Company/Institute	Task	Version	Date of commented version	Sub-section	Page	Comment	Answer / Action
SBBA	2	v1	18/07/2008	2.1.1	5-6	The listing of PRODCOM categories seems to be a little redundant; it may be sufficient to note that this system is not useful here.	You are right. The list has already been given in Task 1, therefore, we will not repeat all the PRODCOM codes, but only refer to the corresponding section in Task 1.
Interfocos & other Dutch manufacturers	2	v1	18/07/2008	2.2.1.1	7	A power output threshold value of 60 kW in the Netherlands is not realisitic for domestic heating purposes. For most of the dwellings in The Netherlands a power output of approx 25 kW is more than sufficient to heat the complete dwelling. Indirect heating appliances with a power output of more than 30 kW can be considered as (semi-) industrial	Accepted. The footnote has been modified to take into account the comment and further discussion with stakeholders.
Danish Technological Institute	2	v1	18/07/2008	2.2.1.1	9	The sales figures for boilers in Denmark in Table 2-21 seem a bit low compared to Table 2-2. This may indicate that Table 2-21 only contains type approved boilers. A certain number of non-approved boilers have also been sold.	Table 2-21 was derived from a published report (from BRG consult). It is likely that type-approved boilers have been taken into account. Table 2-2 contains estimations calculated form extrapolation, we have changed the basis of the extrapolation (ie the country groups) in order to carry out a finer analysis.
SBBA	2	v1	18/07/2008	2.1.1.1	9	The total sales of solid fuel boilers in 2004 was according to Figure 2-1 about 230 000 units. The extrapolation in Table 2-2 shows a sales of 425 000 units in 2007. How has this extrapolation been made?	The extrapolation has been made considering a country grouping. We have changed the country groups in order to carry out a finer analysis. Explanations are given in the annex of the report.
Interfocos & other Dutch manufacturers	2	v1	18/07/2008	2.2.1.1	9	Table 2-2 A estimated sales figure of 1 000 appliances sold in 2007 in The Netherlands is not realistic since The Netherlands has a dense natural gas distribution system.	This data comes from an extrapolation we have made, which is the only way we have to assess the volume of sales in absence of data. If you have a better figure for these sales, please feel free to provide it.
SBBA	2	v1	18/07/2008	2.1.1.1	9-10	Table 2-2: Swedish data from the questionnaire includes also pellet burners. The percentage of unit pellet boilers is estimated to not exceed 10 %.	Data have been refined following further discussion with stakeholders.
SBBA	2	v1	18/07/2008	2.1.1.1	10	Table 2-3: The number of wood log boilers sold in Sweden is 6 100. The number 17 200 pellet boilers sold in Sweden includes pellet burners (see above) The percentage 20 % of total number boilers is not correct.	Data have been refined following further discussion with stakeholders.
SBBA	2	v1	18/07/2008	2.1.1.1	11	The estimation that 38 % of the total number of sold boilers refers to “new installations” is far too low for Sweden if retrofitting an oil burner with a pellet burner is included in this category.	A sentence has been added to reflect this comment.
HKI	2	v1	18/07/2008	2.2.1.2	11-13	Your distinction between open fireplaces and closed fireplaces is not applicable on the pages 11-13.	Page 11-13 concerned closed fireplaces only. Data about open fireplaces have been included in the latest version of the Task following the inclusion of open fireplaces in the scope of the study.
Interfocos & other Dutch manufacturers	2	v1	18/07/2008	2.2.1.2	12	Table 2-5: Approximately 14 500 closed fireplaces and inserts were sold in The Netherlands in 2007 (see also questionnaire).	This remark is not consistent with the figure indicated in the questionnaire. Data for closed fireplaces and insert sales in the Netherlands has been refined through discussion with stakeholders.
SBBA	2	v1	18/07/2008	2.2.1.2	12-13	Table 2-5 och 2-6: The data given for Sweden do not correspond to data given by Swedish Fireplace Manufacturers Association in the questionnaire.	Data appearing in the report can be an average derived from various sources, including (but not only) the questionnaire.
HKI	2	v1	18/07/2008	2.2.1.2	12-13	Table 2-5 and 2-6: Please delete the word "wood" in the title of the tables. The titles "Sales of built-in closed appliances and inserts in Europe" fore table 2-5 and "Sales of hand stoked free standing appliances in Europe" for table 2-6 would be clearer to specify which kind of appliances you mean. As the HKI has members in states all over Europe, we are able to collect sales data for several European countries. For the following member states we have some sales data about the market: Austria, Denmark, Germany, Spain, Belgium, Netherlands, France, Belgium and Swiss. Some of your numbers differ from the numbers we gathered. [New numbers provided with the comment]	Table have been renamed according to the comment, and figures provided have been also taken into consideration in revising the table.
HKI	2	v1	18/07/2008	2.2.1.2	12-13	50% of the insets are used for decorative purposes in general more than for actual heating. Please bear in mind that the design and construction of the appliances are highly different, de-pending of the use of an appliance (decorative/heating). 1/3 of the appliances in the region of the Alps and Eastern Europe are used in tiled stoves (Kachelöfen). These appliances serve a different purpose than most other appliances, as they are only for heating in a special way due to the heat storage process to a mass of brickwork. Slow heat release appliances (e.g. soapstone appliances from Finland) are operated in a similar, different way. Thus they are in operation for longer periods than most room heaters and have a different technology. In regard to this, we would like to point out as well the "VEUKO", an organization of handcrafters, building this type of appliances.	Information taken into account.
Danish Technological Institute	2	v1	18/07/2008	2.2.1.2	13	The sales figure of 15.400 wood stoved per year for Denmark seems low. It may only cover Danish produced stoves (DAPO sales figures) excluding imported stoved (DBL sales figures).	Figure has been changed to 20 000 following discussion with stakeholders.
Interfocos & other Dutch manufacturers	2	v1	18/07/2008	2.2.1.2	13	Table 2-6: Approximately 10 000 stoves were sold in The Netherlands in 2007.	This figure has been taken into consideration.
SBBA	2	v1	18/07/2008	2.2.2	15	Statistics from the Swedish Rescue Board reports the following stock of different types of small scale combustion installations: Fuel oil boilers < 60 kW: 160 278 Conventional wood log boilers: 150 305 Ceramically insulated wood log boilers: 114 627 Pellet fired boilers: 84 000 Stoves, fireplaces etc: 1 447 006 Figure 2-2: There are 349 000 solid fuel boilers in Sweden (see above)	These figures have been taken into consideration.
Interfocos & other Dutch manufacturers	2	v1	18/07/2008	2.2.2.2	16	The most recent estimation for the Netherlands for the number of installed appliances is from 1996 (!): Open fireplaces: 372 000, Closed fireplaces and inserts: 325 000, Stoves: 166 000 Although this estimation is not valid for the situation in 2007 it may give a tool to estimate the 2007 situation. It is expected that the number of open fireplaces has been greatly reduced since 1996.	These data have been taken into consideration, thanks.
SBBA	2	v1	18/07/2008	2.2.2.2	16	The number of stoves, fireplaces etc in Sweden is about 1 450 000.	This figure has been taken into consideration.

Company/Institute	Task	Version	Date of commented version	Sub-section	Page	Comment	Answer / Action
HKI	**2**	**v1**	18/07/2008	2.2.3	18	Table 2-8: Clarify the term "Autonomy" in the table.	Table has been modified and the column in question has been removed.
INFORSE	**2**	**v1**	18/07/2008	2.3.1	19 and following	The assumption in the paper that the current boom in installations will level out is from 2006 and does not include the oil price increases of 2007-2008 and the related gas price increases (past and future). The economic driver for an increased biomass market is the price difference between oil/gas and biomass fuels. As shown in fig. 2.7, biomass has its own price mechanisms that are not directly related to fossil fuels. Therefore increased installations are likely, rather than a slow down before 2015.	The remark has been taken into consideration.
SBBA	**2**	**v1**	18/07/2008	2.3.2	21-22	Figure 2-5: The development in Sweden has been analogous. Last paragraph on page 21: The same drastic effect evolved in Sweden during 2007.	OK.
Interfocos & other Dutch manufacturers	**2**	**v1**	18/07/2008	2.3.2	22	4th para: It is not realistic to consider The Netherlands as a heavy user for pellets. Especially in the field of domestic appliances the use of pellet boilers is negligible, due to the poor availability of wood pellets for end-users and the presence of a dense natural gas distribution system.	Agreed. Netherlands has not been considered as heavy user of pellet, but as one of the main country where pellet market is developped, which is true (the Netherlands produce pellet above all for export). Report has been modified to clarify this context.
Danish Technological Institute	**2**	**v1**	18/07/2008	2.4.1.1	25	The price of a hand fuelled stove of 2000 EUR seems too high.	Based on the different sources and stakeholder input, this has been considered as the average consumer price for a free-standing stove. No
Danish Technological Institute	**2**	**v1**	18/07/2008	2.4.1.2	25	The installation cost of 1500 EUR for boilers seems low, at least for Denmark which has high labor cost.	Based on the different sources and stakeholder input, this has been considered as the European average installation price. The comment does not provide any alternative data. No changes to the report.
Interfocos & other Dutch manufacturers	**2**	**v1**	18/07/2008	2.4.2.1	27	The approximate average price for wood logs in The Netherlands is 5.8 €/GJ (ex VAT).	This price has been added in the table.
HKI	**2**	**v1**	18/07/2008	2.4.2.1	27	Table 2-16: Types of "coal" differ a great deal in Europe, as this term is used for several different fuels, depending on each region. In this light it would, in our opinion, be more realistic to regulate the emissions of appliances using "coal" through regional legislation then through a European wide.	General comment. No changes to the report.
SBBA	**2**	**v1**	18/07/2008	2.4.2.1	26-27	For at least Swedish conditions, the informal market as well as private forest lands contribute to a significant extent to fuel supply.	We are aware of this and report has been amended to mention this explicitly.
Interfocos & other Dutch manufacturers	**2**	**v1**	18/07/2008	2.4.4	33	Due to a changing economic situation in the first half of 2008 the figures given in table 2-20 are not realistic anymore. In July 2008 the annual inflation rates were France: 4%, Germany: 3.3%, The Netherlands: 3.2%	Accepted. Table 2-20 has been updated.
Danish Technological Institute	**2**	**v1**	18/07/2008	annex 2.1	38	Table 2-24 the number of dwellings without central heating (~400.000) seems much too high. Denmark has only about 130.000 electricity heated dwellings and the number of dwellings with only stoves or unknown heating type is just 35.000. However we also have 200.000 summer cottages. Count the summer cottages and you will arrive at ~400.000 however they are not really dwellings.	Table 2-24 was derive from a published study (from BRG consult). Thank you for the precision you give.
HKI	**2**	**v1**	18/07/2008	annex 2-2	39	The grouping based on the BRG study is not applicable in this case. It should be based on the fuel availability.	New country groups have been defined.
INFORSE	**2**	**v1**	18/07/2008			The market for small-scale solid fuel installations consists of a number of distinct markets. The most important difference is between installations for fossil fuels (coal, coke) and biomass installations. Of course some installations can use both types of solid fuel; but the markets are distinct anyway in their structure, supply, legislation, etc. A general division of data between these two types of installations would help understanding the market and trends better, including the development shown in fig.2-1 with decrease and then increase. We strongly recommend such a division throughout the report, in particular in chapter 2.2 and 2.3.	We prefer to keep a categorisation by type of appliances instead of by type of fuel. However fuel types will be accounted for in the Base Cases assessment and afterwards. No specific change in the report.
INFORSE	**2**	**v1**	18/07/2008			While statistics for equipment is difficult to get, statistics for use of biomass, such as the IEA statistics that give divisions between solid biomass and various forms of coal, can supplement the information. We will recommend to do that. To do that can be assumed that residential consumption of solid fuel is in small installations. Another useful source of information that we will propose to include is the Eurobarometer statistics on biomass use in the EU countries (see www.eufores.org), with 2006-data on consumption. The consumption of fuel wood can be assumed to be in small installations.	Acknowledged, this will be taken into account in Task 3 where characteristics of use are studied in more detail.
INFORSE	**2**	**v1**	18/07/2008			The analysis does not mention that increased environmental requirements will both reduce markets because of less total installations and increase markets because of increased replacements. Overall this is likely to increase the installations. It is strongly recommended to include these aspects in the analysis.	The market impacts of the environmental requirements depend a lot of the requirements themselves. Currently, it is seen that the requirments drive qualitative change in the market (Section 2.3.4) rather than quantitative change.
INFORSE	**2**	**v1**	18/07/2008			The market trends for environmentally improved products are very important for preparation of ecodesign measures. Therefore it is strongly recommended to include information on sales products with the labels of Nordic Swan (Sweden, Denmark) and Blaue Angel (Germany etc.). These should be available from the labelling organisations.	According to industry, many products have not been eco-labelled even if they meet the requirements (as it is a voluntary approach). Therefore sales volume of labelled products does not reflect sales volume of "good" products.
INFORSE	**2**	**v1**	18/07/2008			In the economic analysis it is strongly recommended to include data on costs of environmental improvements, from combustion chambers and regulation to particle filters.	Improvement options and their impact on the price will be analysed later in Tasks 6 and 7. No changes to the report.
HKI	**2**	**v1**	18/07/2008			Our proposal for categorization of appliances as well as your own categorization in the report of Task 1 V2 page 90 has not been integrated into the Task. Please understand that this categorization is one of our greatest concerns in this study. Additional differentiation is necessary at least for open fires and pellet stoves.	Categorisation that has been adopted reflects the recognised product groups.The proposed alternative categorisation is based on technical characteristics. These are not well suited for the purpose of the market analysis in Task 2, however further sub-categorisation based on technical criteria may be introduced in Task 4 where relevant. Please note nevertheless that open fireplaces and pellet stoves have been explicitly addressed in the revised Task 2 report.
HKI	**2**	**v1**	18/07/2008			We also would like to point out the importance of open fire insets in Europe. The sales number for open fire appliances make out at least 20% of the market, in Southern Europe. Most closed insets have a heat output between 5-15 kW. Only in Spain, Italy, France and Greece some appliances with a greater heat output (up to 30 kW) exist.	Market estimates for open fires have been included in Task 2 report, although relevant data is very scarce.

Company/Institute	Task	Version	Date of commented version	Sub-section	Page	Comment	Answer / Action
Austrian Bioenergy Centre	**2**	**v2**	21/11/2008		8	In Table 2-2 of the working document, solid fuel boiler sales in Austria of 11 700 are depicted. This number refers to biomass boilers (log wood, wood chips, pellets) with a nominal capacity <100 kW. It should be emphasized that 2007 was not a representative year as such. Boiler sales, especially pellet boiler sales, have decreased significantly compared to the years before, see Figure 1 (*ABC data* sheet). This was mainly due to a high pellet price in winter 2006/2007. In comparison, in 2006 more than 21.000 biomass boilers were sold. For 2008 it is expected that the market is recovering. For example, pellet boiler sales <100 kW are predicted to be around 11.000 in 2008. A national incentive programme has started, which is valid until 28 February 2009. In addition to the funding schemes of the several provinces, it supports the installation of a pellet boiler with €800 and the installation of a log wood or wood chip boiler with €400.	Acknowledged, notes added to table, and section 2.3.2 explains the situation in Austria.
Austrian Bioenergy Centre	**2**	**v2**	22/11/2008		9	The sales by appliance type (80% automatically stoked appliances, 20% hand stoked appliances) presented at page 9 do not fit with the figures presented in Table 2-5. Here, hand stoked appliances (wood log boilers) generally make up at least 40% of the total solid fuel boiler sales. Additionally, sales figures for stoves are depicted (see table 2 in *ABC data* sheet).	Acknowledged - there was an inversion in the figure, the mistake has been corrected.
Austrian Bioenergy Centre	**2**	**v2**	21/11/2008		10	For Table 2-5, again we have to state that 2007 is not representative. Please find sales figures of biomass boiler <100 kW from 2000 up to 2007 in table 1 (see *ABC data* sheet)	Acknowledged, notes added to table, and section 2.3.2 explains the situation in Austria.
HKI / CEFACD	**2**	**v2**	21/11/2008	2.2.1.2	13	footnote 5: It seems unlikely that in Italy the share of appliances with a heat output of more than 15 kW is estimated at 40%, whereas is the rest of Europe the number of that type of appliances is very small. Please explain from where this figure comes.	Data from questionnaire (provided by a single italian manufacturer). No action taken
HKI / CEFACD	**2**	**v2**	21/11/2008	2.2.1.2	13	sales by fuel type and Page 15 Sales by capacity range 2nd para Solid fuels can only be used interchangeably in closed fireplaces and inserts (and hand stoked stoves) when appropriate measures have been taken in the design of the appliance. For example when firing fossil fuels like anthracite or lignite there has to be a grate with an ashtray in the appliance. Also for firing these fuels so-called primary air (from under the fuel bed) is needed.	Acknowledged, and text adopted.
HKI / CEFACD	**2**	**v2**	21/11/2008	2.2.2.2	20	table at top of page. The number of appliances for the Netherlands is a figure from 1996. Has this changed in the last 12 years?	No further data available regarding this now, no action taken
HKI / CEFACD	**2**	**v2**	21/11/2008	2.2.2.2	20	Table 2-15 Austria has been left out of the table. Compare with table 2-9.	Data is not available for every country for every type of product. No change to text
Austrian Bioenergy Centre	**2**	**v2**	21/11/2008	2.3.3	27	Referring to 2.3.3 Key factors influencing the solid fuel SCI market, a new functionality for the future will be the combined heat and power production. The main aim is to enable grid-independent operation. Several technologies are under way.	The scope of this study is limited to space heating appliances. While CHP technologies will become increasingly important in the future of solid fuel combustion appliances, they fall outside the scope of this study.
Ovnsætter Lars Helbro	**2**	**v2**	21/11/2008	2.4.1	30	Table 2-20: The price of a "Slow heat release appliance" (Masonry heater) is in DK less than 10.000 Euros incl. work, bricks, installation, vat, etc. Compared to other countryes, e.g. Hungary and Sweden, this is a high price.	We are aware there can be some regional/country specific differences. This is why we present the range of prices along with the mean. If you have precise market data, please do not hesitate to send it to us, so that we can refine our estimates.
Austrian Bioenergy Centre	**2**	**v2**	21/11/2008	2.4.2.1	30	It is not clear whether the prices are including or excluding VAT. In table 2-20, the capacity or capacity range to which these prices refer is not defined. As boilers up to 500 kW are included in the scope of the study, prices have to be observed with respect to the 2006 capacity range. Additionally, the fuel type certainly plays a role in the final price (within the same capacity range). Exemplarily, prices of log wood, wood chip and pellet boilers are listed in Table 3 (see *ABC data* sheet). These are catalogue prices (excl. VAT) for the boiler including electronic control, excluding any auxiliary components (eg. feeding system). The sources of information are market surveys from FNR Fachagentur Nachwachsende Rohstoffe3, where information mainly from German and Austrian manufacturers has been collected. These market surveys can be downloaded from the homepage of FNR3, unfortunately they are only available in German. Please consider this table as information so far, just to underline the above mentioned arguments. Presumably, a deeper investigation for prices is required. Catalogue prices for pellet stoves range between € 2 500 and € 5 500 excl. VAT.	Table updated with new figures.
Austrian Bioenergy Centre	**2**	**v2**	21/11/2008	2.4.1.1	32	In figure 2 (see *ABC data* sheet) the price developemtn of heating oil (red line), natural gas (blue line) and wood pellets (green line) in Austria is depicted.	OK.
HKI / CEFACD	**2**	**v2**	21/11/2008	2.2.4.2	34	Table 2-25 The electricity price in Austria is probably a factor 10 to low. It should probably be € 0.1662.	Accepted, table was updated with information from S2 of 2007 and the price from Austria was approximately 0,18.
HKI / CEFACD	**2**	**v2**	21/11/2008	Annex 2-2	44	Table 2 Most of the lignite and hard coal production of all the countries mentioned in the table go di-rectly from the mining into industrial processes and power plants >> 20 MW and is not used in SCIs.	Acknowledged, a sentence has been added to clarify this issue
Rheinbraun Brennstoff GmbH	**2**	**v2**	21/11/2008	Annex 2-2	44	table2, lignite / lignite briquettes In named above table 2 the production of lignite and hard coal in Germany is amount to a total of 200 Mt. The most therefrom is used in power plants >> 20 Mw and chemical processes. Only 0.7 Mt are used in domestic solid fuel burning appliances.	Coal resources are only used as an index of the presence of mineral fuels in that country, to refine the country groupings (mainly based on climate conditions). Therefore no change in the report.
Rheinbraun Brennstoff GmbH	**2**	**v2**	21/11/2008	Annex 2-2	46	Grouping of Countries The grouping of Countries on the basis of lignite and hard coal production seems not to be relevant since this is used for industrial purposes only. In principle the grouping of countries shall only be used as a tool for rough extrapolation of data. It is not possible to define groups like that for regulation purposes.	Coal resources are only used as an index of the presence of mineral fuels in that country, to refine the country groupings. The main factors governing the country groupings are the number of heating degree days. Indeed, the country grouping is only used for extrapolation, where no data is available.