उच्च प्रौद्योगिकी केन्द्र

(पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय)

. उ.प्रौ.के./जी.सी.-32/8436 CHT/GC-32/8436



Centre for High Technology

(Ministry of Petroleum & Natural Gas, Govt. of India)

15 अक्तूबर, 2013 15th October 2013

सेवा में/То,

उच्च प्रौद्योगिकी केन्द्र की गवर्निंग काउंसिल / जनरल बॉडी के सभी सदस्यगण (संलग्न सूची के अनुसार) All Members of the Governing Council/General body of CHT (As per list enclosed)

प्रिय महोदय,/Dear Sir,

विषय : उच्च प्रौद्योगिकी केन्द्र की गवर्निंग काउंसिल की 32वीं बैठक का कार्यवृत्त ।

Sub.: Minutes of 32nd Meeting of the Governing Council (GC) of CHT.

दिनांक 19 सितम्बर, 2013 को शास्त्री भवन में पेट्रोलियम और प्राकृतिक गैस मंत्रालय के सभा कक्षा में सचिव, पेट्रोलियम और प्राकृतिक गैस मत्रालय की अध्यक्षता में सम्पन्न हुई उच्च प्रौद्योगिकी केन्द्र की गवर्निंग काउंसिल/ महा सभा की 32वीं बैठक का अनुमोदित कार्यवृत्त आपकी सूचना और आवश्यक कार्रवाई के लिए संलग्न किया जा रहा है।

Please find enclosed the duly approved Minutes of 32nd Meeting of the Governing Council/General body of CHT held on 19th September 2013 at MoP&NG, Shastri Bhavan, New Delhi under the Chairmanship of Secretary, P&NG, for kind information and necessary action.

धन्यवाद.

Thanking you,

भवदीय, Yours faithfully,

> ही .डी .च्याप 15/19/2013 (बी.डी.घोष)

कार्यकारी निदेशक

सदस्य-सचिव, गवर्निंग काउंसिल

(B.D. Ghosh)

Executive Director

Member-Secretarty, Governing Council - CHT

संलग्न : यथा उपर्युक्त

Encl.: As above

VES TO ED

Members of the Governing Council / General Body of CHT

- Shri Vivek Rae, Secretary, Ministry of Petroleum & Natural Gas, Shastri Bhavan, New Delhi – 110 001
- Shri Rajive Kumar,
 Additional Secretary,
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan,
 New Delhi 110 001
- Dr S. C. Khuntia,
 AS & FA,
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan,
 New Delhi 110 001
- Shri R. K. Singh,
 Joint Secretary (Refineries),
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan,
 New Delhi 110 001
- 5. Dr. Neeraj Mittal,
 Joint Secretary (Marketing),
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan,
 New Delhi 110 001
- Shri A. Giridhar,
 Joint Secretary (E),
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan
 New <u>Delhi</u> 110 001
- Shri P. K. Singh,
 Joint Secretary (IC),
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan
 New Delhi 110 001

- Shri P. Kalyanasundaram,
 Joint Secretary (Gen & CA),
 Ministry of Petroleum & Natural Gas,
 Shastri Bhavan
 New Delhi 110 001
- Shri L. N. Gupta,
 Secretary,
 Oil Industry Development Board,
 OIDB Bhawan,
 Plot No. 2, Sector-73,
 NOIDA 201 301
- Shri R. S. Butola,
 Chairman,
 Indian Oil Corporation Ltd.,
 3079/3, Sadiq Nagar,
 J. B. Tito Marg,
 New Delhi 110 049
- 11. Shri S. Roy Choudhury,
 Chairman & Managing Director,
 Hindustan Petroleum Corporation Ltd.
 Petroleum House,
 17, Jamshedji Tata Road,
 Mumbai 400 020
- 12. Shri R. K. Singh
 Chairman & Managing Director,
 Bharat Petroleum Corporation Ltd.
 Bharat Bhawan, 4 & 5 Currimbhoy Road,
 P.O. Box No. 688,
 Ballard Estate,
 Mumbai 400 038
- 13. Shri A. S. Basu,
 Managing Director,
 Chennai Petroleum Corporation Ltd.
 536, Anna Salai,
 Teynampet,
 Chennai 600 018

- 14. 'Shri B. C. Tripathi,
 Chairman & Managing Director,
 Gas Authority of India Limited,
 16, Bhikaiji Cama Place,
 R.K.Puram,
 New Delhi 110 066
- 15. Shri A. K. Purwaha,
 Chairman & Managing Director,
 Engineers India Ltd.
 EIL Bhawan, 1, Bhikaiji Cama Place,
 New Delhi 110 066
- 16. Shri D. Chakraborty,
 Managing Director,
 Numaligarh Refinery Limited,
 6th Floor, Tolstoy House,
 15 17, Tolstoy Marg,
 New Delhi 110 001
- Shri P. P. Upadhya,
 Managing Director,
 Mangalore Refinery & Petrochemicals Ltd.,
 Regd. Office: Kuthethoor,
 P.O. Via Katipalla,
 Mangalore 575 030
- 18. Dr. M. O. Garg,
 Director,
 Indian Institute of Petroleum,
 P.O. Mohkampur,
 Dehradun 248 005
- Shri B. D. Ghosh,
 Executive Director / Member Secretary, Governing Council,
 Centre for High Technology,
 9th Floor, Tower-A, OIDB Bhawan,
 Plot no. 2, Sector-73,
 NOIDA 201 301

Minutes of the 32nd Meeting of the Governing Council (GC) and AGM (2012-13) of Centre for High Technology (CHT) held on 19th September, 2013 in the Conference Room, MoP&NG, Shastri Bhawan, New Delhi

- 1.0 Shri Vivek Rae, Secretary, P&NG chaired the Meeting. The list of participants is enclosed as Annexure. There were no representatives from NRL and MRPL.
- 2.0 Shri B.D. Ghosh, Executive Director, CHT and Member-Secretary of the Governing Council (GC) welcomed the Chairman and Members of the GC and other participants to the Meeting.
- 3.0 Confirmation of the Minutes of 31st meeting of the Governing Council (Agenda Item 1.0)

There being no comments, the Minutes of the 31st GC Meeting circulated by CHT vide letter no. CHT/RK/GC/3646 dated 14th November, 2012 were confirmed and adopted by Governing Council.

4.0 Review of Action Points of the 31st Governing Council meeting (Agenda Item No. 2.0)

The following points emerged out of discussions:

4.1 Integrated Refinery Business Improvement Program (IRBIP) under Phase-II (Agenda Item No. 2.1)

IRBIP Phase-II, initiated in February 2011 and spanning over 36 months, is currently being executed by CHT through M/s Shell Global Solutions International (Shell GSI) at 3 PSU Refineries viz. BPCL-Mumbai, HPCL-Mumbai and MRPL. The Site Assessment has successfully been carried out at all the three sites by experts of SGSI.

A total of 66 Projects for Implementation (PFI's) have been identified jointly by the refineries and SGSI (BPCL-M: 30, HPCL-M: 15, MRPL: 21). Out of these, BPCL has approved 12 PFI's (14.7 cents/bbl), HPCL-Mumbai 3 PFI's (4.3 cents/bbl) and MRPL 9 PFI's (24.8 cents/bbl) so far. The total benefit expected through implementation of the above will be at least around 30 Million USD. Director (R), BPCL informed that 5 more PFIs have been identified recently.

In response to the query by the Chairman, it was informed that detailed techno-economic feasibility is carried before the PFIs are implemented.

Chairman remarked that EIL should also endeavor to develop expertise in line with Shell GSI for undertaking similar studies on their own or in association/collaboration with leading global players in this area.

(Action : EIL)

4.2 Energy Efficiency Improvement Study of NRL (Agenda Item No. 2.2)

The Energy Efficiency Improvement Study (EEIS) jointly undertaken by CHT & EIL at Numaligarh Refinery Ltd. (NRL) has been completed. The final report summarising the present energy consumption status, potential energy savings through Energy Conservation (ENCON) schemes was submitted to NRL in December 2012.

ED, CHT informed that the study has identified number of ENCON schemes in the areas of steam/power optimisation, crude pre-heat improvement, steam and DM water reduction, hydrogen management, flare gas recovery etc. with potential cumulative saving of about 34,000 SRFT/year. He informed that CHT/EIL have offered their services for detailed development of schemes for implementation.

Governing Council took note of the Study and directed that NRL may initiate follow up action on priority.

(Action: CHT/EIL/NRL)

4.3 Institution of Performance Awards for Refineries and R&D (Agenda Item No. 2.3)

It was informed that the methodology and the evaluation criteria proposed by CHT was approved by SAC in the 72nd Meeting held on 30th March, 2013. CHT presented the details of various parameters/attributes for evaluation of proposals for R&D award.

It is proposed to give the awards annually for different categories as below:

- i) Best Indigenously Developed Technology
- ii) Best Innovation in Refinery (refinery / group / individual)
- iii) Best Innovation in R&D Institute (institute / group / individual)

Award on Innovation has been included in the above category based on the outcome of the meeting on Sectoral Innovation in the P&NG sector which was held on June 21, 2013.

The Composition of Award Committee will be as under:

Chairman - SAC Chairman

Convenor – ED(CHT)

Members – 2 from Oil industries, 2 from CSIR/IITs/ National Institute of repute and 2 from SAC nominated members or experts

Governing Council concurred with the composition of the Award Committee and accorded approval for suggested categories of awards.

In the case of cash awards, Chairman advised CHT to work out the quantum of cash incentive in consultation with OIDB.

(Action : CHT)

4.4 Finalisation of Methodology for GHG (CO2 equivalent) Inventory Performance of Refineries (Agenda Item No. 2.4)

ED, CHT informed that for GHG inventory benchmarking, CHT has identified the following methodologies for comparing the performance of refineries w.r.t. GHG emission:

- Using the current CHT Energy Factor which is in practice for estimating the specific energy consumption
- 2. Carbon Weightage Tonnage (CWT) used in European Union Refineries for benchmarking GHG emissions
- 3. Method similar to Solomon's Carbon Emission Index (CEI)

In all the above cases, the absolute GHG emission from the refinery will be estimated using API-2009 Compendium.

During the meeting organised by CHT with all the refineries on 19th June 2013, it was decided to adopt CWT method for GHG inventory benchmarking of refineries.

All the refineries have been requested to provide the desired data pertaining to 2012-13 for evaluation of GHG emission performance and comparison.

Governing Council took note of the above.

(Action: CHT/All refineries)

4.5 Technical Services Agreement (TSA) with world renowned and reputed consultant (Agenda Item No. 2.5)

ED, CHT apprised the Governing Council regarding the Technical Services Agreement (TSA) entered by CHT with Shell Global Solutions International (Shell GSI) on behalf of the oil industry. The TSA contract is for two years with a provision for extension by another year on mutual consent. Under the contract, Shell GSI will provide 1000 man-hours service /consulting per year against Fixed Annual Fee and any man-hours in excess of 1000 hours shall be paid separately. Out of the 1000 fixed manhours, 700 manhours have been allocated to IOCL, BPCL, HPCL, CPCL, MRPL, EIL and GAIL and the balance 300 manhours will be utilised by CHT for any specific studies beneficial to the oil industry.

ED, CHT informed that so far about 150 manhours have been utilised. It was agreed that there is lot of utility of this TSA to reduce gaps identified through benchmarking study. It was mentioned that MRPL is unwilling to participate in this programme.

Chairman advised all the participating companies to ensure utilisation of allotted man hours to get the maximum benefit under this Agreement.

(Action: CHT/All refineries)

4.6 Performance Benchmarking of PSU refineries (Agenda Item No. 2.6)

ED, CHT informed that the Performance Benchmarking of 15 PSU refineries for 2012 by M/s Solomon Associates has been completed and the final study results in electronic form were forwarded to refineries in August 2013. Subsequently, M/s Solomon Associates also made detailed presentation on the results and analysis to BPCL, HPCL and IOCL.

ED, CHT informed that such Benchmarking exercise are extremely useful in comparing the performance of Indian PSU refineries with global peers and identification of gaps and potential areas of improvements. There is, therefore, a need for continuing Benchmarking exercise once in two years on regular basis as is being done by more than 95 % of the refineries globally. IOCL, BPCL, HPCL, CPCL were also of the view that the Benchmarking exercise has been extremely beneficial to the refineries and supported ED, CHT's proposal for undertaking the study on a continuous basis.

ED, CHT informed that this Benchmarking exercise is conducted every 2 years by Solomon Associates and requested Governing Council for according in-principle approval for undertaking Performance Benchmarking Study for calendar year 2014 for the 15 PSU refineries.

Governing Council accorded in-principle approval to CHT for participating in Performance Benchmarking Study of Solomon Associates every 2 years cycle. CHT to process proposal for next cycle, for financial concurrence as per normal procedure.

(Action: CHT/All refineries)

4.7 Organisation of Workshop on "Oil and Gas Pipelines" (Agenda Item No.2.7)

ED, CHT informed that a 2-day Pipelines Workshop was organised by Centre for High Technology in association with GAIL (India) Limited on 12th and 13th April, 2013 at Visakhapatnam. The theme of the workshop was "Dynamics of Pipeline Transportation – Ensuring Safe & Sustainable Energy". The Workshop was inaugurated by the Hon'ble Minister of State for Petroleum & Natural Gas and the Key note address was delivered by Secretary, P&NG.

The workshop was attended by 145 delegates and senior executives from the oil and gas industry from India, viz. GAIL, IOC, HPCL, BPCL, ONGC, OIL. In addition to the plenary session, there were 4 Technical Sessions and a total of 17 technical papers including 5 papers on pipeline case studies were presented during the workshop.

Governing Council took note of the above and complimented CHT for excellent organization of the Workshop.

4.8 Organising 18th Refinery Technology Meet (RTM) during 2013-14 (Agenda Item No. 2.8)

ED, CHT informed that in line with the approval accorded by GC in the last meeting, CHT is organizing the 18th RTM in association with Bharat Petroleum Corporation Ltd. at the Convention Centre, Le Meridien, Kochi from November 11-13, 2013. The theme of the RTM will be "Pacesetter Performance for Improving Margin, Reliability, Efficiency".

It was informed that RTM is the oldest and regular Annual Conference of the Hydrocarbon Sector which is likely attract more than 600 delegates from India and abroad to participate in the 18th RTM. The prestigious Energy Performance Awards for the year 2011-12 and 2012-13 shall be presented to refineries during the RTM by the Hon'ble Minister for Petroleum & Natural Gas.

ED, CHT informed that the expenditure towards organizing the event will be met through sponsorship and all efforts will be taken to ensure economy in expenditure in line with the recent austerity drive of the Government.

Governing Council took note of the above and appreciated the efforts of CHT in knowledge sharing and dissemination of information for the benefit of the oil industry.

4.9 Performance Improvement of PSU refineries through Gap Identification, Analysis and Recommendations (Agenda Item No. 2.9)

ED, CHT informed that MoP&NG had constituted an Expert Group (comprising senior executives from IOCL, BPCL, HPCL, CPCL, MRPL, NRL with ED, CHT as Member Secretary) to evaluate the performance of each refinery, taking into account various constraints faced by them and take effective steps to make them more efficient, viable and profitable as per the recommendations of The Ninth Report of the Standing Committee on Petroleum & Natural Gas (2011-12) on "Challenges of Under-recoveries of Petroleum Products".

Based on the findings of the Solomon Study Report for 2010, the Expert Group has visited 4 refineries (CPCL, IOCL-Haldia, BPCL-Mumbai and HPCL-Mumbai) and had detailed review of the Operational Performance and identification of potential areas of improvement.

ED, CHT informed that the Solomon Benchmarking Study for the year 2012 has recently been completed and based on this latest findings, the Expert Group will be visiting other refineries for detailed performance review. The final report by the Expert Group is expected to be submitted to MoP&NG by December, 2013.

Governing Council took note of the above.

(Action: CHT/Expert Group)

4.10 Manpower requirement of CHT (Agenda Item No. 2.10)

ED, CHT informed that CHT is facing serious manpower resource crunch and is currently having only 11 Technical Officers against the sanctioned strength of 28 technical officers. In addition to this huge shortage, no replacements were given for superannuated employees and those who have completed their tenures, in some cases. GC in its last meeting had requested oil companies to provide necessary manpower support to meet the requirements of CHT.

While HPCL has recently deputed a senior officer to CHT, there has been no replacement from EIL and IOCL against withdrawals/superannuation of manpower. CHT is yet to receive two officers from IOCL as was committed by their Corporate office. CHT had also requested GAIL to depute one officer for handling activities related to Midstream/Gas Sector.

Governing Council took note of the manpower shortage of CHT. Chairman advised the members to depute necessary manpower support to CHT for their activities for the overall benefit of the oil industry.

(Action: IOCL/BPCL/HPCL/EIL/GAIL)

- 5.0 New Proposals (Agenda Item 3.0)
- 5.1 Energy Efficiency Improvement Study of HPCL-Visakh Refinery (Agenda Item No. 3.1)

ED, CHT informed that in line with the recently concluded Energy Efficiency Improvement Study (EEIS) for NRL, similar proposal for EEIS, to be undertaken by CHT jointly with EIL, has been submitted to Hindustan Petroleum Corporation Limited (HPCL), Visakh Refinery. The scope of work has already been finalized in consultation with the refinery.

Director (R), HPCL stated that the commercial offer is being processed and order is expected to be issued shortly.

Governing Council appreciated such indigenous efforts.

(Action: HPCL/CHT)

5.2 Organisation of Workshop on "Innovation in the Hydrocarbon Sector"

ED, CHT informed that as proposed during the presentation to Secretary, P&NG on "Roadmap for Innovations in the Downstream Sector" on 21st June, 2013, CHT will be organising a One Day Workshop on "Innovation in Downstream Hydrocarbon Sector" in January/February 2014 in association with Petrotech Society, oil companies, GAIL, EIL etc.

The Workshop will focus on the following:

- Establishing system for innovation culture
- Strengthening of Innovation Eco-system
- Techniques/Tools for Innovation Management
- Measuring Performance/Success

Governing Council took note of the above.

(Action: CHT/Oil Companies)

5.3 Modification of Methodology and Energy factors for Evaluation of Specific Energy Consumption (Agenda Item No. 3.3)

ED, CHT informed that the Energy Performance Evaluation of refineries by CHT is currently based on Specific Energy Consumption considering the Energy Factors developed by CHT/EIL. The Specific Energy Consumption is in terms of MBtu/barrel/NRGF called MBN.

During the recent Benchmarking Study carried out through M/s Solomon Associates, it has been observed that there is a mismatch between the MBN method and the EII (Energy Intensity Index) method which is being adopted by M/s Solomon Associates. Most of the refineries globally are following Solomon's EII for comparison of energy performance.

Considering the above, CHT intends to address the discrepancy and modify its methodology for energy performance evaluation for realistic comparison with global refineries.

It is proposed to avail the services of Shell under the on-going TSA for detailed review of the present system and develop appropriate methodology for energy performance evaluation of Indian refineries for better alignment and comparison with global refineries.

Director (T), EIL suggested that CHT should also involve EIL in the above exercise with Shell.

Governing Council took note of the above and concurred with the proposal.

5.4 Conduct Special Seminar/Workshop on Refinery performance gaps and develop action plan to bridge performance gap (Agenda Item No. 3.4)

ED, CHT informed that on the basis of the findings of the Expert Group and the Solomon Associates Performance Benchmarking Studies, it is proposed to conduct a special seminar/workshop on Refinery performance gaps and develop concrete action plan to bridge the performance gaps identified in various areas. External help from experts and consultants like Shell/Solomon Associates shall be taken, if necessary, for conducting the seminar/workshop for benefit of the refineries. EIL and IIP also offered their services.

Governing Council took note of the above and concurred with the proposal.

(Action: CHT/Oil Companies)

6.0 Research & Development Activities (Agenda Item No. 4.0)

6.1 ED, CHT apprised the Governing Council on the activities of Scientific Advisory Committee (SAC) on Hydrocarbons of MOP&NG, status of various R&D projects sponsored by CHT/OIDB and Hydrogen projects under the Hydrogen Corpus Fund.

Director (R), BPCL and Director (T), EIL explained in detail the background, progress and status of the ongoing Coal To Liquid (CTL) project being executed jointly by BPCL and EIL in collaboration with Thermax.

As regards the projects under HCF, it was informed that recently two Hydrogen projects of HPCL with IIT-Delhi and Gitam University have been completed and shall be taken up for review in the next SAC meeting. Currently, 5 Hydrogen projects are in progress.

On the subject of HCF, Chairman observed that MNRE is also independently engaged in Hydrogen area and there is a need to have synchronized approach to avoid any duplicity and parallel efforts. ED, CHT informed that representative from MNRE is a member of the HCF Steering Committee.

Chairman opined that since MNRE is the overall nodal agency for hydrogen roadmap in the country, CHT and IOCL (R&D) should apprise MNRE about the efforts being made by MoP&NG/Oil companies under HCF. Planning Commission should also be apprised about these activities.

(Action: CHT/IOCL-R&D)

6.2 New Charter for Scientific Advisory Committee (SAC) on Hydrocarbons of MoP&NG

ED, CHT informed that the recommendations of the Committee with regard to the New Mission, Charter/Objectives and Composition, approved by the SAC in its 71st meeting have been submitted by CHT to MoP&NG for consideration, approval and notification.

GC took note of the same. Chairman desired that the Sectoral Innovation Council of MoP&NG should be merged with CHT, if feasible.

(Action: MoP&NG/CHT)

- 7.0 Other Activities of CHT (Agenda Item No. 5.0)
- 7.1 ISO Certification for CHT

ED, CHT informed that in line with commitment given by CHT in the Results Frame Document (RFD), CHT initiated extensive action plan for implementation of ISO 9001. M/s

DNV carried out Stage 1 and final audit as per QMS procedures on 18th June 2013 and 2nd July 2013 respectively and certified Centre for High Technology (CHT) with the Quality Management System Standard, ISO 9001:2008 for "providing technical advice, guidance and support to the downstream hydrocarbon sector and refineries under the aegis of Ministry of Petroleum and Natural Gas".

Governing Council took note of the above and congratulated CHT for the achievement.

7.2 Roadmap for Innovations in the Downstream Sector

CHT prepared a Comprehensive Report on "Roadmap for Innovations in the Downstream Sector" and made a presentation to MoP&NG. The Report was prepared based on detailed review of global innovation scenario in the downstream, analysis/review of existing R&D activities by R&D Institutes/academia/industry, specific inputs from various stake holders, SWOT Analysis, future challenges for the downstream sector etc. The Report also included various recommendations for improving existing innovation ecosystem and Way Forward. The Summary and Highlights of the Report was presented to Secretary, P&NG in July, 2012.

CHT was also actively associated and instrumental in providing intellectual inputs for the preparation of the Final Consolidated "Report of Sectoral Innovation Council of Ministry of Petroleum & Natural Gas".

Governing Council took note of the above efforts and contribution of CHT.

7.3 Enlistment of HPCL-Mittal Energy Limited (HMEL) as Member of CHT

ED, CHT informed that HMEL has requested for associating with various activities of CHT by becoming a Member of CHT. HMEL has agreed and given undertaking to share the data/information/best practices pertaining to their operations as is being followed by other regular members of CHT. It was informed that being a Joint Venture refinery with more than 26 % PSU holding, HMEL is eligible for enlisting as Regular Member of CHT.

Governing Council accorded approval for enlisting HMEL as Regular Member of CHT.

(Action: CHT)

7.4 ED, CHT apprised the Governing Council about various other regular activities carried out by CHT, viz., Activity Committee Meetings, Energy Performance Evaluation of refineries, Surveys during Oil & Gas Conservation Fortnight, recommendations for issuance of essentiality certificates for import of project item, review of technical proposals forwarded by MoP&NG, compilation of data and review of physical performance of refineries for QPR meetings, technical support to MoP&NG etc.

- 8.0 Finance (Agenda Item No. 6.0)
- 8.1 Adoption of the Annual Audited Accounts for the Financial Year 2012-13 (Agenda Item6.1)

Governing Council reviewed and approved the Annual Accounts as placed by CHT for the financial year 2012-13 and adopted the following resolution:

"Resolved that the Annual Accounts of Centre for High Technology for the financial year 2012-13 as audited and reported upon by M/s Aggarwal Vineeta & Co., Chartered Accountants and now placed before the Governing Council are approved".

- 8.2 Revised Budget Estimates for 2013-14 & Budget Estimates for 2014-15 (Agenda Item 6.2)
- 8.2.1 Governing Council reviewed the Revised Budget Estimate (RBE) for 2013-14 and Budget Estimate (BE) for 2014-15 in respect of Revenue Expenditure, Capital Expenditure and R&D Projects presented by CHT.

AS&FA_advised_that_the_Revenue_Expenditure_for_RBE_2013-14_and_BE_2014-15_may_be_maintained at the BE 2013-14 level.

Considering the above, the Governing Council approved the following Revised Budget Estimate (RBE) for 2013-14 and Budget Estimate (BE) for 2014-15 for Centre for High Technology:

(Figures in ₹ lakh)

2012-13			2013-14		2014-15	
RBE	Actual	Particulars	BE	RBE	BE	
927.00	856.63	Revenue Expenditure	965.00	965.00	965.00	
16.00	8.66	Capital Expenditure	12.00	12.00	12.00	
		Projects				
1244.00	254.71	(a) R&D Projects *	180.00	668.00	335.00	
314.00	303.33	(b) Special Studies	600.00	575.00	250.00	
2501.00	1423.33	Total	1757.00	2220.00	1562.00	

^{*} Excluding R&D projects under Hydrogen Corpus Fund which is maintained by OIDB

8.2.2 Secretary I/c, OIDB noted that the funds lying in FD as shown in the Balance Sheet should also be utilised in meeting the expenditure towards funding of R&D projects/special studies of CHT.

(Action: CHT)

8.2.3 AS&FA noted that an amount of ₹ 500 lakh has been earmarked by CHT under RBE 2013-14 for the CTL project being executed by BPCL and EIL in collaboration with Thermax. He advised EIL to ensure utilisation of this budgeted amount. Director (T), EIL explained the detailed status of the project including procurement of gassifier from Thermax and assured the Governing Council that the funds budgeted under RBE 2013-14 towards CTL project will be utilised.

(Action: EIL/CHT)

8.3 Appointment of Auditor to Audit the Accounts of CHT for the Year 2013-14

Governing Council advised CHT to appoint the Auditor from the panel of CAG approved Auditors in consultation with OIDB.

(Action: CHT/OIDB)

9.0 The meeting concluded with thanks to the Chair.

List of Participants of 32nd Meeting of the Governing Council (GC) and AGM (2012-13) of Centre for High Technology (CHT) held on 19th September, 2013 in the Conference Room, MoP&NG, Shastri Bhawan, New Delhi

S.No.	Name, S/Shri	Designation	Organisation	
1	Vivek Rae	Secretary, P&NG	MoP&NG	
2	Dr S.C. Khuntia	AS & FA	MoP&NG	
3	R.K. Singh	Joint Secretary (R)	MoP&NG	
4	P.K. Singh	Joint Secretary	MoP&NG	
5	V.L.V.S.S. Subba Rao	Secretary I/c	OIDB	
6	Ms Sushma Rath	Director (DMC)	MoP&NG	
7	Mohan Lal	Dy. Secretary	MoP&NG	
8	Dr R.K. Malhotra	Director (R&D)	IOCL	
9	M.K. Padia	ED (EI & ENCON)	IOCL	
10	B.K. Namdeo	Director (R)	HPCL	
11	B.K. Datta	Director (R)	BPCL	
12	A.S. Basu	MD	CPCL	
13	Ajay Deshpande	Director (T)	EIL	
14	P.K. Pal	ED (PD)	GAIL	
15	M.V.R. Someswardu	GM (R&D)	GAIL	
16	Dr S.M. Nanoti	Chief Scientist	CSIR-IIP	
17	M.C. Singh	FA & CAO	OIDB	
18	B.D. Ghosh	ED	CHT	
19	R. Krishnamurthy	Director	CHT	
20	Rajan Kapoor	Director	CHT	
1	A.S. Pathak	Addl. Director	CHT	
2 :	S. Halder	Joint Director	CHT	
3 '	V.K. Suri	Joint Director (Fin)	CHT	
4 5	S. Chaudhary	Joint Director	CHT	
5 F	R.K. Bali	Adviser	CHT	