355

4.61 Mr Wightman, who took over responsibility for the RHI scheme, as grade 7 Head of Energy Efficiency Branch in June 2014, told the Inquiry that the lack of effective project arrangements for both non-domestic and domestic schemes was a key omission, as was the absence of a monitoring committee. For a programme on the scale of the non-domestic scheme he would

³⁵¹ TRA-06558 to TRA-06560

³⁵² TRA-06567 to TRA-06568

³⁵³ WIT-12528; TRA-01018 to TRA-01019

³⁵⁴ TRA-07053 to TRA-07054

³⁵⁵ WIT-13027

have expected an effective programme of management in place in line with PRINCE, with an Oversight Board and key milestones such as a review of tariffs and an application for DFP reapproval. Such a programme would have also had a decision log, live risk register and issues log.³⁵⁶

- 4.62 Mr Wightman said that he had not queried the lack of project management arrangements during his induction because he was assured that the non-domestic scheme was established and being administered by Ofgem on DETI's behalf. Consequently the scheme, as he understood it at that point, would take up very little time.³⁵⁷
- 4.63 Mr Mills, who succeeded Ms Hepper in 2014 as Head of Energy Division and who holds a qualification in PRINCE 2, told the Inquiry that he should have raised the issue of lack of project management but that the prevailing culture did not encourage it but rather favoured an approach of "get on and get things done and deliver." He said that the relevant software was not available for certain project management techniques, that there was a lack of resources, a culture that emphasised delivery and that there was no project/programme office in the Department. According to Ms McCay, Mr Mills mentioned to her that he had been told that RHI "could look after itself" until replacements were in post.
- 4.64 Again, Dr McCormick, in his evidence to the Inquiry, accepted that there were failings in this area. His view was that all of the staff dealing with RHI moving within a short timescale was clearly unacceptable and "the baton was, in fact, dropped"; but that there was no recognised system within the NICS in relation to this and it was a systems issue where the buck ultimately stopped with him, with project management being the right corrective measure.³⁶¹

The role of the Permanent Secretary in respect of project management

- 4.65 As noted at the start of this section on project management, guidance was available within the NICS on good practice in project management dating from at least 2009. However it appears that it was not normal practice during the period 2011-2016 for the Permanent Secretary or either of the Deputy Secretaries in DETI to consider systematically whether projects should be managed on the basis of PRINCE or any comparable methodology, and there was no central area in DETI which ensured that the guidance was consulted and put into practice.³⁶²
- 4.66 Mr Sterling, the DETI Permanent Secretary until 2014, told the Inquiry:

"I see my role as a senior civil servant as being first and foremost to help Ministers do that which they want done. And I would say that it is always our responsibility to deliver the outcomes they're seeking to the maximum extent possible within the resources and policy framework that we have."

He added:

"I would always advise staff, 'You don't say no to a Minister.' What you would say is, 'Look, this is going to be very difficult for whatever reason. Maybe there is another

- 356 WIT-17033 to WIT-17034
- 357 WIT-17034; TRA-06869 to TRA-06872
- 358 TRA-09495
- 359 TRA-07122 to TRA-07126
- 360 WIT-13021
- 361 TRA-12039 to TRA-12044
- 362 TRA-06067 to TRA-06068; TRA-11517 to TRA-11519; TRA-11581 to TRA-11582

way we can get the outcome you're looking for, or is this something that we can do but it is going to take a bit longer?'"

He accepted that he had never informed a Minister that the Department did not have the resources or the expertise to take on a particular project.³⁶³

- 4.67 Mr Sterling had also told the Northern Ireland Assembly's Public Accounts Committee (PAC) on 30 November 2016 that, with hindsight, he would have to accept that project management methodology should probably have been used with respect to the RHI scheme and would have reduced the risks but that whether to use PRINCE "would not have been a decision of mine." He explained to the Assembly's Public Accounts Committee (PAC) that the decision would have been taken "in the energy division" and he "was not conscious of what considerations were applied to it at the time." 364
- 4.68 Mr Sterling further told the PAC inquiry that it was not mandatory to use applications such as PRINCE when developing projects or programmes, but he also accepted in his evidence to this Inquiry that DETI officials were familiar with PRINCE and that its use was well-established and visible. He considered that it was a tool that could have reduced the risks and brought benefits to the development and implementation of the NI RHI and that both formal project management and Gateway arrangements should have been in place for projects of such scale, complexity and risk. Mr Sterling also told the PAC that when he left DETI in July 2014 the scheme was "not terribly visible on my radar" and appeared to be underperforming.³⁶⁵
- 4.69 In terms of his approach overall, Mr Sterling told this Inquiry that, as the head of a Department, his role was very much to ensure that there was an internal control framework which would ensure that different schemes or projects would be delivered as free from risk as possible. He accepted that the Department should have invested more in project management and that there should have been a programme management approach to the suite of projects contained in the Strategic Energy Framework. He wished that he had sought more resources for that purpose such as the expertise which could have been available from the Strategic Investment Board (SIB). 367
- 4.70 In practice Mr Sterling relied upon the six-monthly risk assurance statements and the departmental Operating Plan together with informal contacts with the officials involved. He emphasised that RHI was only one of approximately 30 actions which flowed from the Strategic Energy Framework and that RHI was the only project that produced problems.³⁶⁸ However, Mr Sterling was unable to recall any other scheme which had, at that time, the combination of features specific to the RHI of being demand-driven and incentivised, volatile, unpredictable, grounded upon variable assumptions and funded in a highly unusual way.³⁶⁹
- 4.71 Ultimately, Mr Sterling was unable to say why some form of project management had not been utilised and he stated that, in his view, RHI "was a project too far for us." Mr Stewart told the Inquiry that he agreed with that assessment. 371

³⁶³ TRA-06088

³⁶⁴ PAC-06186

³⁶⁵ PAC-06185

³⁶⁶ TRA-06792 to TRA-06793

³⁶⁷ TRA-06066; TRA-06072 to TRA-06073; TRA-06730 to TRA-06731; TRA-06763; TRA-06799 to TRA-06800

³⁶⁸ TRA-06810 to TRA-06811

³⁶⁹ TRA-06062 to TRA-06063

³⁷⁰ TRA-06730

³⁷¹ TRA-11530

- 4.72 In summary, Mr Sterling accepted that there should have been a greater investment in project management and that Strategic Investment Board expertise might have been consulted.³⁷² Mr Sterling emphasised to the Inquiry that his role was to ensure an internal control framework was in place and that, while it was novel, the RHI scheme was not so novel that he thought "I need to get personally involved in this."³⁷³
- 4.73 Dr McCormick, who succeeded Mr Sterling as DETI Permanent Secretary in July 2014, told the PAC that:

"The fundamental point is that it was not managed as a project. There should have been a project manager, a senior responsible owner and all the routine dimensions of a PRINCE-based procedure. That was not done. It is not clear why it was not done, but a lot of things that have gone wrong flow from the absence of those straightforward aspects of governance." 374

In his written evidence to this Inquiry, Dr McCormick said:

"Much more systematic and rigorous project management would have been appropriate throughout the project and might have mitigated the problems that arose." 375

Were the problems of project management limited to the RHI?

- 4.74 The Inquiry notes that previous DETI projects had attracted the attention of the Northern Ireland Audit Office (NIAO) and the PAC with regard to similar problems as emerged in relation to the NI RHI scheme. It is obviously not the purpose of this Inquiry, nor this Report, to conduct any form of investigation into those earlier projects or the reasons for their falling into difficulty. However, in light of the (at times) striking similarity of some of the themes which have emerged from earlier inquiries into these previous failures, some discussion of them is appropriate by way of context.
- 4.75 The Bytel Project was a cross-border broadband initiative aimed at the provision of high-speed broadband connectivity between Belfast, Craigavon, Armagh, Dundalk and Dublin. Departmental responsibility lay with the Department of Finance and Personnel in Northern Ireland and the Department of Public Expenditure and Reform in Ireland. DETI and the equivalent Department in the Republic were appointed as Joint Implementing Agents for the project. As a cross-border project, effective co-operation was required between the Departments in Northern Ireland and the Republic of Ireland and the Special EU Programmes Body (SEUPB). However, from the outset there were serious failings in the handling of the project, with a catalogue of mismanagement, poor communication and inadequate response to warnings. As a result, the project delivered very poor value for money. The Bytel Project was the subject of a report from the Comptroller and Auditor General, Mr Kieran Donnelly, which was published by the Northern Ireland Audit Office on 3 March 2015.³⁷⁶ It was also considered by the PAC.
- 4.76 Significant conclusions drawn by the PAC in the Executive Summary of its report on the Bytel Project, published in July 2015, included the following:

³⁷² TRA-06066; TRA-06072 to TRA-06073; TRA-06730 to TRA-06731; TRA-06799 to TRA-06800

³⁷³ TRA-06061 to TRA-06062

³⁷⁴ PAC-03644

³⁷⁵ WIT-10539

³⁷⁶ INQ-90001 to INQ-90107

- "9. The assessment and appraisal of the project was seriously flawed, and it is likely that with due diligence and more robust probing of the proposal, the Project would not have had funding approved.
- 10. The Department admits that it did not have sufficient technical expertise to understand the Project. The failure to re-appraise the Project when it changed significantly was a fundamental shortcoming which contributed significantly to the problems which followed. This was a critical lost opportunity to re-assess costs and to ensure that the level of grant payable was reduced accordingly.
- 11. The pressures within DETI to meet grant expenditure targets within tight deadlines overtook the need to ensure that grant claims were properly scrutinised. The Committee is convinced that DETI's main concern in approving grant claims for the Project was to ensure that available EU funding was spent. The Department's primary responsibility was to scrutinise claims properly to ensure that they were valid. The Committee concludes that DETI failed fundamentally to meet this responsibility."³⁷⁷

A detailed review of the project was unacceptably delayed. Paragraphs 6 and 7 of the PAC report³⁷⁸ are of particular significance in relation to what later occurred with the RHI scheme. Those paragraphs read as follows:

- "6. The failings are similar to those reported by the Committee in 2012 in relation to the Bioscience and Technology Institute. This was another DETI Project from around the same time as the Bytel Project. The Committee is very concerned that poor project management and disregard for value of money appear to have been endemic within the Department at that time.
- 7. The Committee notes the assurances from both DETI and SEUPB that improvements in systems and processes in recent years should substantially reduce the risk of similar failings in future. However, DETI provided unsubstantiated assurance over many years in relation to the Bytel Project. Important as systems and processes are, it is vital that these work in practice. It is clear that this case only came under proper scrutiny because of the allegations made by whistle blowers. It is essential that the culture within DETI is changed and that the Department must recognise the need to take decisive and prompt action to address problems such as those which arose in the Bytel case."
- 4.77 The Bioscience and Technology Institute Limited (BTI) was established in 1998 with the primary objective of providing biotechnology incubator facilities through the development of a specialised building at Belfast City Hospital. The Company was funded by a combination of public funds and debt. It was the Company's original expectation that Belfast City Hospital would provide a site in its grounds, free of charge, on which BTI would construct business premises.
- 4.78 In the event, the premises were not built at that location and, in 2001, the Company acquired the Harbourgate Building, in respect of which it paid a "finder's fee" of £100,000 to a firm of Belfast Solicitors. Investigations revealed that the finder's fee was subsequently disbursed to

³⁷⁷ INQ-90114

³⁷⁸ INQ-90108 to INQ-90126

³⁷⁹ INQ-90113 to INQ-90114

others. The Institute effectively never operated, as the Harbourgate Building was unsuitable and would have required to be upgraded at a cost of potentially £4 million. The project was therefore never adequately funded or managed from the outset.

- 4.79 Invest NI and DETI decision making and monitoring in respect of the BTI project did not follow the processes that had been established within the organisations for the assessment, approval, consideration and approval of material changes, payment of grant, or monitoring of the project. Guidelines which were in place for processes such as project appraisal and approval, project monitoring and payment of claims were not always applied.
- 4.80 Recommendation 14 of the Public Accounts Committee Report (of May 2012)³⁸⁰ on the BTI project noted that:

"There is a particular responsibility on top management to encourage a culture of compliance with good practice throughout their organisation. The Committee recommends that both DETI and Invest NI now ensure that the lessons on leadership and management culture arising from the Report are assimilated within their respective organisations." 381

4.81 In a paper for the DETI Senior Management Team in November 2012 Mr Sterling noted a number of specific issues in the case including the fact that the BTI project was not adequately monitored and that records were not kept to explain each decision.³⁸² At paragraph 5 of the paper Mr Sterling recorded that it appeared that there had been a culture 10 to 12 years previously that had enabled those procedures to be circumvented and ultimately lead to the substantial loss to the public purse.³⁸³ At paragraph 7 he wrote "I am content that the culture within DETI is totally different to that which appears to have operated ten to twelve years ago."³⁸⁴ At paragraph 10 of the same document he said:

"I am also happy that as an organisation we can and should take risks in order to deliver our objectives. Risks should be recognised and managed, and decisions taken at an appropriate level commensurate with the funding and risks being proposed. This should not result in undue delay in decision making and following appropriate and proportionate process protects the individuals involved in the decision as well as the public purse." 385

³⁸⁰ INQ-05114 to INQ-05324

³⁸¹ INQ-05125

³⁸² INQ-05325 to INQ-05328

³⁸³ INQ-05327

³⁸⁴ INQ-05328

³⁸⁵ INQ-05328

Findings

- 20. It is questionable whether DETI should have embarked on the independent development of an NI RHI given its own accurate assessment of lack of resources.
- 21. The Inquiry finds that the resources available to develop this novel and complicated scheme were inadequate. The insufficiency of resources was not only in terms of staff numbers: the small team was simply not provided with the necessary knowledge or experience to carry out the necessary activities; to analyse the information it received; to make the necessary judgments; nor was there any adequate effort to access expertise in other parts of the Northern Ireland Government such as Invest NI and/or the Strategic Investment Board.
- 22. The Inquiry finds that there was a failure to apply appropriate project management, which was a significant failing.
- 23. One of the many consequences of there being no formal project management of the RHI scheme was the complete absence of any objective, easily accessible unified record. By way of examples, as discussed later in this Report, as activity to develop the scheme advanced during 2012, the lack of formal project management documentation meant that the risk mitigation measures referred to in the Casework Committee minutes (which identified nine risks and various mitigating actions, including the need regularly to review the level of subsidy)³⁸⁶ were not captured in an easily accessible project record. Neither the conditions attached to the DFP approval of the business case,³⁸⁷ nor the fact that DFP's approval of expenditure was limited to the end of March 2015, were captured in a readily accessible record.
- 24. The absence of project management also had profound consequences for the progress of the RHI scheme. Had there been a programme plan and a progress log, together with a live risk register and issues logs, the relevant Energy Branch staff would have had an ongoing indication of steps that were required to be taken and the scheme could have been managed as circumstances changed. This was a new 'flagship project', subject to volatile and unpredictable degrees of uptake that required careful, continuing review and management of risk.
- 25. The decision not to have a Gateway Review in 2012 was a key missed opportunity to subject the RHI scheme to independent scrutiny, especially given that the scheme represented a very real risk, being a new, volatile, demand-led programme, subject to many variable assumptions.
- 26. The risks of the scheme, although well identified initially, were never managed systematically. The initial scheme Risk Register was not updated or used effectively as a tool to manage and reduce risk. While risks may have been discussed informally at team meetings, no record of such discussions was kept and the Inquiry saw no evidence that the RHI scheme Risk Register was ever formally amended or updated, not even when risks began to materialise.

- 27. The Inquiry has had regard to the resource difficulties faced by Ms Hepper and her approach to the practical/proportionate management of the project. The lack of adequate resources may have mitigated against the institution of all aspects of the PRINCE structure, but recognised project management disciplines are adaptable and the Inquiry finds that the application of some of the relevant features should have been considered given the characteristics of the scheme. Elsewhere in the Energy Division it appears that the "Gas-to-the-West" project was being managed subject to PRINCE principles.
- 28. Nevertheless, the Inquiry is unable to see why, even with the limited resources available in Northern Ireland, an objective project plan could not have been created, maintained and reviewed which might have been supplemented, as required, between particular individuals together with some type of oversight board holding regular meetings. As meetings of the Renewable Heat Group declined and without a joint DETI-Ofgem board the absence of some form of project board proved particularly damaging in terms of the failure to ensure continuity of knowledge and regular review.
- 29. Ofgem and DETI failed to establish appropriate important governance arrangements, such as the joint board originally proposed by Ofgem in the feasibility study of 2011. This was a significant failure on the part of both parties.
- 30. The absence of such a joint project board with recorded minutes of its monitoring activities is very difficult to justify in the context of a novel, demand-led, volatile scheme subject to significant variables, not least the fluctuations of fuel prices.
- 31. The Inquiry finds that the failings in respect of project management and the RHI scheme are all the more unacceptable given that throughout the life of the scheme, DETI was actively considering failings from previous projects which raised similar issues.