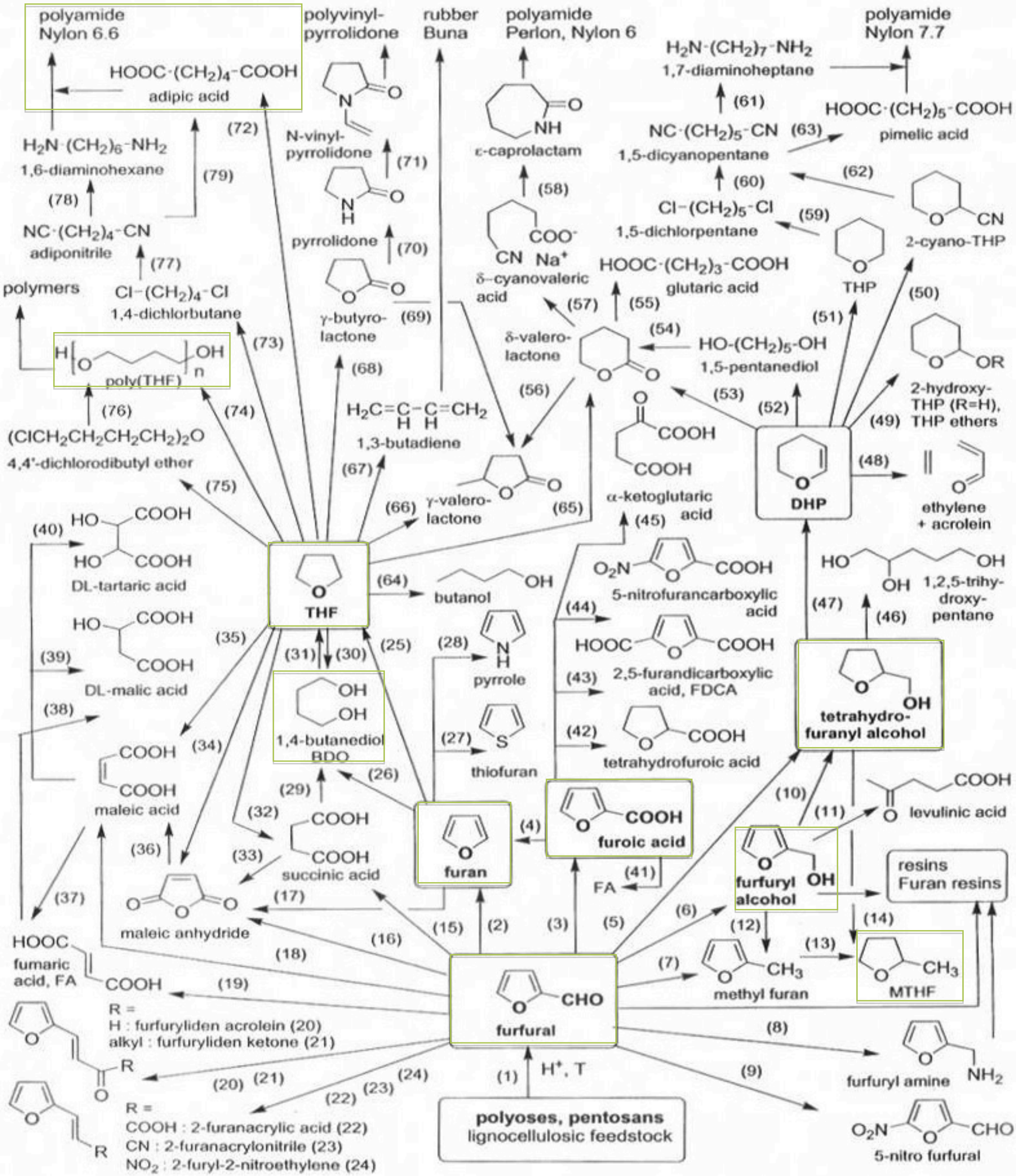
polyamide
Nylon 6.6
HOOC-(CH2)4-COOH
adipic acid
polyvinyl-
pyrrolidone
rubber
Buna
polyamide
Perlon, Nylon 6
H2N-(CH2)7-NH2
1,7-diaminoheptane
polyamide
Nylon 7.7
HOOC-(CH2)5-COOH
pimelic acid
NC-(CH2)5-CN
1,5-dicyanopentane
H2N-(CH2)6-NH2
1,6-diaminohexane
N-vinyl-
pyrrolidone
ε-caprolactam
NC-(CH2)4-CN
adiponitrile
pyrrolidone
Cl-(CH2)5-Cl
1,5-dichlorpentane
2-cyano-THP
δ-cyanovaleric
acid
HOOC-(CH2)3-COOH
glutaric acid
THP
polymers
Cl-(CH2)4-Cl
1,4-dichlorbutane
γ-butyro-
lactone
δ-valero-
lactone
HO-(CH2)5-OH
1,5-pentanediol
2-hydroxy-
THP (R=H),
THP ethers
poly(THF)
H2C=C-C=CH2
1,3-butadiene
(ClCH2CH2CH2CH2)2O
4,4'-dichlorodibutyl ether
γ-valero-
lactone
α-ketoglutaric
acid
DHP
ethylene
+ acrolein
DL-tartaric acid
THF
butanol
5-nitrofurancarboxylic
acid
1,2,5-trihy-
droxy-
pentane
DL-malic acid
pyrrole
2,5-furandicarboxylic
acid, FDCA
1,4-butanediol
BDO
thiofuran
tetrahydrofuroic acid
tetrahydro-
furanyl alcohol
maleic acid
succinic acid
furan
furoic acid
levulinic acid
furfuryl
alcohol
resins
Furan resins
maleic anhydride
FA
fumaric
acid, FA
methyl furan
MTHF
R =
H : furfuryliden acrolein (20)
alkyl : furfuryliden ketone (21)
furfural
furfuryl amine
R =
COOH : 2-furanacrylic acid (22)
CN : 2-furanacrylonitrile (23)
NO2 : 2-furyl-2-nitroethylene (24)
H+, T
polyoses, pentosans
lignocellulosic feedstock
5-nitro furfural