

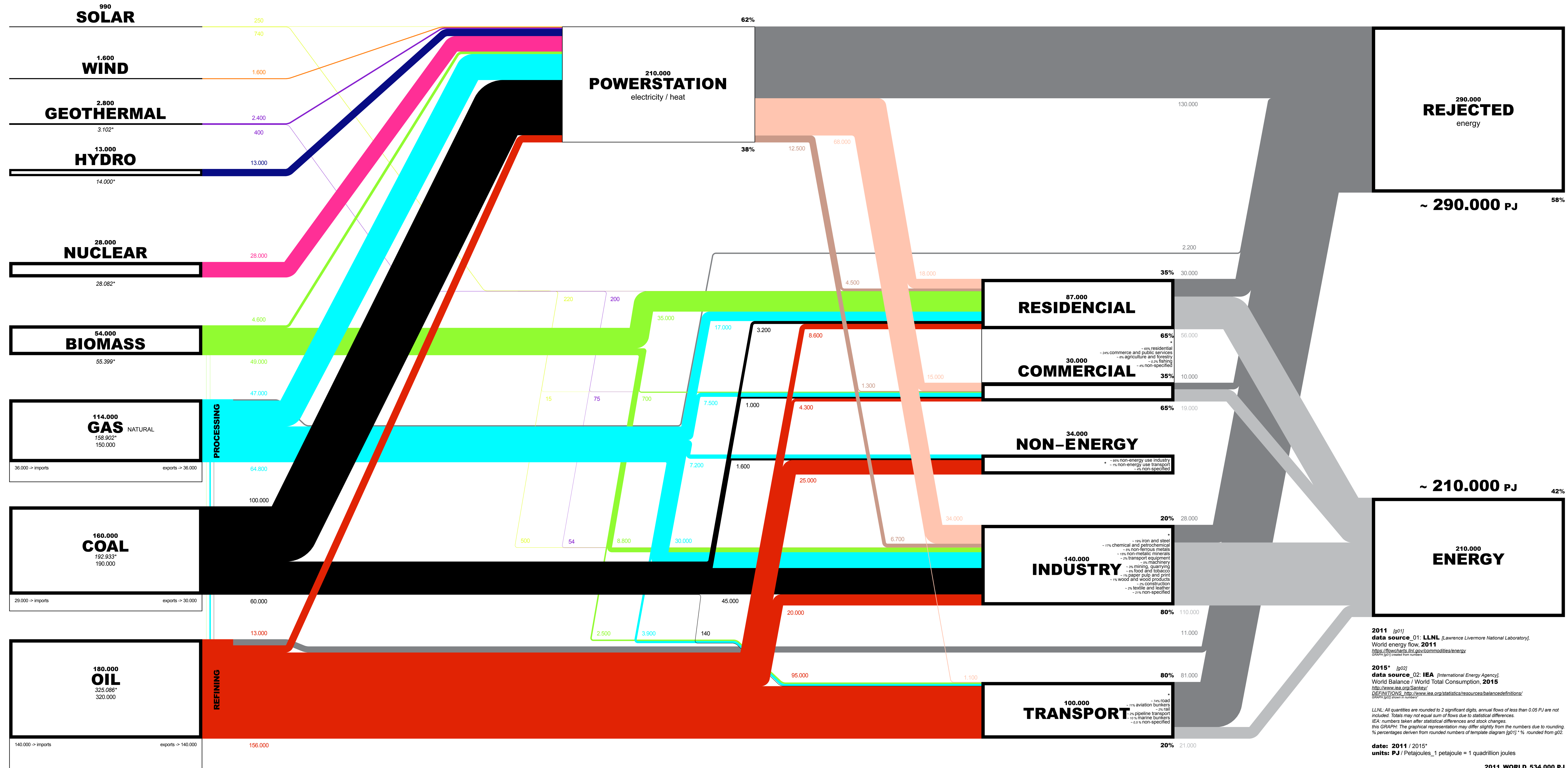
PHOTOELECTRIC
K_{ph} = 1/17 J/B

KINETIC / HEAT / POTENTIAL
K_{kin} = 1/2 mv² / Q = mΔT / (k_hΔT) = mgΔh

NUCLEAR
U₂₃₅235g + n⁰ → fission fragments + 2.4e+102.3MeV

FOSSIL / ORGANIC
C_{org} + O₂ → CO₂ + 1100 + energy
W_{org} = C_{org} + 2.5e + CO₂ + 1100 + energy

World energy input 2011
~ 534.000 PJ



2011 [g01]
data source_01: LLNL [Lawrence Livermore National Laboratory],
World energy flow, 2011
<https://flowcharts.llnl.gov/commodities/energy>
GRAPH [g01] created from numbers

2015* [g02]
data source_02: IEA [International Energy Agency],
World Balance / World Total Consumption, 2015
<http://www.iea.org/Sankaty/>
DEFINITIONS: <http://www.iea.org/statistics/resources/balancedefinitions/>
GRAPH [g02] created from numbers

LLNL: All quantities are rounded to 2 significant digits, annual flows of less than 0.05 PJ are not included. Totals may not equal sum of flows due to statistical differences.
IEA: numbers taken after statistical differences and stock changes.
this GRAPH: The graphical representation may differ slightly from the numbers due to rounding.
% percentages derived from rounded numbers of template diagram [g01] * % rounded from g02.

date: 2011 / 2015*
units: PJ / Petajoules_1 petajoule = 1 quadrillion joules

2011 WORLD_534.000 PJ

ENERGY FLOW