

MELLOWS CAMPUS BIOMASS BOILER AND DISTRICT HEATING PROJECT

PROJECT OVERVIEW

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TUAM NOV. 2011

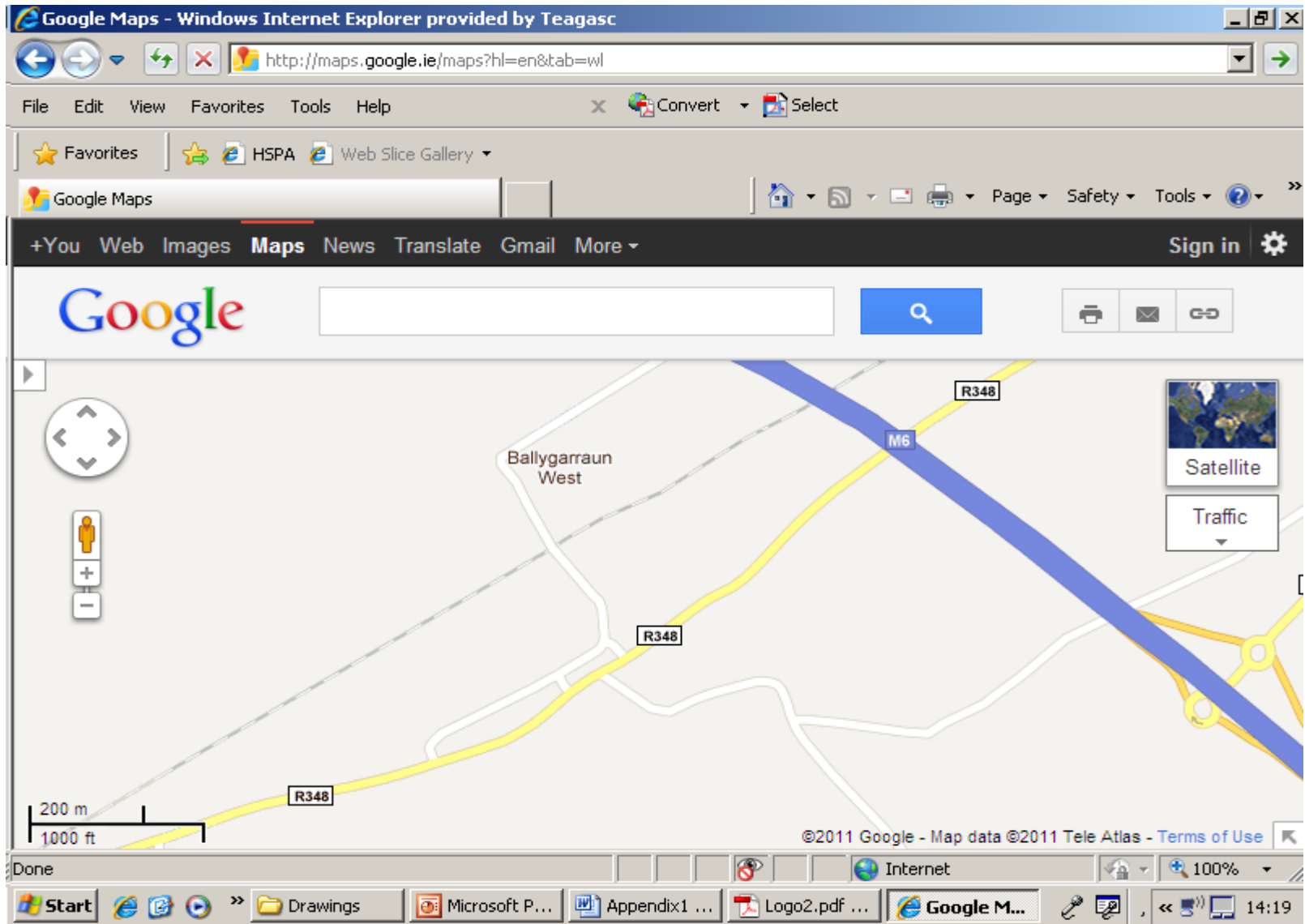
INTRODUCTION

- WHO WE ARE
- THE LOCATION OF THE PROJECT
- THE DRIVERS FOR THE PROJECT
- THE PROJECT (2)
- THE PROCUREMENT PROCESS (2)
- THE PROJECT CURRENT STATUS
- SUMMARY
- ACKNOWLEDGEMENTS

WHO WE ARE

- The national body providing integrated research, advisory and training services to agriculture and the food industry.
- Eight research centres, 3 colleges and 60 (approx.) offices.
- Chartered Civil Engineer employed by Teagasc as Buildings Officer covering an area south of a line from Galway to Wexford.

PROJECT LOCATION



The screenshot shows a web browser window titled "Google Maps - Windows Internet Explorer provided by Teagasc". The address bar contains the URL <http://maps.google.ie/maps?hl=en&tab=wl>. The browser interface includes a menu bar (File, Edit, View, Favorites, Tools, Help), a Favorites bar with "HSPA" and "Web Slice Gallery", and a navigation bar with "Google Maps" and various utility icons. The main content area displays the Google Maps interface with the Google logo, a search bar, and navigation controls. The map shows a region in Ireland, with "Ballygarraun West" labeled. A blue line representing the M6 motorway runs diagonally across the map, and yellow lines represent regional roads R348. A scale bar at the bottom left indicates 200 meters and 1000 feet. The bottom status bar shows the Windows taskbar with the Start button and several open applications: Drawings, Microsoft P..., Appendix1..., Logo2.pdf..., and Google M... The system clock shows 14:19.

PROJECT DRIVERS

- TEAGASC HAS A WORKING TARGET OF 15% OF ENERGY TO COME FROM RENEWABLE SOURCES BY 2015.
- THE COMMITMENT OF OUR FORESTRY COLLEAGUES IN OBTAINING A BUDGET ALLOCATION FOR A BIOMASS PROJECT AT MELLOWS.

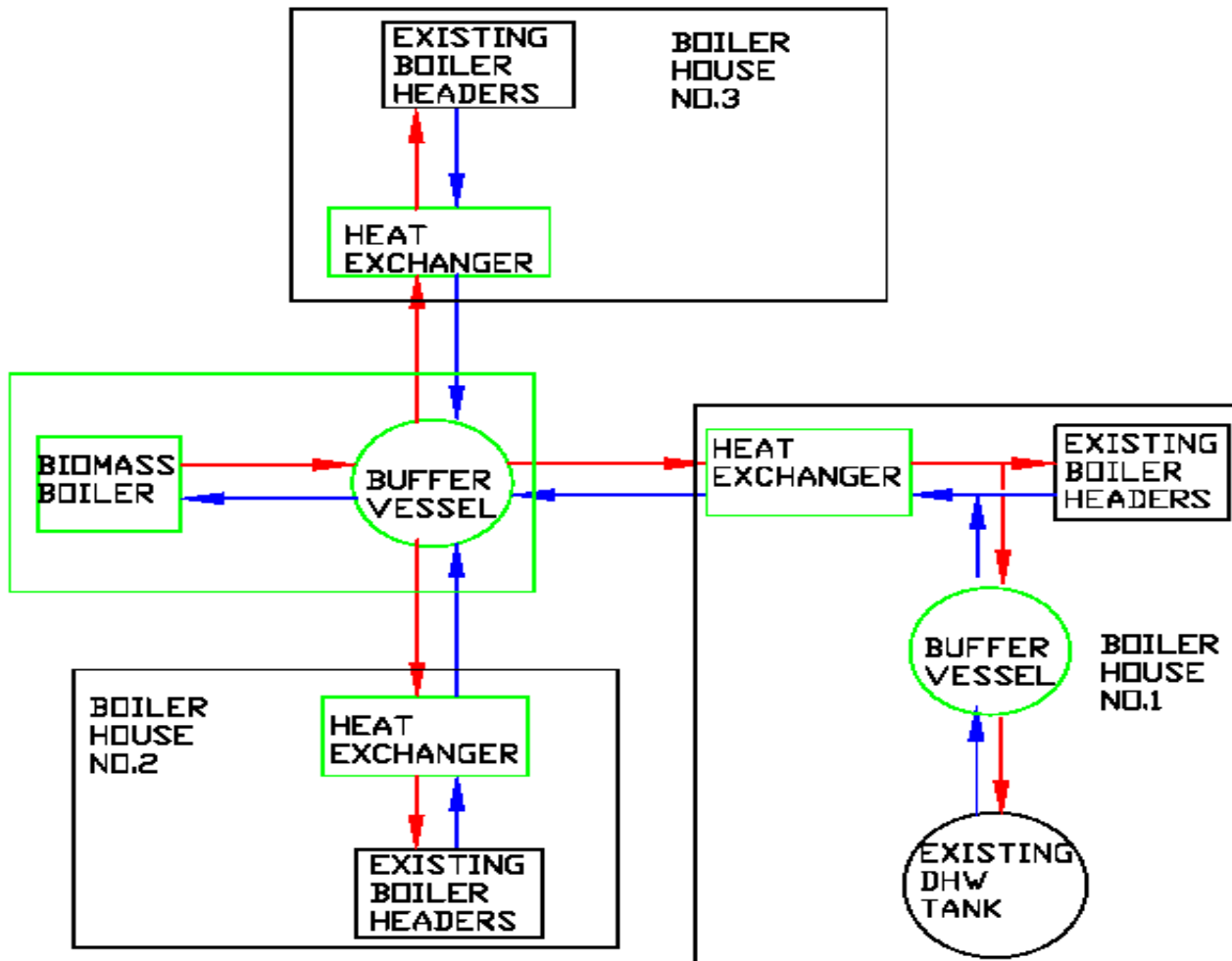
THE PROJECT (1)

- THE SUPPLY INSTALLATION AND COMMISSIONING OF A 250 KW WOOD CHIP BOILER WITH 2 BUFFER VESSELS AND A FUEL STORE.
- CONNECTING THE BIOMASS BOILER TO HEAT EXCHANGERS TO BE LOCATED IN 3 EXISTING BOILER HOUSES USING DISTRICT HEATING PIPING.
- ASSOCIATED PUMPS, HEAT METER, CONTROLS ETC.

THE PROJECT (2)



SCHEMATIC LAYOUT



PROCUREMENT

- PROCUREMENT OF THE CONSULTANTS BY THE E-TENDERS OPEN PROCEDURE
- NOEL LAWLOR CONSULTING ENGINEERS KILKENNY APPOINTED.
- PROCUREMENT OF THE CONTRACTOR BY THE E-TENDERS RESTRICTED PROCEDURE.
- FILTREX OF BLAKES CROSS DUBLIN APPOINTED IN LATE JUNE 2011.

Current Status

- The Herz boiler has been fired and heats up the buffer vessel in approx. 30 mins.
- The installation of the district heating pipes is complete
- The heat exchangers are in place in each of the 3 boiler houses.
- The boiler house pipe-work is at final stage.
- The boiler will initially commissioned using pellets and then wood chip.

Summary

- The installation will save €25,000. per year
- Save approx. 150 tons of carbon per year.
- Teagasc will purchase timber from local suppliers.
- Demonstrate that indeed “sustainable development is at the confluence of 3 constituent parts, environmental, economic and social”

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