```
CF[ω_. 𝔼[Q_]] := Simplify[ω] 𝔼[Simplify[Q]];
𝔼 /: 𝔼[Q1_] 𝔼[Q2_] := CF@𝔼[Q1 + Q2];
N_{u_i_ c_j_→k_}[ω_. 𝔼[Q_]] :=
  CF[ω 𝔼[e^(-γ) β u_k + γ c_k + (Q /. c_j | u_i → 0)] /.
    {γ → ∂_{c_j} Q, β → ∂_{u_i} Q}];
N_{w_i_ c_j_→k_}[ω_. 𝔼[Q_]] :=
  CF[ω 𝔼[e^γ α w_k + γ c_k + (Q /. c_j | w_i → 0)] /.
    {γ → ∂_{c_j} Q, α → ∂_{w_i} Q}];
N_{w_i_ u_j_→k_}[ω_. 𝔼[Q_]] :=
  CF[
   ν ω 𝔼[-b ν α β + ν β u_k + ν δ u_k w_k + ν α w_k +
        (Q /. w_i | u_j → 0)] /. ν → (1 + b δ)^-1 /.
    {α → ∂_{w_i} Q /. u_j → 0, β → ∂_{u_j} Q /. w_i → 0, δ → ∂_{w_i,u_j} Q}];
m_{i_,j_→k_}[ω_. 𝔼[Q_]] :=
 CF[Module[{x},
   (ω 𝔼[Q] // N_{w_i c_j→x} // N_{u_i c_x→x} // N_{w_x u_j→x}) /.
    {c_i → c_k, w_j → w_k, y_x :→ y_k}]]
```