

## Approved Models of Portable Improved Biomass Cookstoves

Natural draft and forced draft models of single part metallic and metal plate ceramic (ceramic composite/ industrial insulating materials) cook-stoves have been developed and are being manufactured in the country. Some of the models have been approved by the Ministry of New and Renewable Energy on the basis of their performance testing conducted by Improved Cook-stove Test Centres and satisfying stipulated performance parameters. The approved cookstove models supplied by respective manufacturers are given below:

Sl. No.	Address of Manufacturers	Model& Fuel used	Performance Parameters as per test testing conducted in MNRE supported Test Centres
<b>I. Domestic Size Cookstoves - Natural Draft</b>			
1.	Sh. N.C. Panda, Director, M/S UNICUS ENGINEERING PRIVATE LIMITED Regd. office ; 23, Madhusudan Nagar, Unit - IV, Bhubaneswar, Dist.: Khurda Pin :- 751001, Factory Office : Plot No. 622, Durga pur, DandiChhatabar Bhubaneswar, Dist.: Khurda, Pin: 751054 (M) 09439556490, 09861794100 Email:nrusingha06@yahoo.co.in	Harsha Multi-Fuel Cookstove	Thermal efficiency: 28.6% CO : 3.75 g/MJd TPM : 338.33 mg/MJd Power output : 2.0 kW
2.	Shri Vikram S. Kale, Proprietor, Vikram Stoves & Fabricators. A-37, MIDC, P O Box No.25 Osmanabad-413501, Maharashtra Telefax : 02472 228401. (M) 09422465477,9922157777,9422465457 Email: <a href="mailto:vikramskale@rediffmail.com">vikramskale@rediffmail.com</a> <a href="http://www.vikramstoves.com">www.vikramstoves.com</a>	a) Bio-classic (Fuel-wood) Front Feeding  b) Vikram Bio Super ChulhaTop feeding  c) VikramBio Classic Chulha Front Feeding	Thermal efficiency : 26.01% CO : 4.54 g/MJd TPM : 315.38 mg/MJd Power output : 1.49 kW  Thermal Efficiency : 31.95% CO : 4.51g/MJd TPM : 331.83mg/MJ CO/CO2 : 0.042 Power Output : 2.77KW  Thermal Efficiency : 26.30% CO : 2.93g/MJd TPM : 123.80mg/MJ CO/CO2 : 0.0245 Power Output : 2.13KW
3.	Ms. NehaJuneja,Co-founder, Greenway Grameen Infra Pvt Ltd, 301, Chawla Complex, Sector 15, CBD Belapur, Navi Mumbai 400614 Tel: 022-41239169, (M) 09930751591 <a href="http://www.grameeninfra.com">www.grameeninfra.com</a> Email: <a href="mailto:neha@greenwayappliances.com">neha@greenwayappliances.com</a>	Greenway Jumbo Stove Model JS1	Thermal Efficiency : 25.00% CO : 5.00g/MJd TPM : 239.94mg/MJ Power Output : 1.40KW
4.	M/s Ravi Engineering & Chemical Works, L-166, Ground & 1 <sup>st</sup> Floor, sector-3, DSIDC, Bawana, Delhi-110039 (M) 9911773887 Email: <a href="mailto:recwfire@gmail.com">recwfire@gmail.com</a> ,	Firenze(Fuel- Wood)	Thermal efficiency : 26.62% CO/CO2 : 0.041 TSP : 1.92mg/m3 Power Output : 0.74kW

	www.firenzal.in		
5.	Adarsh Plant Protect Ltd,604, GIDC, VitthalUdyognar, Anand, Gujarat.Contact Details: MrSreekanth, Director Pooja Horti & Herbal Farms (P) Ltd. A-102, Anee Circle, Ganesh Chowkdi, ANAND-388001, Gujarat Phone: 02692, 262278, 09825156796 Email: poojahorti@yahoo.co.in	Adarsh Domestic	Thermal Efficiency : 28.10% CO : 4.65g/MJd TPM : 212.13mg/MJ CO/CO2 : 0.044 Power Output : 1.41KW
6.	Shri T. Pradeep, Chief Executive, I -Square D Charitable Trust No. 15, 1st Main, 2nd Cross, RMV 2nd Stage, Dollar's Colony,Bangalore-560094 Contact person: Ms. Anita Balagopal Email: anita@isquared.in Mobile: 099483535046	Chulika (Fuel- Wood)	Thermal efficiency: 29.77% CO :2.57g/MJd TPM :228.37 mg/MJd Power output : 0.74 kW
7.	Mr. Soumitra Kulkarni, Swami Samarth Electronics Pvt. Ltd M-63, Ambad Nasik, Maharastra 0253- 238 0687, 09953356232 Email- swamisamarthm63@gmail.com	a)Agnika ND Eco Stove  a) Agnika ND Premium Stove	Thermal Efficiency : 25.05% CO : 4.50g/MJd TPM : 329.67mg/MJ Power Output : 1.47KW  Thermal Efficiency : 25.13% CO : 3.69g/MJd TPM : 313.09MG/MJ Power Output : 1.41 KW
8.	M/s. KSP Industries, Plot No. C 26 MIDC Parbhani-431402 (MS) Ph.- 02452-232911, (M) 9881822555 Email- ksp_industries@rediffmail.com	Srushti Chulha ,(Fuel- wood), Front Feeding	Thermal Efficiency : 25.257% CO : 2.81g/MJd TPM : 203.26mg/MJ CO/CO2 : 0.0241 Power Output : 2.187KW
9.	Digvijay Sales & Engineering Works, Ishkrupa Vidyanagar, Parali Vajjinath-431515,Beed- 431515(MS) Manufacturing Unit: Vimal Udyog B-110, Additional MIDC, Harangul, Latur-413512, Maharashtra (M) 9869254891 Email- digvijaysalesengworks@rediffmail.com	a) Digvijay Chulha Top Feeding  b) Stri Sakhi Chulha, Front Feeding	Thermal Efficiency : 33.44% CO : 2.55g/MJd TPM : 272.04mg/MJ CO/CO2 : 0.0284 Power Output : 2.46KW  Thermal Efficiency : 25.04% CO : 3.54g/MJd TPM : 183.43mg/MJ CO/CO2 : 0.023 Power Output : 1.89KW
10.	ENERGY DEVICES 7-2-1/A/22 BALKAMPET, SANATHNAGAR HYDERABAD, Telangana - 500018 EMAIL : <a href="mailto:energydevices@gmail.com">energydevices@gmail.com</a> Website : <a href="http://www.energydevices1991.com">www.energydevices1991.com</a> Cell No. +91-9848020046 Landline : 040-23705090/3062	Urja Dix (Fuel – wood)	Thermal efficiency : 29.00% CO : 3.69 g/MJd TPM : 314.08 mg/MJd Power output : 1.28 kW
11.	M/s. Envirofit (India) Pvt. Ltd., Hemant Shree Apartment Flat No. 202 ,Bhavdhan Khurd, Pune- 411021 Mob: +91 9890393939 Tel: +91 (20) 71800200 Fax:+91(20)71800211 harish.anchan@envirofit.org, infoindia@envirofit.org www.envirofit.org	Envirofit PCS	Thermal efficiency : 25.46% CO : 4.84 g/MJd TPM : 331.40 mg/MJd Power output : 0.77 kW

12.	M/s. Shri Ram Dev and Company, Gulmohar Colony, Bhopal- 462039 (MP) Production Unit :- Plot No. 8 , Sector- B Industrial Area , Mandideep Dist. Raisen ( M.P. ) Mobile No. +919425009113 , 8109583839 E-Mail :- (I) kasrekarvijay@gmail.com (II) shriramdeo2012@gmail.com www.dattuchulha.in	DB1(Dattu Chulha Big)	Thermal efficiency : 31.81% CO : 2.50 g/MJd TPM : 163.799 mg/MJd Power output : 1.70 kW
13.	SPRERI, M/s. Nilkanth Industries, Vitthal Udyognagar, Anand	a) SPRERITECH Eco-Chulha No.190-NDS-L  b) SPRERITECH Eco-Chulha No.170-NDT-L	Thermal efficiency : 25.955% CO : 2.95 g/MJd TPM : 216.64 mg/MJd Power output : 1.907 kW  Thermal efficiency : 25.90% CO : 3.12 g/MJd TPM : 304.14 mg/MJd Power output : 1.85 kW
<b>II. Domestic Size Cookstoves- Forced Draft</b>			
1.	Shri Mahesh Yagnaraman, Managing Director, First Energy Pvt. Ltd., B 101, Signet Corner Building, Baner Road, Baner,Pune – 411045(Fax:020-67210444). Tel: 020-67210500. Email:yagnaramans@gmail.com	a) Oorja K3 Dlx (Portable -Forced Draft)	Thermal Efficiency : 37.26% CO : 1.12g/MJd TPM : 128.26mg/MJ Power Output : 1.51KW
2.	The Energy and Resources Institute (TERI), 6C, Darbari Seth Block India Habitat Place, Lodhi Road New Delhi - 110 003 Tel: 011-24682111/24682100 Manufacturer Address:PhoenixUdyogPvt Ltd, Nahan Road, Moginand, Kala-Amb, District: Sirmour,Himachal Pradesh-173030 Tel:098161 03575 Email: phoenix.hp@rbsgroup.in	a) TERI SPT-0610(Fuel-Wood)  b) IMPMUD,TERI -PMU 0414D  c) TERI-SPF 0414S (Front-fed)	Thermal efficiency : 36.84% CO : 2.25 g/MJd TPM : 147.40 mg/MJd Power output : 1.08 kW  Thermal Efficiency : 35.52% CO : 3.63.g/MJd TPM : 107.56.73mg/MJ Power Output : 4.36KW  Thermal efficiency : 40.78% CO : 1.28 g/MJd TPM : 71.36 mg/MJd Power output : 2.24 kW
3.	Mr. I.H. Rehman Director, The Energy & Resources Institute (TERI), Darbari Seth Block, IHC Complex New Delhi- 110003 Email- ihrehman@teri.res.in	IMPMUD Stove TERI SPF 0143	Thermal Efficiency : 36.77% CO : 2.13g/MJd TPM : 100.94mg/MJ Power Output : 3.06KW
4.	Shri Ashwin Patel, Director, Alpha Renewable Energy Pvt. Ltd.At. & Po. Vasna (Borsad), Ta. Borsad, Dist. Anand, Gujarat, India-388 540 Tele:02696-290380; (M):09904184849 Email:info@alphaindia.co.in ap@wallguard.net	XXL Echo Chulha Stoves	Thermal Efficiency : 36.52% CO : 1.14g/MJd TPM : 56.290mg/MJ CO/CO2 : 0.013 Power Output : 1.98KW
5.	Shri Sashidhara B T, Proprietor, Sacks Right	OJAS(Fuel-Pellets)	Thermal Efficiency :35.33% CO :2.569 g/MJd

	Energy Innovations No.83/84, Kempegowda Circle 14th A Cross, Thigalarapalya Main Road, Peenya 2nd Stage, Bangalore -560 058 (M): 09900241276, 09886425879 Email: wedesignforyou2000@gmail.com		TPM : 78.82 mg/MJd Power output : 1.99
6.	Mr. Rajesh Saboo, Phoenix Udyog Pvt. Ltd, Vishal Market, West Mukherjee Nagar, Delhi-110009 Mb: 098161 03575 Email- rajesh@rbsgroup.com	TERI SPT 0314 Stove	Thermal Efficiency : 40.81% CO : 2.09g/MJd TPM : 140.67mg/MJ Power Output : 1.46KW
7.	M/s. Pura Infrastructure development Consultants Pvt. Ltd. 9081, Pocket C9, VasantKunj, New Delhi- 110070 Mob: +91-9871454997 purainfrastructure@gmail.com www.purainfrastructure.com	PMTS, (Thermoelectric Generator Stove)	Thermal efficiency : 35.47% CO : 3.20 g/MJd TPM : 117.03 mg/MJd Power output : 1.50 kW
8.	M/s Biolite C-61 Palaspalli Duplex Colony Bhubaneswar, Odisha 751020 ethan@biolitestove.com	Biolite Homestove (Thermoelectric Generator stove)	Thermal efficiency : 36.92 % CO : 0.91 g/MJd TPM : 120.02mg/MJd Power output : 1.68 kW
<b>III. Community Size Cookstoves - Natural Draft</b>			
1.	Shri Vikram S. Kale, Proprietor, Vikram Stoves & Fabricators. A-37, MIDC, P O Box No.25 Osmanabad-413501, Maharashtra Telefax : 02472 228401. (M) 09422465477, 9922157777, 9422465457 Email: vikramskale@rediffmail.com www.vikramstoves.com	Vikram Jumbo Bio Super, top feeding	Thermal Efficiency : 28.10% CO : 1.15g/MJd TPM : 123.67mg/MJ CO/CO2 : 0.015 Power Output : 3.64KW
2.	Digvijay Sales & Engineering Works, Ishkrupa Vidyanagar, Parali Vajinath-431515, Beed-431515(MS) Manufacturing Unit: Vimal Udyog B-110, Additional MIDC, Harangul, Latur-413512, Maharashtra (M) 9869254891 Email- digvijaysalesengworks@rediffmail.com	Digvijay Community Chulha Top feeding	Thermal Efficiency : 30.28% CO : 1.73g/MJd TPM : 168.85mg/MJ CO/CO2 : 0.023 Power Output : 4.209KW
<b>IV. Community Size Cookstoves - Forced Draft</b>			
1.	Shri Ashwin Patel, Director Alpha Renewable Energy Pvt. Ltd. At. & Po. Vasna (Borsad), Ta. Borsad, Dist. Anand, Gujarat, India-388 540 Tele: 02696-290380; (M): 09904184849 Email: info@alphaindia.co.in, ap@wallguard.net	XXXL Plus Stove	Thermal Efficiency : 35.52% CO : 1.97g/MJd TPM : 78.93mg/MJ Power Output : 3.78KW

2.	Shri Sashidhara B T, Proprietor Sacks Right Energy Innovations No.83/84, Kempegowda Circle 14th A Cross, Thigalarapalya Main Road, Peenya 2nd Stage, Bangalore -560 058 (M): 9900241276,9886425879 Email: wedesignforyou2000@gmail.com Sin_e@yahoo.co.in	a) Ojas - M06 (Fuel-Pellets)	Thermal Efficiency : 35.11% CO : 1.05 g/MJd TPM : 69.01 mg/MJd Power output : 5.43 kW
3.	Mr. Sandeep Kashyap, M/s. Navitas Green Power(Fuel Management) Pvt. Ltd. Udyog Vihar, Gurgaon Ph- 0124-4987400 124-4987499(Fax) Mb: 9910402185 Email- sandeep.kashyap@sar-group.com	a) Navshakti Cookstoves, Model: NSTF10 (Fuel -Pellet)  b) Navshakti Continous Cookstove, Model No. NSCF10	Thermal Efficiency : 42.80% CO : 1.03g/MJd TPM : 68.45mg/MJ Power Output : 12.2KW  Thermal efficiency : 35.42% CO : 1.34 g/MJd TPM : 123.28 mg/MJd Power output : 11.46 kW
4.	Teri, PMU Lab Jagdishpur, Amethi, U.P	IMPMETAL TERI SPFB_0514b	Thermal efficiency : 37.12% CO : 1.59 g/MJd TPM : 105.62 mg/MJd Power output : 9.11 kW
5.	M/s. Supernova Technologies Pvt. Ltd. Gujarat Tel: +91 2692 237037 sntgstove@yahoo.com, sntgjarat@gmail.com www.supernovawindsolar.com	Supernova-SGDCM	Thermal efficiency : 36.10% CO : 4.63 g/MJd TPM : 112.17 mg/MJd Power output : 4.62 kW
6.	M/s TERI , Darbari Seth Block, IHC Complex, Lodhi Road, New Delhi-110003	a) IMPMETAL-TERI-SPFC-1114  b) IMPMETAL-TERI-SPFM-0414N	Thermal efficiency :36.49 % CO : 1.71 g/MJd TPM : 133.65 mg/MJd Power output : 3.36 kW  Thermal efficiency :35.41 % CO : 1.889 g/MJd TPM : 116.63 mg/MJd Power output : 4.256 kW
7.	M/s Phoenix Udyog (P) Ltd., Nahan Road, Moginand, Kala-Amb-173030, Dist. Sirmour (Himachal Pradesh) Tel: 09816103575 Email: phoenix.hp@rbsgroup.in	a) TERI SPFB-0514C  b) TERI SPFM-0414E	Thermal efficiency :37.32 % CO : 0.830 g/MJd TPM : 92.38 mg/MJd Power output : 9.05 kW  Thermal efficiency :35.75 % CO : 2.22 g/MJd TPM : 138.73 mg/MJd Power output : 4.26 kW