

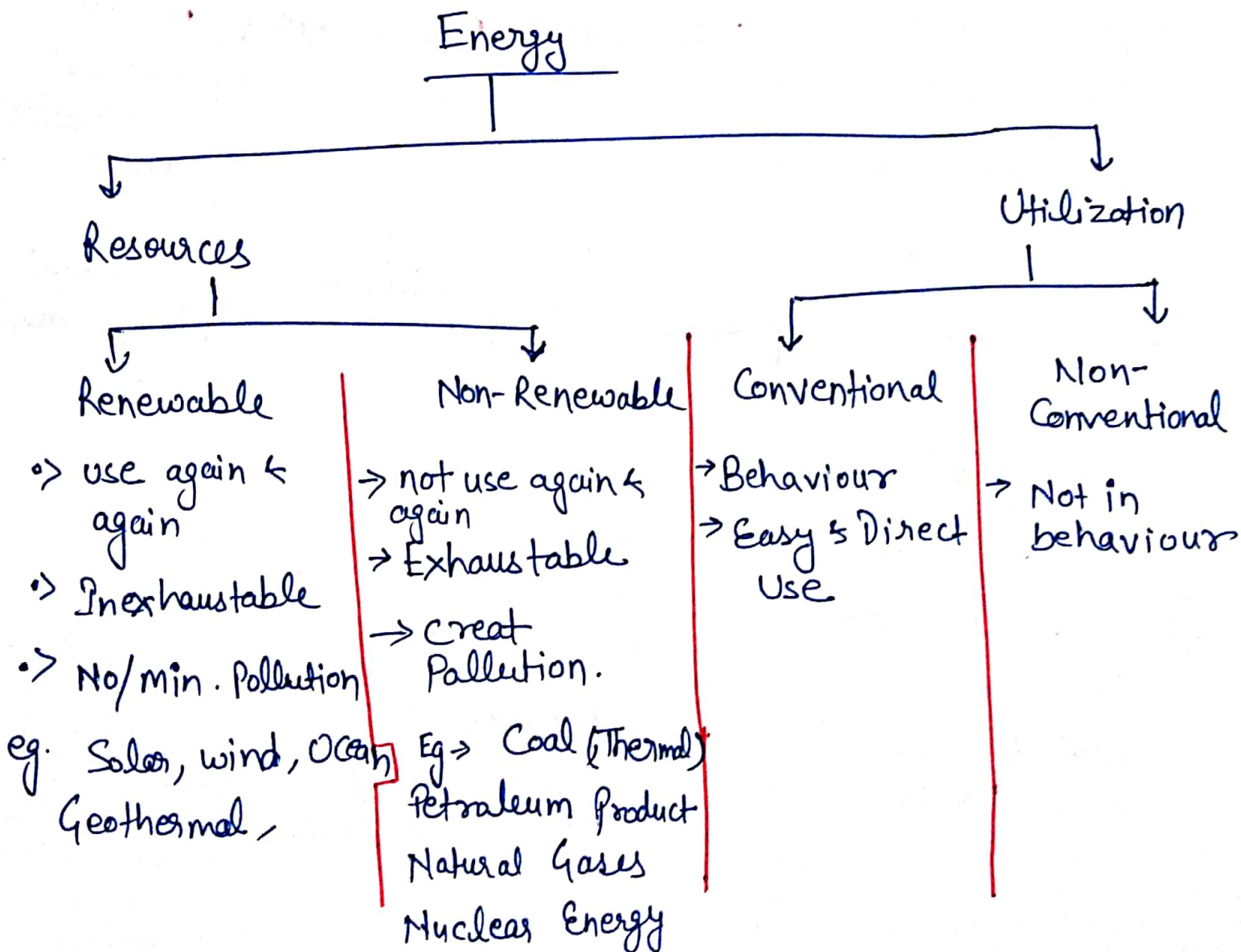
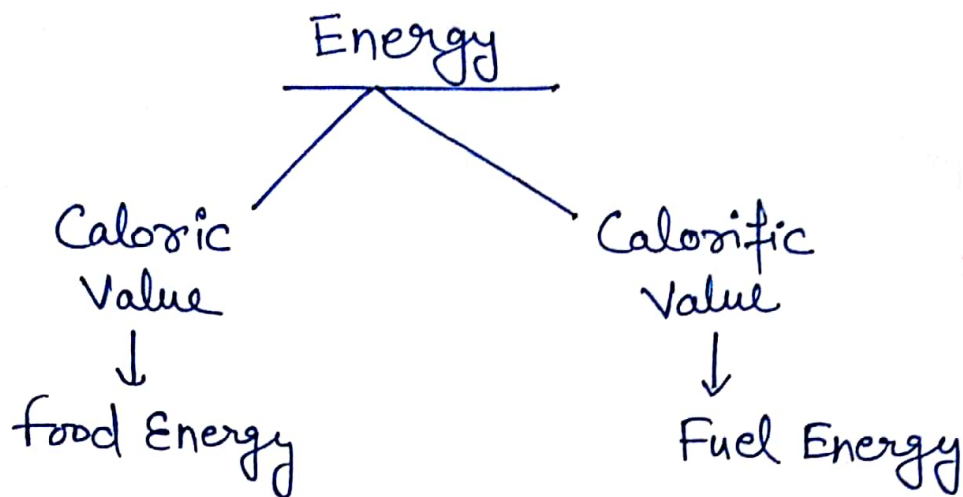
Science & Technology

(Dr. Ravi Agrahari)

- Unit 1 - Science & Technology in India - (Self study).
- ✓ Unit 2 - ENERGY
- ✓ Unit 3 - SPACE TECHNOLOGY
- ✓ Unit 4 - COMMUNICATION and Information Technology.
- ✓ Unit 5 - Defence Technology
- ✓ Unit 6 - Superconductivity ×, Laser ×, Artificial Intelligence, Robotics, Nano Technology.
- ✓ Unit 7 - Intellectual Property Rights (IPR) & Related Rights.
- ✓ Unit 8 - × Astronomy & Particle Physics ✓
- Biology Unit 9 - Biotechnology
- Biology Unit 10 - Different type of Diseases and its recent issues, Health & family welfare and various immunisation programme.
- ✓ Unit 11 - Miscellaneous Topics.

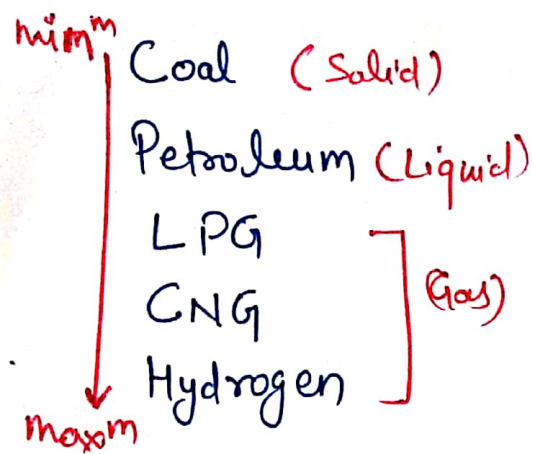
Chapter - Energy

(2)



(3)

Study of fuel on the basis of Calorific Value



Coal

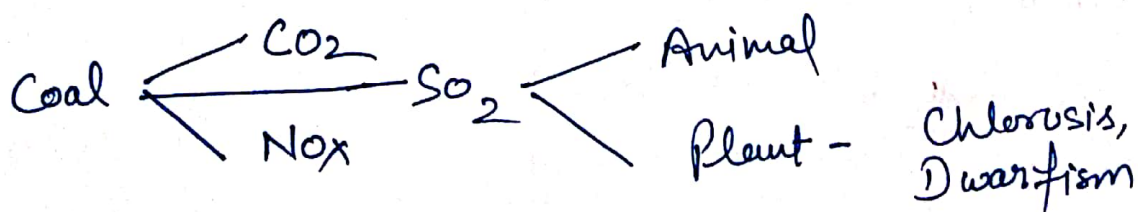
Types of Coal

	Carbon Content	Burning Efficiency	Results
1. Anthracite	$> 85\%$	maximum	Heat max Smoke min Best
2. Bituminous	$55-85\%$		
3. Lignite	$35-55\%$		
4. Peat	$< 35\%$	minimum	Heat min Smoke - max Worst

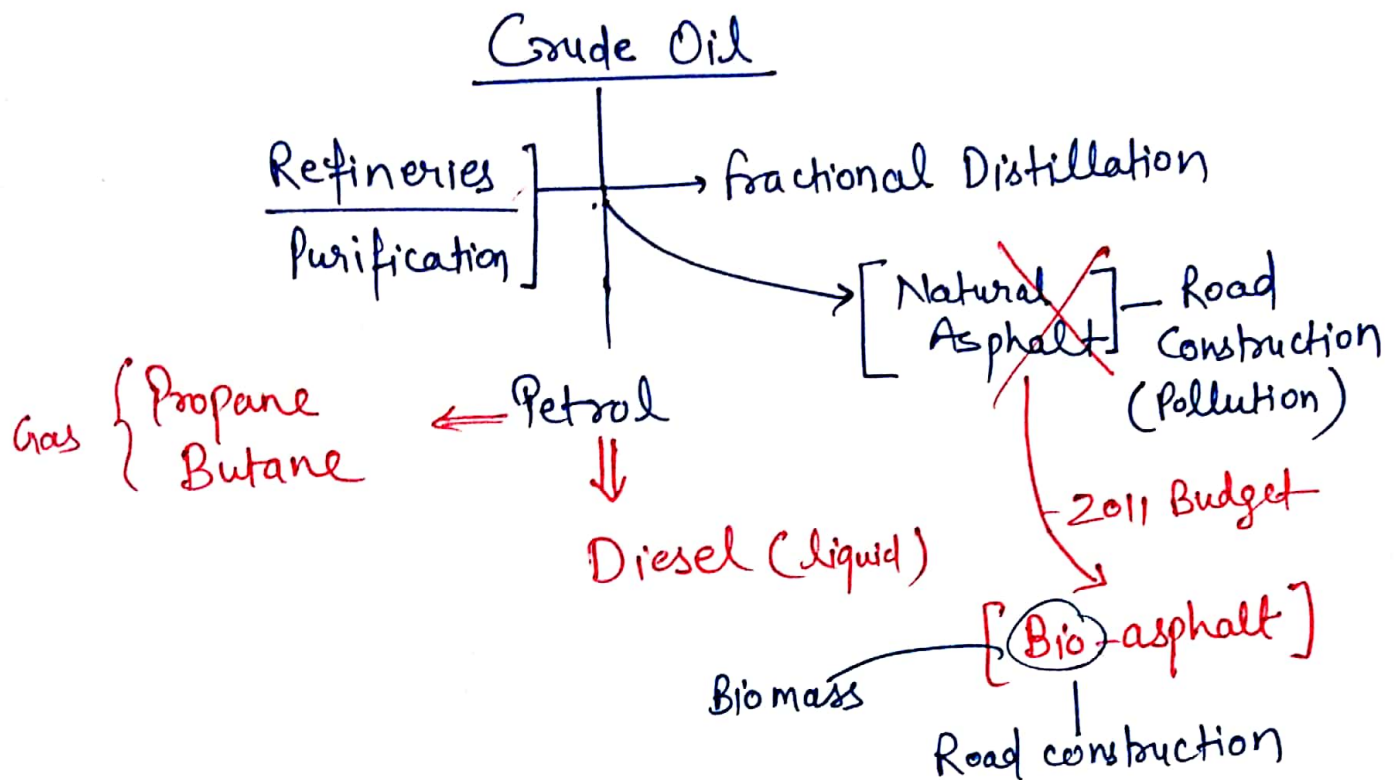
Lignite & Bituminous

Less heat & more smoke.

Sulphur content is less



Petroleum Products



Terminology

1. Knocking
2. Anti-Knocking Agent
3. Octane no & Cetane No.
4. ULSD (Ultra Low Sulphur Diesel) / City Diesel
5. Gasohol